# AN APPROACH TO THE FOOD HABITS OF THREE COMMUNITIES IN TIMOR-LESTE

# FINAL REPORT

**December 2013**
**Prepared by**
**Alberto Fidalgo Castro**

**for**

**CARE International in Timor-Leste**

## Table of Contents

Table of Contents ..... 3

List of Table ..... 5

Tetun Language Terminology ..... 6

Technical Terminology ..... 6

List of Abbreviations ..... 7

Executive Summary ..... 8

Summary of recommendations ..... 8

1. Introduction ..... 10

*1.1 Objective of the study ..... 10*

*1.2 What is nutrition? ..... 10*

*1.3 Methodology ..... 11*

*1.4 Limitations of the study ..... 13*

2. The cultural gap between food and eating: Semantics and food ..... 14

3. Food choices and nutrition: the case of Malabe, Asumanu and Dato ..... 17

*3.1 Social status ..... 17*

*3.2 Food of availability and financial resources ..... 18*

*3.3 Sensorial perception ..... 19*

3.3.1 Taste ..... 19

3.3.2 Smell ..... 20

3.3.3 Texture ..... 21

*3.4 Accessibility and convenience of the foodstuffs ..... 21*

*3.5 Believed nutritional value and health effects ..... 22*

*3.6 Religion and food choices ..... 25*

3.6.1 Food as a gift ..... 26

3.6.2 Food taboos and Prohibitions ..... 26

*3.7 Rituals and their impact on nutrition ..... 28*

Distribution of food within the household. ..... 29

Conclusions ..... 31

Recommendations ..... 32

References ..... 34

Annex 1. Names, social groups and locations of interviewed people (interviews and FDG) ..... 40

Annex 2. Terms of Reference (ToR) ..... 3

## List of Table

Table 1: Field research matrix. November 2013 (16th-27th)..... 13

Table 2: Number of people interviewed by age/gender groups ..... 13

Table 3: Food items classified as hahán and modo. ..... 16

Table 4: Rice versus Maize: a comparison from a local perspective; ..... 17

Table 5: Some woman's feeding constrains during pregnancy and child care ..... 23

## Tetun Language Terminology

***Foodways***: "The shared customary habits of groups of people concerning to food and eating" (Pond, Nichols, & Brown, 2009)
***Ethnoscience***: Local knowledge systems and world-view.
***Fetosaa* or *mane-foun***. Wife taker group in relation to a person's ego group. The lineage or descent group (*uma-lisan*) to which a person's ego group provides wives. ????
***Lia-na'in***: Keeper of the word.
***Lulik:*** Sacred, taboo, forbidden.
***Lulik-na'in***: Keeper of what is sacred. A traditional authority within a family that is entitled to keep the sacred heirlooms of a lineage or descent group (*uma-lisan*)
***Suku***: The smallest administrative division in Timor-Leste that can be comprised of several *aldeias* (hamlets).
***Uma-lulik* / uma-lisan**: sacred house / traditional house. Heuristically translated in the report as lineage or descent group. It is sometimes referred to as 'clan', but we will avoid using this terminology
***Umane* (or *uma mane*)**: Wife-giver group in relation to person's ego group. The lineage or descent group (*uma-lisan*) from which a person's ego group takes wives from????.

## Technical Terminology

**Ethnoscience**: Local knowledge systems and world-view.
**Folk taxonomy**: A system of classification based on the relationships among a culturally constructed set of categories. (Park, 2011)
**Foodways**: "The shared customary habits of groups of people that relate to food and eating" (Pond, Nichols, & Brown, 2009)
**Re-semantize**: The act of strategically modifying the meaning of a given category or symbol (Alonso Población, 2013)
**Semantics**: The study of the meaning of words, phrases, signs and symbols.

## List of Abbreviations

| | |
|---|---|
| CITL | CARE International in Timor-Leste |
| EU | European Union |
| FAO | Food and Agriculture Organization of the United Nations |
| FDG | Focus Discussion Group |
| HAN | Hadia Nutrisaun no Agrikultura |
| MDG | Millemium Developmnet Goal |
| PROMISE | Promoting Healthy Lives |

## Executive Summary

This report is the outcome of a 29 day consultancy with CARE International in Timor-Leste (CITL) for the food security and nutrition program, funded by *Hadia Agricultura no Nutrisuan* [Improving Agriculture and Nutrition] (HAN) and "Promoting Healthy Lives" (PROMISE). Since 2010, CITL has been implementing the EU funded HAN project in the districts of Ermera, Liquiçá and Bobonaro. These are considered to be the most food insecure districts in the country. HAN has been working with approximately 2,800 food-insecure households in order to address the inter-related issues of food availability, access, use, as well as resilience to natural disasters. Approaches have included interventions in agriculture and farming to improve productivity, facilitating people's access to markets, development of financial services to generate income, improvement of dietary practices and health services, community based disaster management to improve better year round food security.

In December 2012, the Norwegian-funded health program PROMISE was established to improve health and nutrition within the poorest households of Ermera and Liquiçá districts. PROMISE has been working with the HAN project to achieve the first Millennium Development Goal (MDG) by enhancing practices in the areas of maternal and child health, sanitation and hygiene, as well as improving production and daily consumption of nutritious food at the household level. CITL commissioned this consultancy which has the aim of uncovering social factors, traditional and cultural practices, behaviors and believes related to food use and consumption that might be affecting the nutritional status of the most vulnerable people in the area of study.

The study was implemented in the CITL area of intervention, specifically in two *sukus* in Liquiçá district, Dato and Asumanu, and one in Ermera district in the *suku of* Malabe The study analyses some semantic aspects related to food; the valorization of food items and how food choices are based on them; local knowledge-based taxonomies (folk taxonomies) and the relationship between food belief systems. This analysis is predominantly drawn from key case studies that will be discussed in the following sections and allow the reader to get a glimpse of the extreme complexities surrounding food systems in Timor-Leste. This report will highlight the following culturally-linked themes governing food habits in Timor-Leste: social status is linked to food; there exists an underlying classificatory binary system: "hot"/"cold", "hard"/"soft" which is related to human biology and social development and ultimately makes up an ethno-medical system; there are lineage-related taboos governing food choices, and finally, the regime of consuming animal meat during rituals drives food production.

## Summary of recommendations

**i)** Greater emphasis should be placed on the development of awareness campaigns that focus on changing conceptions and re-semantisizing food-related terminology

   i. Low social status but highly nutritional food items should be promoted;
   ii. More research should be done on the ethno-scientific (local) knowledge and its effects on nutrition.

**ii)** Finding synergies between the ethno-scientific and scientific knowledge could be a way of boosting the process of behavioral change;

a. Awareness campaigns should avoid addressing feeding regimes linked to:
    i. Lineage taboos.
    ii. Animistic based rituals consumption.
b. Awareness campaigns should be formulated in a simple and understandable manner. Starting awareness campaigns through television spots or shows is recommended as electricity is increasingly reaching bigger audiences in remoter places of the country.

**iii)** The processing of foodstuffs considered inconvenient can be promoted as a complementary livelihood for household economies (i.e.: by adding value to basic products and then selling them on);

**iv)** The introduction of new food preparation and cooking processing tools could change the convenience perception of highly nutritious but inconvenient food items. An example could be the introduction of pressure cookers in order to reduce the cooking process some foodstuffs like maize or beans. The introduction and use of more efficient kitchen equipment instead of the traditional three-stone fireplace could ease this process.[1]

[1] It should be kept in mind that fireplaces, even in regular houses (not sacred ones), are regarded by many people (especially in remote areas) as sacred. Therefore an assessment of the convenience and suitability of this sort of introductions in each specific community is highly recommended.

# 1. Introduction

## *1.1 Objective of the study*

The aim of this study is to get an insight into the social factors, including traditional and cultural practices, behaviors and beliefs that affect the peoples' nutritional status in Timor-Leste. It is important to know of, understand and analyze local beliefs, taboos and practices that exist and if they have an effect upon the nutritional status of vulnerable people (see ToR in Annex 2). In order to accomplish this task, the present study focuses on the analysis of the food choices of people interviewed in three communities located in Dato, Asumanu and Malabe. The objective of this study is to understand the causes that influence the selection of food items and the systems of value that shape these choices. For the sake of the present analysis, priority has been given to the social groups presenting higher rates of malnutrition: children and women, the latter especially during pregnancy and childcare of the newborn (National Statistics Directorate (NSD) & ICF Macro, 2010: xvii).

The following analysis provides some ideas on how our informants make sense of their own food system and how food consumption patterns, as any social practice, are inextricably linked to cultural worldviews.

## *1.2 What is nutrition?*

There are many factors that influence the range of foods choices in any given society. The biological need of eating is one of them. That being said, nutrition is not the only, nor is it the preferred variable in people's choices. In fact, for most cultures, it is rather local ideas (related to local cosmologies) on body nourishment and hunger relief that are taken into account. The modern idea of nutrition is a relatively new one in the history of humanity. During the last decades there has been a tendency to "medicalize" food consumption, especially in Western countries (Contreras Hernández & Gracia Arnáiz, 2005), where the new trend to analyze and measure the amount of proteins, vitamins, macronutrients and even micronutrients is gaining large acceptance. This "medicalization" of eating tends to see food consumption through a biomedical logic that tends to, as García Arnáiz (2007) puts it, "substitute many of the economic, adaptive and symbolic reasons that have […] conditioned eating habits in all cultures, exclusively for reasons of a dietetic nature".

> ***Nutrition***: The act or process of nourishing or being nourished; *specifically*: the sum of the processes by which an animal or plant takes in and utilizes food substances. (Webster Online).

The uses of food in human societies encompass many other aspects beyond nourishment and energy intake. As the classic study *Community Nutrition and Individual Food Behavior* pointed out (Baas, Wakefield, & Kolasa, 1979), the following are basic functions linked to food consumption:

1. To satisfy hunger and nourish the body
2. To initiate and maintain personal and business relations
3. To demonstrate the nature and extent of social relations
4. To provide a focus for community activities
5. To express love and affection

6. To express individuality
7. To assert group differences
8. To demonstrate belonging to a group
9. To face psychological and emotional stress
10. To show off social status
11. To reward and punish someone
12. To reinforce self-esteem and gain recognition
13. To wield political and economic power
14. To prevent, diagnose and treat physical illnesses
15. To prevent, diagnose and treat mental illnesses
16. To symbolize emotional experiences
17. To show piety or devotion
18. To demonstrate security
19. To express moral sentiments
20. To demonstrate wealth

As such, when people choose a particular food item to be consumed the following factors should be considered (de Garine & de Garine, 1999). :

- Availability of food and money resources
- Sensorial perception
- Believed nutritional value and health benefits for each individual
- Accessibility and convenience of the food
- Religious beliefs
- Social situations

Folk conceptions of nourishment indeed apply when it comes to food choices in every society: eating a hamburger in a fast food chain "for its easy access and low price" or consuming salads for their perceived "nutritional value" are as imbued of folk beliefs and moral principles as the consumption of water buffaloes in Timorese ceremonies. For the purpose of this study, individual preferences of certain food items, particularly based on personal sensorial perception will not be taken into account. Instead this research focuses on social habits, aligning with Pond's (et al., 2009) concept of *foodways*: "the shared customary habits of groups of people that relate to food and eating".

### *1.3 Methodology*

Some of the data included in this report comes from previous ethnographical surveys in the country on a range of different topics[2]. Scattered data on food beliefs and practices were gathered from

[2] As a member of a team of anthropologists directed by professor Luis A. Gárate Castro and María Jesús Pena Castro I took part on the following research projects: 1) Evaluation and prospects of education in Timor-Leste. Education and development: challenges, problems, opportunities and proposals for intervention strategies (2007); 2) Situation analysis of gender-based violence in Timor-Leste. (2008); 3) Analysis of the decision-making process at the household level. Assessment levels Empowerment of women in Timor-Leste

previous fieldwork by participatory observation and interviews while living in the communities. Primary fieldwork was carried out discontinuously between 2007 and 2012 in Liquiçá district (mainly in sub-villages Faulara and Leotelá, both in the *suku* of Dato and Loidahar) and elsewhere in Timor-Leste (Ainaro, Baucau and Dili). The data gathered was used to define the research problem, main hypothesis, as well as design interviews. In addition, academic literature concerning Timor-Leste's food systems was reviewed from an anthropological, food security and nutritional point of view[3].

New data was collected during 10 days of fieldwork in November 2013 ($16^{th}$-$27^{th}$) in three selected *sukus*: namely i. Dato and ii. Asumanu in the Liquiçá sub-district of Liquiçá district, as well as iii. Malabe in the Atsabe sub-district of Ermera district (see Map). The three *sukus* were selected within the areas where CITL is implementing its food security and nutrition programs. Furthermore, the three *sukus* are representative of three major agro-ecological zones, including lowlands/costal area (Dato), mid-land slopes (Asumanu) and highlands (Malabe). The selection followed a specific geographical distinction in order to assess food habits in areas with different farming systems and productive resources.

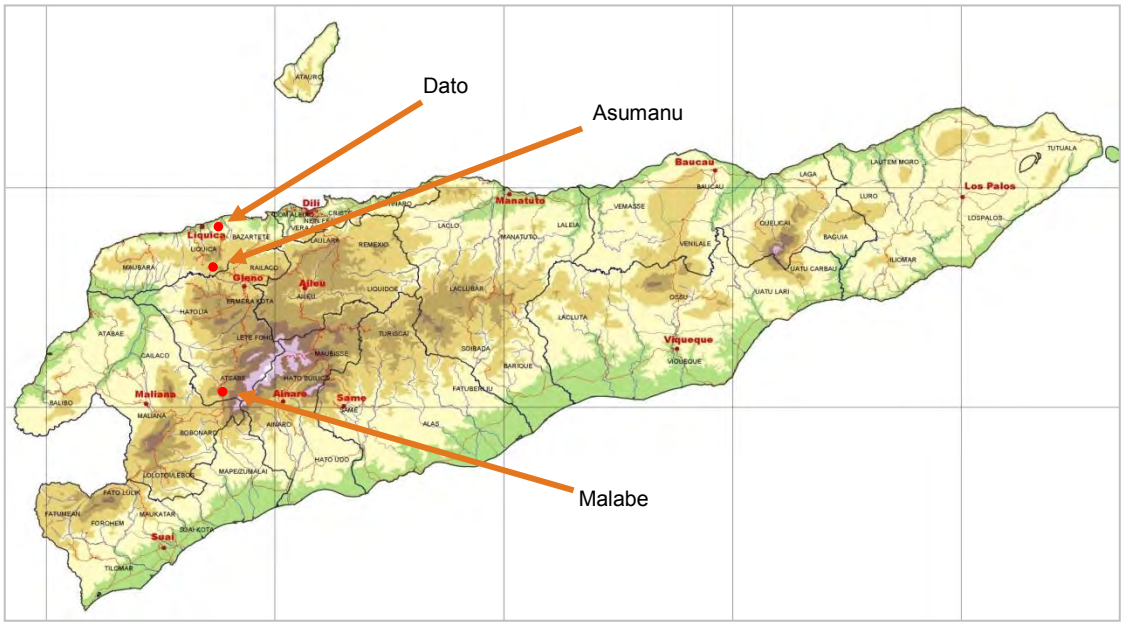


**Figure 1 Map of Timor-Leste with the target *suku* of the study;**

Overall 21 interviews were conducted (See *Table 1*). 20 of them were recorded and lately operatively transcribed for analysis. Many of the interviews turned spontaneously into informal focus groups discussions (FGD) when families and neighbors of the people who were being

(2009); 4) Uma lulik project. (2009-2010); 5) Fieldwork for my PhD dissertation (2010-2012). Some of my publications are: Fidalgo Castro & Alonso Población, 2013; Fidalgo Castro & Legaspi Bouza, 2012; Fidalgo Castro, 2009, 2010a, 2010b, 2010c, 2010d, 2012a, 2012b, 2012c; Gárate Castro & Assís, 2010; Pena Castro, Gárate Castro, & Fidalgo Castro, 2010.

[3] Although analyses of secondary data as well as research reports on primary data were used in this study, it was not deemed necessary to conduct a literature review of them as some papers are available already accomplishing such task (Andersen, Pant, & Thilsted, 2013; Fanzo & Curran, 2013; Sanyu Consultants Inc., 2009)

interview came to the house and started to participate in the conversation. Some of the best insights came from those spontaneous contributions.

Apart from interviews, participatory observation techniques were applied during data collection. The research team, which included the consultant and two CITL local staff, stayed in the areas of research, living with local families for the total length of the stay (10 days?). Data was gathered during informal conversations during the meals with people in communities. The use of participant observation, short as it was, was applied with the intention of overcoming biased (discursive-only) data gathering. As previously pointed out, participant observation conducted during these ten days was complemented with previous observations from past studies.

**Table 1: Field research matrix. November 2013 (16th-27th);**

| | DATO | ASUMANU | MALABE |
|---|---|---|---|
| **Length of stay** | 2 days | 3 days | 5 days |
| **Areas of research (*aldeia*)** | Leopa and Kamalelara | Hatumatilu, Quirlelo and Siscolema | Batumigi, Bobalete, Ilat Kora, Malabe |
| **Number of interviews and informal FDG (recordings)** | 4 | 8 | 8 |
| **Other techniques** | Participant observation | Participant observation | Participant observation |

**Table 2: Number of people interviewed by age/gender groups[4];**

| | DATO | ASUMANU | MALABE | TOTAL |
|---|---|---|---|---|
| **Female youth** | 1 | 2 | 2 | 5 |
| **Female adult** | 2 | 2 | 4 | 8 |
| **Female elder** | 1 | 1 | 3 | 5 |
| **Male youth** | | 4 | 1 | 5 |
| **Male adult** | 1 | 3 | 5 | 9 |
| **Male elder** | | 2 | 1 | 3 |
| **Total** | **5** | **14** | **16** | **35** |

## *1.4 Limitations of the study*

The data presented in the study should not be seen as an all-encompassing survey of the foodways of Timor-Leste. It is rather a glimpse into the complex food system of the country through the

[4] For a complete list of the people interviewed during research see Annex 1.

examination of some of the topics related to food in three *sukus*. The data presented is qualitative and shouldn't be seen as a representative sample. Its findings cannot be generalized to the rest of the country, and some of them might be unique to the few people and/or communities included in the research (Dato, Asumanu and Malabe). Further qualitative and quantitative research is required elsewhere in Timor-Leste. Nonetheless we feel confident that some of the findings unveil underlying trends, processes and interpretations in relation to people's food choices and their impact on nutrition.

Even though we tried to avoid any sex/gender bias in our interviews (see Table 2) we would like to point out that the specific female spaces may somehow be underrepresented. The time spent in kitchens with women for the purpose of observing thier cooking processes was less than we'd have liked, which limited what we were able to see in the three households we stayed overnight in each community. Data from previous fieldwork undertaken by the consultant elsewhere in the country (mainly Liquiçá District) was used to fill possible gaps.

## 2. The cultural gap between food and eating: Semantics and food

"Do you know how to eat this or not?"(*Hatene han ida ne'e ka lae?*). This is a question that any foreigner commonly faces during their visits to rural communities in Timor-Leste. When eating in someone's house or whenever a new food item is about to be served, this question arises. The hosts seem worried about the foreigner's (*malai)* food habits and persistently ask what the *malai*[5] would eat and if he or she would like (*toman han*) Timorese food. However, after a while, it becomes clear that the questions is not a personal one, but in fact it is part of normal local etiquette and good manners (*hasé*)[6] to ask any guest this, not only *malai* ones. One of the reasons for this is that in few occasions the guest cannot eat a particular food item (food taboos: *lulik*[7]) and it is the host's duty to find this out. In such cases it is believed that the one facing the consequences of breaking the taboo is the one that served the food, not the one who ate it. Furthermore, the question encompasses all the possible situations related to food consumption: dislike, taboo, beliefs on potential negative consequences of eating. In such cases, the guest can simply reply «I'm not used to it» (*ha'u la toman han*) or «I don't eat it» (*ha'u la han*) and he/she won't be forced or pressured to do so. The reference to these daily practices illustrate how an otherwise simple question represents an underlying complex cultural food system.

One of the main difficulties when dealing with other cultural food system is the taxonomy that people use when referring to food. What is considered to be food and what is not? What is considered to be edible? Which food items are considered to be a meal and what is considered to be

[5] The Tetun word that means 'foreigner'.

[6] *Hasé* is not only related to table or eating good manners, but also greeting people. In this sense the question «where are you going» (*bá ne'ebé?*) is as well part of the local good manners, not that people really want to know of one's personal life.

[7] *Lulik* could be translated as sacred, forbidden or taboo. One of the best analyses of the term in Timor-Leste was done by anthropologist Elizabeth G. Traube (1986: 142-143):« *Luli* does not signify an essence, but a relationship. An object that is called *luli* possesses no inherent quality or intrinsic force. Nothing is *luli* in and of itself but may become so by virtue of its separation from something else. In all its contexts, *luli* signifies a relation of distance, a boundary between things, created out of gestures of avoidance. This structural relation subsumes a set of disparate attitudes which range from mild respect to awe».

a snack? When considering any particular food system, these questions need to be answered first. Understanding how communities identify and classify food items into categories might help improve the design of programs aimed to address malnutrition.

In Timor-Leste two important conceptual categories regarding food are *hahán* and *modo*. The difference between the two concepts is extremely important.

*Hahán* is considered to make up a basic meal, in other words the basic food items that any meal should include. Meals are not equal, and the suitability of each food item in different meals of the day and/or special meals can vary. Food items can also carry symbolic value or prestige. For instance, while cassava is considered a food item that can be part of a proper meal, this doesn't mean that it is the preferred food item for lunch as it would also be a well-suited food item for breakfast. Tubers, bananas and yams are ideally breakfast meals and they are not accompanied by *modo*. It is common to take them with coffee or tea and they could be served with some chili (*ai-manas*) and salt. Even though they are ideally used for breakfast or even as snacks, they could be used as a main meal too, especially during scarce times. Maize is perfectly suitable for lunch time, but rice is more prestigious. Either of these food items are considered indispensable parts of a proper meal.

*Modo* is eaten in meals that are considered to be the most important: lunch and dinner. *Modo* consists of any foodstuff in the main meal that accompanies rice or maize. The table below illustrates some food items and their local taxonomical classification[8] either as *hahán* or *modo* as they were used by our informants during interviews and informal conversations.

[8] This categorization was done by free listing-technique. Though it is accurate, it should be seen as a first approach. Many other categories and sub-categories should be considered in developing a comprehensive taxonomy.

**Table 3: Food items classified as hahán and modo;**

| Food classified as *hahán* | Food item classified as *modo*[9] |
|---|---|
| Maize (*batar*) | Papaya leaves (*ai-dila tahan*) |
| Cassava (*ai-farina*) | Cassava leaves (*ai-farina tahan*) |
| Sweet potato (*fehuk*) | Sweet potato leaves (*fehuk tahan*) |
| Rice (*foos*/*etu*/*hare*) | Sweet potato leaf tip (*fehuk dikin*) |
| Yam (*talas*) | Unripe papaya fruit (*ai-dila okir*) |
| Tubers (*kontas)*[10] | Potato (*fehuk ropa*) |
| Banana (*hudi*) | Banana flower (*hudi-dubun*) |
| | Mustard leaves (*mostarda* or *modo-mutin*) |
| | Moringa leaves (*marungi*) |
| | Bitter gourd (*baria*) |
| | Pumpkin (*lakeru*) |
| | Spinach (*baiaun*) |
| | Breadfruit or jackfruit (*kulu jaka* or *kulu tunu*) |
| | Water spinach (*Kanku*) |
| | Carrot (*senora*) |
| | Cabbage (*repollu*) |
| | Tomato (*tomate*) |
| | Any kind of meat (*na'an*) |
| | Any kind of fish (*ikan*) |
| | Noodles (*supermi*) |

The semantic barriers are crucial when trying to promote behavioral change. A systematic comprehension of the local way of understanding and explaining the world should be the first step in this process. The example of the word "nutrition" (*nutrisaun*) is relevant in this case. In recent years, the word nutrition has entered in local speech and is frequently used. This has come from awareness campaigns, advertisements and trainings conducted by both national and international

[9] Modo was divided in other sub-categories such as: leaves (*modo-tahan*), seeds (*musan*)
[10] Unidentified tuber or root.

organizations. However, the meaning of *nutrisaun* may be being understood in unexpected ways because of issues of interpretation and given the long chain involved in the transmission of messages, which could bring negative consequences or simply misunderstanding by most users.

## 3. Food choices and nutrition: the case of Malabe, Asumanu and Dato

This chapter provides some analyses of the main points taken into consideration by informants when making feeding choices. Among them are social status related to food items, food availability and financial resources, issues of sensorial perception, accessibility and convenience of different foodstuffs, believed nutritional value and health benefits, as well as taboos and practices linked to traditional animistic belief systems.

### *3.1 Social status*

The comparison between rice (*etu*/*foos*/*hare*) and maize (*batar*), the two most important staple foods in Timor-Leste, offers a good example of what and how Timorese people understand and valorize food in their daily life. The data presented was taken from the transcribed interviews. This comparison aims to reflect what our informants consider when choosing between these two different food items.

**Table 4: Rice versus Maize: a comparison from a local perspective;**

| Rice (*etu/foos/hare*) | Maize (*batar*) |
|---|---|
| Rice is not produced in any of the areas of research. | Maize is produced in all areas of research. |
| Rice produced in Timor-Leste is perceived to be better than the imported one: *morin* (good smell), and more "*vitamina*" | No data on imported Maize being purchased at the household level. It can be used as cash crop. |
| It is normally preferred to other staple food | It is the second choice after rice. Maize consumption is less in Dato than in Asumanu and Malabe |
| In Malabe the use of local rice was mandatory for rituals related with the construction of the sacred house. | Local production of maize is regulated by a complex set of ritual activities. |
| It's a "convenient" food: easily accessible in every small shop in the country, prepared without much effort. "*Han lais" (eaten quick)*. | It's not a "convenient" food and its cooking process is considered to take a lot of time. *Han ho pasiensia (eaten with patience)* |
| Cooked as porridge is considered the proper food for kids and elder because it's soft (*mamar*). | It's considered to be hard (*toos*) and thus it's not a proper food for children and elder unless it is smashed (*fai*) with a mortar and pestle (*lensu ho alu*). |
| It is considered to be a food that makes you feel hungry quickly, don't get full and 'doesn't give much strength' (*hamlaha lalais, ladún bosu, ladún fó-forsa*). | It's considered to be a food that make you feel full for a long time and 'gives strength'(*hamlaha kleur, bosu, fó-forsa*). |
| Must be accompanied by modo. | In times of need may be the only affordable staple food for the poorest households |

| | |
|---|---|
| It's a suitable food to be given to house guests | It's not a suitable food to be given to house guests, or served at parties, ceremonies, visit of a *malae* to a household…) |
| It's the young people's favorite choice | Young people are said to be reluctant to eat it |
| In Asumanu and especially in Malabe, people that eat rice everyday are considered to be rich (it is not the «way of the mountain» to eat rice everyday) | Half cooked dried maize (*te'in natón de'it, toos oituan, mamar oituan*) its considered to be a good food during lactancy for it is believed to increase the amount and quality of maternal milk produced. |

As mentioned in the previous chapter, there is a hierarchy in the social value of meals. The most important meals are those that contain rice, and/or maize, and are subsequently considered main meals. In these meals, the category of *modo* is of secondary importance. So a first classification could be done where *modo* is a secondary food item while maize and rice are the primary food items. However, a hierarchical relationship between rice and maize also exists, which is illustrated in the table above. Rice is linked to the urban, modern way of life, it is not considered very nutritious but it is deemed as the proper food to be offered to guests. Rice is a necessary food item in any public event or ritual. It is considered to be the food of the high classes because purchasing it for consumption is expensive. On the other hand, maize is deemed rural, typical of the lower classes who produce it, and is not to be given to guests or consumed at public events, despite its nutritional value.

### *3.2 Food of availability and financial resources*

Food security has long been a major concern for both the government as well as aid organizations in Timor-Leste. The country experiences great seasonal oscillation between abundant and scarce availability of food. Food insecurity is greatest in January as farmers are waiting for the maize harvest (FAO & WFP, 2003). The best time of the year is around August, after the coffee harvest in Asumanu and Malabe.[11] These seasonal differences are embedded in the traditional belief system where the alternation between the dry season (*bailoron*) and the rainy season (*udan*) are considered to be in line with the two traditional deities: Father Heaven and Mother Earth. In this male/female symbolic division, the dry season is considered to be the time of abundance, while the rainy season is considered to be the time of scarcity (Traube, 1986, p. 146).

In the target areas of this research, the households' main strategies to provide food are agriculture and acquisition. During the dry season, maize has already been harvested (January-March), and income generated from the sale of coffee provides cash to the households (in Malabe and Asumanu). In addition, it is *modo* is ready to be cultivated in their home gardens, which is both a cash crop and a self-supply activity[12]. In Malabe, beans (*Koto*) are also a cash crop. The dry season

[11] Dato, in Liquiçá Vila, is more dependent on formal jobs and some other informal economic activities as their main provisioning source. Even though people cultivate some products (maize and different kinds of *modo* and fruits) and raise cattle and poultry (pigs & chickens mainly), they do it as a complementary activity. This doesn't mean that these activities don't help their household security in an important way but they do not deem those activities as their core livelihood.

[12] The cultivation of *modo* depends strongly on the water supply and the house's strategic location within the suku. A house with a permanent water supply and a central location in the *suku* would have an important advantage to get the best out of this activity.

is also the "time for rituals" (*tempu lia*) in which many of the schedulable[13] ones are celebrated. There is an ecological reasoning for this symbolic classification. Scarcity makes ritual celebrations and social gatherings unwise during the rainy season. On the other hand, the plentyness of the dry season makes it desirable, especially as these gatherings —many of them in form of rituals— can work as a means of redistributing perishable food. Rain is an important element in this cultural ecology too. During the rainy season, movement between hamlets is not easy for inhabitants.[14] On the other hand, the rainy season is also the working time for households. Cultivation of maize is considered to be hard work. It is perceived by some to be the "hungry season" (*rai hamlaha*) (Seeds of Life, 2007) as this is when maize reserves are almost depleted. The staple food shift is then from maize to rice that was not produced in the areas of research but can be purchased at the local market. Many of the households do not produce enough maize to fulfill their needs for the whole year, therefore they need to address this shortcoming with coping strategies (Costa et al., 2012): i. sale of animals, ii. increased consumption of tuber and root crops (cassava, yams, sweet potato…), iii. foraging wild foods, iv. accessing social networks, v. buying on credit from local sellers or vi. borrowing money from other people (Pati Ojha, 2011).

Recent archaeological research (Vasco da Silva, Miranda de Oliveira, 2008, 2010) has shown that communities had tended to diversify their plant regimes and diets in the past as a strategy of risk management for unreliable rain regimes and failed harvests. Indeed, it seems that the traditional diet of Timorese people was far more diverse in the past than nowadays. Famine foods like wild beans and tubers were common in the traditional diet of Timorese people, just like certain kind of insects that were consumed during the rainy season. We were told that up to this very date the consumption of *kalalu* (flying termites)[15] is practiced in Malabe and Asumanu and is considered to be a *hahán uluk* (food from the past), regarded by the ancestors as the 'meat of the rainy season'.[16] This practice is disappearing and the consumption is not considered to be an important part of the diet but rather a snack or as a way of entertaining children. Some people expressed their disgust and seemed reluctant to consume insects, but in most cases the consumption of insects is acceptable both as a snack, food for kids and as famine food.

In sum, food availability is highly variable in Timor-Leste, making people's diet change in terms of products and quantities all the way through the year. It seems that old coping strategies have been lost and postharvest losses remain an issue for food availability (Curran, 2013; Fanzo & Curran, 2013; FAO & WFP, 2003; Sanyu Consultants Inc., 2009).

## *3.3 Sensorial perception*

### 3.3.1 Taste

The two most important flavors accordting to the informants are *moruk* and *midar*. *Moruk* is the Tetun name for "bitter" but it means also "dangerous for human consumption" and "poisonous".

[13] There are many unexpected rituals. The most obvious examples of rituals include those that take place after the sudden death of a person (*mate-foun*).
[14] For a brief account of Tetun ecology see Hicks (1977).
[15] Bukkens (1997) points out that the nutritional value in 100g portion of flying termites (measured in Angola) is: energy (612 kcal); crude protein (38.42 %); total fat (46.1 %); ash (6.56 %).
[16] An older woman (*ferik*) from Asumanu regarded the *kalalu* as the "meat of the *beamalala* [an unrecognized type of tuber or root]", that was consumed during the hungry season.

Eating slightly *moruk* vegetables (papaya leaves, bitter gourd called) is considered to be good for people's health in general. Papaya leaves are quite commonly consumed with noodles as a traditional remedy against malaria (*bee-doko*). *Moruk* flavors are considered to be good for women to consume during lactation. Eating *moruk* foods is deemed to be good occasionally as it improves ones health and "washes the interior of the body" (*fase ita-nia isin-laran*). Children and young kids are reluctant to eat *moruk*, but parents encourage them to eat such foods for their own well-being.

*Midar* is the opposite of *moruk*. *Midar* means "sweet", but is also considered "harmless for human consumption" and "delicious". Eating (and drinking) *midar* is regarded as a positive and prestigious habit. One situation in which sweetness marks prestige for a household is when they host a visitor. In such cases, the host must offer them coffee, biscuits or sweets. Serving coffee without sugar might be followed by an apology as it reveals that the household doesn't have enough resources to buy sugar. Nevertheless, consuming too many sweet food items is considered to be bad for personal well-being. Eating too much sugar makes people "fall sick quickly" (*moras lais*). Some of the symptoms of sweet-related sickness are headaches (*ulun moras*) or leg pains —mainly from rheumatisms—[17] (*ain-kabun siin*). As in almost every other culture, it sweet foods are considered to be children's preferred choice.

Apart from these two core flavors, two major other major tastes are: *masin* "salty" and *siin* both "acid" and "sour". *Siin* is also used to refer to the flavor of food that has already gone bad. *Siin* is considered to be a flavor of choice for recently pregnant women (first couple of months) because it prevents nausea.[18] Some foodstuffs considered *siin* are: green mangoes, vinegar, lime, lemon or tamarind. Salty foods are normally seen as being appropriate for any social group although some of our informants stated that eating some food items regarded as salty (sea fish, dry fish) was bad for a woman's health after childbirth (see Table 5). The preparation of daily meals includes plenty of *monosodium glutamate*, however no health considerations about it were recorded. There is no local equivalent for the *umami*[19] flavor, it is only known by the name of locally sold brand: *masako* (broth powder, with lots of salt and monosodium glutamate) and *machine* (AJI-NO-MOTO). A quick review of some scientific papers shows that the impact of the *monosodium glutamate* on human nutrition is still under discussion (Chinna & Karupaiah, 2013; Insawang et al., 2013; Rogers, 2013; Shimada et al., 2013; ThiThu, 2013). However, it has been proven that *monosodium glutamate* is a food additive that provokes obesity (Savcheniuk et al., 2014), which affects 5% of both children under age 5 and females (National Statistics Directorate (NSD) & ICF Macro, 2010: xvii).

### 3.3.2 Smell

The smell of food has been identified as an important criterion of peoples' choices of food.. Smelling (*horon*) was considered to be the first step before eating which causes the rejection of food by many people. Though smell is considered to be a personal matter, there was some consensus among informants on the perceptions of different smells. *Morin* (good scent) was generally applied

[17] I follow the *Health Terms Tetun-English* for all English translations of Tetun sicknesses (Peace Corp, 2004)

[18] A young male can make fun of another male friend whenever he sees him eating *siin* foods by saying: "Maybe you are pregnant!" (*Isin rua ona karik!*). Saying the same thing to a young girl is considered rude.

[19] Japanese word.

when talking about rice. Locally produced rice was regarded to be more *morin* than the imported one, and therefore better. This might be related to the social values linked with rice. During the fieldwork only once did a person use the word *dois* (bad scent) when describing dried food. Informants used the expression *iis forte* (strong scent), *tauk nia iis* (being afraid of the smell) or *la toman nia iis* (not used to the scent) when rejecting a particular food item.

#### 3.3.3 Texture

The two basic textures that are taken into consideration when making food choices are *mamar* (soft) and *toos* (hard). 'Hard foods' were considered inappropriate for young kids (especially during breastfeeding) and for elders, based on status of their teeth: children don't have strong teeth and elders have 'bad teeth' (*nihan aat*). Maize (*batar*) is the staple food that is considered to be 'hard' (*toos*) and thus is not a suitable food for children and elders unless it is smashed (*fai*) with using a mortar and pestle (*lensu ho alu*). Another food item considered 'hard' was cassava leaves (*ai-farina tahan*) eaten as *modo*, a side dish for rice. Eating *toos* food is considered to be potentially good or bad for a particular individual based on age[20] gender variables (see *Table 5: Some woman's feeding constrains during pregnancy and* ). Eating 'hard food' too often is considered the cause of a stomach ache or diarrhea (*kabun moras*). The opposite word for *toos* is *mamar* (soft). Soft foods are generally preferred to hard ones. Rice is the softest staple food and is considered suitable for people with teeth problems (children and elders).

Other important textures are dry (*maran*) and wet (*been*). Eating dry foods is considered to be highly undesirable and the least nutritious of all foods[21]. It refers to rice consumption without any side dish (*modo*) or with a side dish classified as dry too. The normal preference is to eat rice with a side dish that contains some liquid on it: sauce, soup or broth side-dishes (*modo been*)[22]. Eating dry (*han maran*) is a common punishment for kids whenever they refuse to eat a particular food item, especially 'bitter' (*moruk*) ones. It is also deemed the food for those who don't have the resources to have proper cooked side dishes.

### *3.4 Accessibility and convenience of the foodstuffs*

One of the important features of the food choices that our informants pointed out was the convenience associated with a particular food item. Among other variables, the convenience deals with the grade of difficulty associated with obtaining a particular food item: working for it (cultivation or animal rearing), buying it (and therefore getting money), having access to it, the preparation and cooking process. Some examples are highlighted: i. Corn was considered to be the basic staple food cultivated both in house gardens (*uma-hun*) and in the fields (*toos*) in Asumanu and Malabe. In Dato, considered to be a city by our informants, the cultivation of maize was taken

[20] When referring to the age variable, one should bear in mind that we're referring both to biological and social aging. Thus apart from biological constraints on food consumption, there are also cultural aspects related to the age status of the person: baby, child, teenager, adult, elder; but also, married, single, widow, student…

[21] The attribute "dry" is commonly used to signify pejorative or bad attributes like death, old or ruined (Traube, 1986). A person with a "dry body" (*isin maran*), "without blood" (*ran maran*), is considered to be a person that is about to die.

[22] The term *been* is used only for vegetable-based broths such as *kulu-been, koto-been* and cannot be used for meat-based broths. A literal translation for chicken broth could be *manu-been* but it means "sperm" and so people use *kaldu* (Portuguese loan meaning broth). *Manu* is metaphorically used to refer male genitalia.

as a minor activity in terms of household provisioning. The convenience and access to maize at the household level in Asumanu and Malabe was taken almost for granted. Its preparation and cooking process were considered to be hard work and to take a lot of time, being classified as an uncomfortable food to prepare.[23] The 'slow cooking' (*te'in kleur*) was regarded as a negative characteristic of this food item. Rice was considered to be an important staple food as well, and its everyday consumption was one of the characteristics of Dato. It wasn't produced in either one of the areas of research.[24] Even though it is mostly bought, its acquisition was considered to be easy as it could be found in any selling point close to the house. Milled rice could be bought in local markets or in a *kios*[25]. Contrary to maize, preparation and cooking of rice was considered to be quick and effortless (cleaning, washing and cooking).

The range of convenience of food items did have two poles: from extremely inconvenient (wild foods) to very convenient (noodles). Wild foods such as 'poisonous beans' (*koto moruk*) and *beamalala* (an unidentified yam) were classified as highly inconvenient foods. This is because firstly, they have to be collected from the wild, and secondly, because both are considered to be 'poisonous' (*moruk*): in order to become 'harmless for human consumption' (*midar*), they must go through a long process. For example, *koto moruk* must be boiled twelve times, with the water being changed every time. *Beamalala's* process is even more laborious: it must be peeled, cut into tiny pieces, sun-dried for four days and left to soak in a river or a permanent source of running water for another four days. Only then it is to be cooked, either roasted or fried as a tortilla. On the other end of the spectrum, noodles are cheap and can be found easily in any selling point. All they require is boiling water to be cooked.

Wild foods are not being used on a daily basis as they are believed to be foods for bad times: famine, extremely bad economic situations or war. Their consumption is undesirable. Nonetheless, we witnessed the selling of ready-to-eat (*midar*) *koto-moruk* in Atsabe market during our fieldwork stay in Malabe. Wild foods and other famine foods that require a laborious preparation process which make them inconvenient, may be shifting from a marginal presence in people's diet to a market product,. This means that they are becoming another coping mechanism for food-insecure households. Another example of this in Timor-Leste is the selling of cooked sago palm flour (*akar*).

### *3.5 Believed nutritional value and health effects*

The physical health status of a person is judged —among other ways— by the external appearance of his or her body. A person could have a 'good body' (*isin di'ak*) or a 'bad body' (*isin aat*),

[23] There are two basic ways of preparing it: smashed (*fai*) and then boiled mixed with other vegetables and/or beans, or just boiled without being smashed. The smashing is done with a big mortar and pestle (*lensu ho alu*), which takes a while and is quite heavy. After that, the dirt from the smashed corn must be cleaned out and then it must be boiled for an hour and a half or 2 hours. This was considered to be the most adequate way to prepare maize for all the individuals in a single household, including elders and children. It is mostly women who take on the task of preparing maize in this manner.

[24] Some of the people interviewed in Malabe claimed to have uncultivated rice fields elsewhere in Atsabe as they didn't have enough people who could help with this task within their own household. This is because their children spend their days at school (*labarik sira eskola*). Other informants cultivated their rice fields (*lisuk*) with the help of other households that didn't have rice fields to harvest.

[25] Small shops.

meaning healthy and sick respectively. Being a little bit fat is considered to be a sign of good health while being too thin (*krekas*) is the opposite.

Even though the local culture doesn't integrate scientific or expert explanations of the nutritional values of the different food items, there are indeed widespread ideas about the health benefits of eating. However, it is locally believed that external signs of malnutrition may not be linked exclusively to food consumption. There are other factors related to the belief system which are considered to affect the body's shape, such as i. failing to keep the cosmological equilibrium through ritual (Pena Castro, 2010a, 2010b), ii. not observing the ritual debts to the ancestors (*abó*, *bei'ala*), iii. being a victim of sorcery or witchcraft, iv. failing to follow the food taboos, etc. The role of local specialists is of extreme importance to identify the causes of health and illness. Traditional healers and soothsayers (*matan-do'ok*) or traditional midwifes (*daia*), keepers' of the word (*lia-na'in*) and keepers' of all that is sacred (*lulik na'in*) are considered to have privileged access to this local knowledge (Fidalgo Castro, 2012c)[26].

Food makes people feel 'full' (*bosu*) at different degrees. Maize is the staple food that is regarded as the one that fills you up for a longer time (*bosu kleur*) and gives the most strength (*fó-forsa*) while rice makes people 'feel hungry quickly' (*hamlaha lais*).

The opposition between hot and cold is one of the classic themes related to the local system of beliefs related to food and health. A sick person is classified as hot (*manas*) while a healthy person is "cold" (*malirin*) (Hicks, 1984). A dangerous situation is said to be 'hot', while tranquility and calm is said to be 'cold'. Coldness is synonymous with fertility (Barraud & Friedberg, 1996); during pregnancy, the fetus grows healthy when her mother consumes was are to be considered "cold" foods or drinks (pork, coconut milk). After the delivery, the consumption of "cold" products endangers both the mother and the child and thus it is good for the woman to consume 'hot' foods instead (chili, ginger, soup, chicken).

This is the only binary oppositions that is believed to affect the nutritional and health status of a person during his/her life cycle. The biological and social development of a person comes with a shift in what is considered to be a suitable food for him or her (García, 2009). A food item that may be taken as good for a child may not be appropriate for an adult or an elder. As an example of this, see the table below in which we present a set of health effects (either good or bad) caused by the ingestion of different food items by women at different stages of pregnancy and childcare:

**Table 5: Some woman's feeding constrains during pregnancy and childcare;**

| Food / drinks | Informant | Period of the constraint | Effects |
|---|---|---|---|
| Cold water<br><br>(*bee malirin*) | All informants | After childbirth and until the end of lactation | Blood can go up to the head and coagulate there, putting the woman in danger of death. |
| Coconut water | Previous | After childbirth and until the end | Baby can have a blocked nose (*inus* |

[26] For some further insight on traditional midwives see Araújo, 2013.

| | | | |
|---|---|---|---|
| (*nuu-been*) | fieldwork<br><br>(Faulara) | of lactation | *metin*)<br><br>Baby can get a fever (*isin manas*) |
| Goat meat (*na'an bibi*) | Female respondent. Asumanu | After childbirth and until the child starts to speak (just for the people from her husbands' linage) | The baby could be mentally diabled (*beik*, *bilán*), and/or mute (*ko'alia la hatene*).<br><br>After two previous cases in her husband'sfamily, a link was made between goat meat consumption and this condition.[27] |
| Any kind of fish | Male respondent, Asumanu | During pregnancy | The baby can be asthmatic and die at childbirth |
| Chili<br><br>(*ai-manas*) | Female respondent, Dato | During pregnancy | Mother suffers from strong pains on her hips & lower back (*kanotak moras*) |
| Coconut water<br><br>(*nuu-been*) | Previous fieldwork (Faulara) | During pregnancy | Good for the development of the baby's body. |
| Banana flower (*hudi-dubun*) | Female respondent, Asumanu. | During pregnancy | Problem during the delivery. Amniotic sac doesn't break during the delivery and the baby gets blocked in the womb. |
| Rice porridge (*sasorok*) | Female respondent, Dato | Lactation | Not good for the baby as it can cause diarrhea. |
| Boiled maize not smashed (*fai*) and not too boiled | Various informants | Lactation | Gives strength to the mother and increases the production of milk |
| Cassava leaves (*ai-farina tahan*) | Female respondent, Dato | Lactation | Baby can get constipated (*kabun toos*) |
| Dried small pieces of fish (*ikan rahun*) & small fish(*ikan ki'ik*) | Female respondent, Dato | Lactation | Baby can cough (*mear*).<br><br>Baby can get an itchy skin condition (*isin katar*) |
| Fruits | Female respondent, Asumanu | One or two months after childbirth | Baby can have a blocked nose (*inus metin*) |

[27] This case works as an example of the *post hoc ergo propter hoc* ("after this, therefore because of this") causality scheme or etiological reasoning (Alonso Población, 2010; Lisón Tolosana, 1987) that is working under local food choices.

| | | | |
|---|---|---|---|
| | | | Baby can cough (mear). |
| "Hard foods" (*hahán toos*) | Female respondent, Asumanu | Right after childbirth | The recovery of the womb after childbirth takes longer |
| Boiled maize (*batar-da'an*) | Female respondent, Dato | Right after childbirth | Bad for the baby's stomach because it's hard (*toos*) |
| Chicken soup (*kaldu*) | Female respondent, Dato | Right after childbirth | Helps to cure the womb of the mother after childbirth |
| Porridge with chili (*ai-manas*) and / or ginger (*ai-lia*) | Female respondent, Asumanu | Right after childbirth | Helps to heal the womb of the mother after childbirth |
| Sea fish and salt | Male respondent, (Dili, Kémak person) | Right after childbirth | Bad for the quick recovery of the mother's womb after childbirth. |

These relationships between food and health are not limited to the actual consumption of food. Based on local beliefs, it is not only eating that could be hazardous for the well-being of the baby and the mother, but cooking as well. From one of the FGD it emerged that when cooking rice while pregnant, no rice leftovers should be kept in the pot after it is finished being cooked. All of the rice should be taken out the pan and placed elsewhere. The pot should be completely empty and turned upside-down afterwards. A woman told us that there would be consequences if one fails to follow this system : the woman would end up being in labor for a long time and the placenta would take longer than normal to be delivered.

Another feature of cooking and childbirth is leaving the *kanedok* (a wooden spoon used for cooking) in the pot while cooking rice. This spoon must be removed from the pan and put in water. If the cook fails to do so while cooking during pregnancy, the mother's womb could get dry, and there could be complications during the delivery of the baby.[28]

### *3.6 Religion and food choices*

Religion and ritual plays an important part in people's food choices. Particularly in Timor-Leste, religion refers to the animistic-based system of beliefs. Even though most Timorese declare themselves Catholic[29], they still practice an animistic religion simultaneously, which is strong in both belief and practice, especially in rural areas. As any other beliefs system, the animistic one does make people choose or refuse certain foods. In this section we'll discuss the place of food

[28] Personal communication registered by anthropologist Beatriz Varela Trigo in Bobonaro during former joint research (2009).
[29] 96,9 % of the people declared to be Catholic according to the 2010 Census (NSD & UNFPA, 2011)

within these belief systems as well as its presence in mythical narratives that give sense to food taboos. We also note, briefly, the impact that rituals have on nutrition.

### 3.6.1 Food as a gift

In the traditional belief system of Timor-Leste food is considered to be a gift from the deities. Shepard Forman (Forman, 1981) and Elizabeth G. Traube (Traube, 1986) had written on how food is given to human beings by Mother Earth (*inan rai*) and Father Heaven (*Maromak* or *Lalehan*[30]). Human beings are indebted to them and that debt must be repaid cyclically with the harvest of different crops "feeding Earth" (*fó-han rai*), something that is done through animal sacrifice during rituals. This debt is never really 'repaid' (Graeber, 2012) and the last fulfillment of it comes with the death of the person who's remains would feed the Earth (Traube, 1986). Today, however, these explanations of the origins of the food, as all those related with the deities of the land and heaven have been more or less blurred by the influential power of the church, which has concentrated its efforts on substituting these deities for the Catholic perception of God (Delgado Rosa, 2012; Fidalgo Castro, 2012a) .

### 3.6.2 Food taboos and Prohibitions

The prohibition of consuming crocodile meat is widespread across Timor-Leste, with the possible exception of some people in Viqueque[31]. The crocodile taboo has been reported already during Portuguese colonization and still stands to this day (Almeida, 1945). Crocodiles are believed to be ancestors (*abó*, *bei'ala*) and even though they cause a number of causalities every year (Tsujimura, Alonso Población, Amaral, & Rodrigues, 2012), they are explained to be acts of punishment for the inappropriate behavior of a person (*sala*). This taboo has been largely reported in the country.[32] There are many myths around the figure of the crocodile which, in many cases, deal with folk explanations of the taboo (Hicks, 1988, 1990).[33]

Apart from this widespread myth, there are many other food taboos in the country. These taboos don't apply to society as a whole but rather to particular kin groups, namely lineages (*uma-lisan*). They originate from mythical events which made the founding ancestors (normally the oldest generation of ancestors[34]though not necessarily) declare a food restriction for their descendants. In the case of Dato and Asumanu (in Liquiçá) and Malabe (in Atsabe), people are compelled to follow the food prohibitions of their particular lineage (*uma-lisan*), with the exception of the married-out women who have to follow their husband's house taboos instead as they become members of their husband's family lineage.

---

[30] For a discussion on the ontological status of the male deity see Fidalgo Castro, 2012.

[31] I have personally never witnessed its consumption during my time in Timor-Leste, but I've been told this on several occasions from different sources.

[32] David Hicks refers to a myth in which a princess from Samoro is kidnapped by Wehali people and how the crocodiles rise to defend her, taking her back. After the event they promised that neither them nor their descendants would ever hunt or eat crocodile meat. (Hicks, 1990, pp. 92–99).

[33] In one of the interviews done in Malabe an informant told us that there was a myth in which, by the agency of the crocodiles, all the earth —with the exception of mount Ramelau— was flooded (*tasi sa'e*). Some ancestors went to war against the crocodiles with weapons (*sasán kro'at*) they received from heaven (*lalehan*). After defeating the crocodiles with those weapons, the sea level began to drop until it went back to its original level. Interview: 27_11_2013_Ezequiel_Maia_Monteiro.

[34] The founding ancestor is the person at the *apex* of the family's genealogy.

Apart from the two cases reported in boxes 1 and 2 below, other food taboos within the target communities did not emerge from the FDG. The prohibition of eating cat meat (*busa*) was quite common among the people in Asumanu, where it was almost the only taboo in relation to the lineage house we could find. Another taboo was identified in a house in *suku* Leotelá (Faulara), specifically *Laueli* lineage house.[35] For people who eat eel, it is considered taboo for them to call it "*tuna"* (eel, in Tetun). However, if they refer to it as "goat meat" (*na'an-bibi*) or "side dish" (*modo*), it is fine for them to eat it. In this sitaution, eel was considered to be an animal with a special relationship with a house's lineage. One of the features of this relationship was the belief that whenever people were in need of meat, they just had to ask the river for some meat (*halo lulik*) and a big eel would come and offer itself to them.

In Malabe, a common taboo is the consumption of fish from the Bee-Malai lake[36] which is regarded as *lulik*. Any other sea or fresh water fish however is considered to be edible without breaking the taboo. Other food taboos recorded during the fieldwork were: dog meat (*na'an asu*), mung beans (*fore-mungu*), fish (in general)[37], pork meat (*na'an fahi*), and goat lungs (*bibi nia aten-book*).

**Box 1: Why people belonging to the *Be-Ubu* house do not eat black pumpkin (*lakeru-metan*)?**

Long ago there was an ancestor who was the keeper of the sacred house (*hein uma-lulik*). He was already very old. One hot day, all the people of the house left and he was on his own in the house. That day the sacred house started to burn (*ahi han*).When the family came back to the house they started to look for the ancestor, but they couldn't find him anywhere. Then they wanted to search for him in the house but they had to wait until the flames stopped. When the fire was extinguished, they started to look for him, but they couldn't find any trace of the body nor the bones. The only part of the body they found was a half-burned lung (*aten-book*). They gather around it, cleaned it and said: "Here is our ancestor". They put it in a place and left it there until one day during the rainy season, it rained on the lung, they saw from the remains of the ancestor a black pumpkin had sprouted. And that's why they don't eat it, for they say that may the eat it they would be "eating our own flesh" (*han ita-nia isin*).

Some informants did acknowledge that they had broken a food taboo rule at some point in the past or did not follow them anymore. In some cases, a particular member of the lineage was selected as a "delegate" and he or she would be the one that would keep observing the taboo on behalf of the remaining members of the lineage. Normally this person would be one of the elders that looks after the lineage's sacred house (*katuas ho ferik hein uma*). Even in the case of people who keep observing the taboos, whenever they failed to do so, they could still avoid the dangers of having broken the taboo by paying a fine (*kasu*) to their ancestors, by bringing offerings for rituals that would be performed by the elders that look after the sacred house.

[35] Something that my data gathered from my previous fieldwork in the very same place (Faulara) confirms.
[36] Some accounts of the myths in relation with the *Bee-Malai* lake can be seen in Cinatti, 1965 & King, 1965.
[37] Other taboos concerning fish consumption have been reported in Oecusse in a *Fish and Animal Consumption and Availability Survey* (AMSAT International, 2011, pp. 122–123)

The question that emerges from these experiences is that these taboos have a real impact on the nutritional status of people. From what we've seen above, these kinds of beliefs and food taboos are quite specific (they affect one specie, a specific vegetable or the fish of a specific area) and deal explicitly with one or two food items that are regarded as taboo per each lineage (*uma lisan*). Most of them don't seem to have a real impact on nutrition for they prohibit particular kinds of animals, even parts of animals.

On the other hand, there are some temporal prohibitions that apply to different foodstuff. One of the most widely practiced and recognized is a ritual called *sau batar* in Tetun and known as *sau sele* both in Tokodede and Kémak (Lekede'e Study Group, 2006; Renard-Clamagirand, 1982). This is a ceremony related to the agricultural production of maize, the most important staple food in the three areas of research, in which the temporal prohibition (*bandu*) on the consumption of the new yield is lifted. It is normally a particular lineage in each area that holds the right to perform this ceremony. This lineage is considered to be hierarchically superior to others based on different mythical narratives.[38] Generally speaking none of the different members of the different households living in the area are allowed to consume the new yield of maize before the ceremony is held. Consuming the maize beforehand is considered to be dangerous for human consumption (*moruk*). Some other temporal prohibitions on other food items exist elsewhere in Timor-Leste, for instance on rice and beans.[39] We were told though that in many cases these kinds of ritual prohibitions are not generally followed by all the people in the areas we did fieldwork as, just like with the taboos, one or more of the elders from each lineage house would stand on behalf of them and continue to observe it.

### *3.7 Rituals and their impact on nutrition*

A recent study from AMSAT International (2011) has demonstrated that most (80%) of the protein intake of the population in rural and non-coastal areas of Timor-Leste is consumed during rituals, festivities and celebrations. Ritual time is considered to be a 'good time because we eat meat' (*tempu di'ak tan han na'an*). Elisabeth G. Traube pointed out that the Mambai of Aileu, when attending a particular mortuary ritual, would talk about it «as an opportunity "to eat meat"» (Traube, 1986, p. 210). While undertaking fieldwork in Timor-Leste and asking people what a particular ritual consists of, the most common first answer would be the ritual that consists of "sacrificing meat" (*oho na'an*). Differences between rituals are often based on the different animals that are going to be sacrificed during the celebrations, however animal sacrifice and meat consumption is one of the principal mottoes of ritual activity (Alonso Población, 2013).

Eating obviously has an important social aspect to it. This social way of sharing food in rituals has its advantages: "communal meals have the advantage of providing an abundance of food choices as well as fellowship that would not be acquired if individuals were to eat on their own" (Pond et al., 2009, p. 56). Every culture shares food in some way to maintain social ties and reinforce group solidarity. Local narratives reinforce this moral economy of communal eating as well (see Box 3). While ritual performance has many social benefits and serves as an occasion for the redistribution of meat proteins, it should be taken into account, as pointed out by Alonso, that the mandatory

[38] See Fidalgo Castro, 2012 for an example of this myth-based hierarchy of linages.
[39] See Fidalgo Castro & Alonso Población (2013) for the rice ritual (*nahe biti*) in Faulara (suku Leotelá, Liquiçá district) and Pascoal (1967) for the beans one, called *ai-hulun* in Maubisse.

**Box 2: Why people belonging to the *Bor-Mea* house do not eat horse meat?**

Long ago the house had two brother ancestors: an elder and a younger one (*maun / alin*). They lived in suku Parami, near *Ramelau-hun*. During the rainy season, while they were waiting for the harvest of maize, they ran out of food. Maize takes longer to grow in Parami, for it is high in the mountains and it is colder. Thus they decided to go and buy some food. They walked a long way and bought corn (*batar*), cassava (*ai-farina*) and rice (*hare-kulit*). After buying their food they departed back home. They started walking, but as they were really hungry, they didn't have enough strength to keep on walking and carrying the food, so they stopped. They couldn't cook because they didn't have fire with them. Then the younger brother started to cry in desperation. Therefore his brother, feeling sad about him, said: "I'll put up with this weight: close your eyes" So he did and when he opened them his brother was gone. A strong and big horse was in his place instead. Then the horse said to him: "Now I'll be eating my grass, you'll be eating your food. Put the food on my back". The younger brother did so and they started walking back to their places until they arrived safe and with food for their home.

nature of the presence of meat in ritual practice creates a specific system of incentives that steers production of other resources, which are "ritually marginalized" (Alonso Población, 2013).

## Distribution of food within the household.

Our goal of studying the distribution of food within the household is primarily focused on finding out if there are any practices that constrain improving the nutritional status of the social groups with worse rates of malnutrition. Is it possible that they might receive less quantity or lower quality of food from the available stock? We've partially seen this topic in relation to women when dealing with the believed nutritional values of food (See *Table 5: Some woman's feeding constrains during pregnancy and* ). However, the highest rate of malnutrition is found in children aged 2-5 years old (National Statistics Directorate (NSD) & ICF Macro, 2010: xvii).

The distribution of food within the household is a female task. Women are the ones who decide who gets a particular food item, when the different members of the household should eat, in what order each person should eat, and who gets more or less food (which depends on gender and social status). Having women distribute food within the household could be seen as an empowerment strategy; i.e.: as a way of gaining influence over their husband. But it would be ambitious to affirm that the distribution of food is related to power. While it may be potentially used as a way of gaining influence, it also could be seen as a form of female subordination. Both scenarios could be present within the same household depending on a particular situation and the context.

This being said, we should point out that there is a widespread belief among international development workers that women and children are not fed as well as men because of the sequence of eating which follows local etiquette: men eat first, woman and children eat last. It is important to say that even though this is still widely followed (especially in rural areas) it doesn't deal with the private way of eating, but with the public way of eating. When a guest (*bainaka*)[40] eats at a house he or she is invited to be the first one to eat while sharing a table with the male adults of the house. After finishing, women will collect the dishes and then eat in the kitchen or somewhere else, along with the children. This sequence of etiquette doesn't reveal that food portions had been previously divided before its serving. A woman (normally the head of the house) will decide who eats what, based on age/gender and the social capital held by each individual. At that particular moment it is quite common for women to give children their share of the food, especially the small ones.

[40] The word guest (bainaka) refers to any visitor from outside the household that is not considered a part of it. This category includes male and female guests undifferentiated.

Moreover, this etiquette is not strictly followed on a daily basis, as the sequence of eating depends more on the workload of each members of the household. For example: if a man is working in the fields it is common not to wait for him to come home before eating. His portion would simply be set aside for him to eat it when he arrives home. However, this etiquette is not always followed among the people of a household: a different treatment is applied to each individual depending on his or her status within the household.

The impact of this etiquette on nutrition is irrelevant. It is rather the factors that influence the distribution of food among the different individuals that could have a negative impact on the nutritional status of people. As an example of this, we've witnessed children temporarily living in a house that is not his/her parents' home (normally for school attendance) receiving a worse share of the food than others within the household. It is common practice to send children from rural or isolated areas to live with family in places where a school is nearby. From the cases we've registered, we can point out that the lower the social capital of the children's family (especially their family network), the higher the risk of him/her to be badly nourished and, in a broader sense, taken care of.

However, this social feature doesn't explain the main nutritional problem in relation to children, as it affects children in a different range of age (primary school, secondary school) than the ones that are severely malnourished (2-5 years old). The weaning process, which our informants situated between eleven months and a year and a half, is a critical time in any child's development (Contreras Hernández & Gracia Arnáiz, 2005). The age range with the worst rates of malnutrition seems to coincide with the beginning of the weaning period and the period of complete dependency on the child's parents for nourishment, while he or she hasn't develop the minimum capacity for self-providing.

The age when the child begins to improve nutritional indices (after five years) coincides with the moment they begin to develop food-related activities independently. One such activity is the collection of insects, especially cicadas[41] (*sigarra*), as well as hunting small birds which are then consumed exclusively by children. This activity is considered typical of children and tends to be practiced more by males than females[42]. Perhaps these practices may have some positive impact on child nutrition rates from five years onwards, but should be studied further

There is a genuine concern from parents about their own children's health, at least discursively. The meal that is considered ideal for young children (*labarik kiik*) is rice porridge (*sasorok*). Nutritional regarded *modo* (such as carrot, spinach or mustard leaves) is added to this meal, depending on the providing capabilities of the household. Even the consumption of meat or fish, which is considered a luxury, is grounded on the welfare of the children. It is common to say: "buy it for the children to eat" (*sosa para labarik sira han*). When the household is unable to provide rice for the child, he/she will be given corn, which is considered a "hard food" (*toos*) and not too good for the child. However, even then, maize is processed in a different and more laborious way when the child is young: it is crushed and smashed (*tuku*) as it is believed that it would be better for the child as it is made softer (*mamar*) and thus easier to eat.

[41] Registered in Malabe and Asumanu, but without information in the case of Dato.

[42] Bird hunting is performed with a slingshot and is seen as a male-only activity. Parents forbid their daughters from practicing it.

## Conclusions

From this research, a set of conclusions may be drawn.

i. In local terms, a full meal or *hahán* is considered as such when it comprises a large quantity of rice or maize. The side dish or *modo* (which contains the most vitamins and proteins), is considered to be of secondary importance;

ii. While rice is considered a sign of status, maize is stigmatized, reveals lack of resources and "rurality";

iii. Food availability is highly variable, oscillating between abundance and scarcity. Consumption is then highly shaped by seasonality. During the rainy season, households rely strongly on imported rice as a reserve food, while during the dry season the main meals are composed of rice, maize or tubers. During the time of abundance however, most of the traditional rituals take place, which brings along the consumption of meat;

iv. With regards to sensorial perceptions, there seems to be a twofold dimension when analyzing food choices. The first is the individual taste, while the second dimension pertains to a complex local system of classification regulating the social realms and the smells, textures and tastes;

v. When it comes to convenience and accessibility of food, the convenience of food choices out-weighs others and makes the consumption of rice or Chinese noodles more attractive than, for example, forest resources. This raises the consumption of carbohydrates (in a diet already full of carbohydrates) over other food items with other nutritional value;

vi. With regards to the perceived nutritional value and the health benefits of food, interesting observations were made: the nutritional value of food is not linked to currently available nutritional knowledge but instead on a complex system of classification of different binary oppositions such as "cold" or "hot" foods. Food choices based on this system that is rooted in tradition may be already having an impact on pregnant women, newborns and recent mothers as their food choices don't follow the nutritional value of food, but criterion such as "cold" or "hot" in binary opposition;

vii. One of the main determiners of food choices is the animistic-based system of beliefs and the lineages system:

   a. On the one hand, each lineage has a common mythical ancestor whose narratives have established which items are lulik or prohibited for consumption by the lineage members. As it has been shown in this report, the nutritional impact of these kinds of beliefs is minimal as they refer to a single specie or food product;

   b. On the other hand, the importance of meat during rituals creates a system of incentives that steers productive investments, shaping household economies and the diversity of food at large.

viii. Contrary to common knowledge of external observers, there seems to be a genuine care for the well-being of the two social groups with the highest malnutrition rates. This special care however, is defined based on local views of appropriateness of the different food items for

each individual, not on scientific knowledge. The significance of well-being is linked to beliefs concerning the value and properties of food (not scientific): hard/soft, hot/cold are examples of these culturally defined properties of food that apply differently to the different stages of a person's life and to their social status;

In sum, different culturally-rooted sets of rules govern food consumption:

a) Social status is linked to food;
b) The classificatory binary system: "hot"/"cold", "hard"/"soft" and its relationship with human biology and social development, that is in sum an ethno-medical system;
c) The lineage-related taboos;
d) The regime of consuming animal meat during rituals drives food production.

## Recommendations

i. Work in the realms of food production and the development of market chains should continue in Timor-Leste. However, agreeing with Alonso (2013), **focus should be enhanced in the development of awareness campaigns** specifically targeting the more vulnerable social groups;

ii. **Awareness campaigns should focus on changing conceptions and re-semantisizing foodstuffs**. They should address food consumption regimes linked to:

a) **Social status and food**; being regarded as the food of the social elites, rice is overvalued and makes rural households imitate the higher classes instead of investing in a balanced diet. Social status should be linked to other foodstuffs and a balanced diet;

b) **More research should be done on the ethno-scientific (local) knowledge and its effects on nutrition**.[43] From this preliminary analysis it seems that the system of classification that structures patterns of nutrition based on the metaphorical ethno-scientific knowledge is not contributing positively to the nutrition of pregnant women and newborns. However, the specific effects of its derived practices should be better known. Finding synergies between the ethno-scientific and scientific knowledge could be a way of boosting the process of behavioral change;

iii. However, **awareness campaigns should avoid encouraging regimes linked** to:

a) **Lineage taboos**: at least in the researched areas, these kinds of taboos do not seem to have a significant impact on nutrition. These particular kinds of food taboos are one of the many ways of expressing identity in society. The act of eating or rejecting to eat a particular food item allows people to demonstrate which group they belong to and state their difference from others, and are the practices that Timorese people seem more reluctant to change;

[43] A literature review of the existing works on Timor-Leste's local knowledge systems would be helpful as a first stage to address the relation between nutrition and local knowledge. Different works such as those by Amaral de Carvalho (2011); Collins, Martins, Mitchell, Teshome, & Arnason (2007); Collins, (2005); or Friedberg (1990) are examples of previous research on this topic (mainly ethnobotany) of Timor (both West and East Timor).

b) **Animistic-based ritual consumption**: Rituals are important both socially and ontologically. The change of the food consumption patterns would be focused on the daily non-ritual practices. Obviously, both the ritual and non-ritual practices are entirely interlinked, however by changing daily food consumption patterns the system of incentives driven by the consumption of meat can be counteracted so that production of other food items will be boosted;

iv. **Awareness campaigns should be formulated in a simple and understandable manner**, Notions related to nutrition should be introduced and should be conveyed directly and simply in order to have a higher impact;

v. **The processing of foodstuffs considered inconvenient can be promoted as a complementary livelihood for household economies (i.e. an income generating activity for some households)**. As we have seen some products are not consumed because their preparation is laborious; however, they are already a part of the local meals.

vi. **Lastly, the introduction of new food preparation methods and cooking tools:** electrical cooking and processing tools, rice cookers, fridges, mills and others non-electrical tools could reduce the labor involved in cooking and preparing food. Their introduction could change the comfortable perception of highly nutritious but inconvenient food items, by easing the work needed to process them.

## References


Almeida, A. de. (1945). Crónica de etnografia colonial – Carne de répteis e batráquios. Tabu alimentar dos nativos das colónias portuguesas. *Boletim Da Agência Geral Das Colónias*, *21*(241), 76–91.

Alonso Población, E. (2010). *Riesgo, Cultura y Trabajo. Un Estudio de Caso de la Pesca en Galicia*. Unpublished doctoral dissertation. Departamento de Humanidades. Universidade da Coruña.

Alonso Población, E. (2013). Fisheries and food security in Timor-Leste: the effects of ritual meat exchanges and market chains on fishing. *Food Security*. doi:10.1007/s12571-013-0308-2

AMSAT International. (2011). *Fish and animal protein consumption and availability in Timor-Leste. Regional Fisheries Livelihoods Programme for South and Southeast Asia (GCP/RAS/237/SPA) Field Project Document 2011/TIM/02* (p. 123).

Andersen, A. B., Pant, J., & Thilsted, S. H. (2013). *Food and nutrition security in Timor-Leste. CGIAR Research Program on Aquatic Agricultural Systems.Project Report: AAS-2013-29*. Penang, Malaysia. Retrieved from http://aas.cgiar.org/sites/default/files/publications/files/AAS-2013-29.pdf

Araújo, I. S. B. de. (2013). *O sagrado na cultura das parteiras do Timor-Leste*. - Universidade Federal de Santa Catarina, Centro de Ciências da Educação, Programa de Pós-Graduação em Educação. Florianópolis.

Baas, M. A., Wakefield, L., & Kolasa, K. (1979). *Community Nutrition and Individual Food Behavior* (p. 250). Minneapolis: Burgess Pub. Co.

Barraud, C., & Friedberg, C. (1996). Life-Giving Relationships in Bunaq and Kei Societies. In S. Howell (Ed.), *For the sake of our future: Sacrificing in eastern Indonesia* (pp. 351–398). Leiden: Research School CNWS.

Bukkens, S. G. F. (1997). The nutritional value of edible insects. *Ecology of Food and Nutrition*, *36*(2-4), 287–319. doi:10.1080/03670244.1997.9991521

Chinna, K., & Karupaiah, T. (2013). Assessment of monosodium glutamate (MSG) intake in a rural Thai community: questioning the methodological approach. *Nutrition & Metabolism*, *10*(1), 52. doi:10.1186/1743-7075-10-52

Cinatti, R. V. M. G. (1965). A pescaria de bé-malai. Mito e ritual. *Geographica. Revista Da Sociedade Geografica de Lisboa*, *1*, 32–51.

Collins, S. W. (2005). *The Ethnobotany of East Timor*. Ottawa-Carleton Institute of Biology.

Collins, S. W., Martins, X., Mitchell, A., Teshome, A., & Arnason, J. T. (2007). Fataluku medicinal ethnobotany and the East Timorese military resistance. *Journal of Ethnobiology and Ethnomedicine*, *3*(7). Retrieved from http://www.ethnobiomed.com/content/3/1/5

Contreras Hernández, J., & Gracia Arnáiz, M. (2005). *Alimentación y cultura. Perspectivas antropológicas* (p. 504). Barcelona: Ariel.

Costa, M. dJ, Lopes, M., Ximenes, A., Ferreira, A. D. R., Spyckerelle, L., Williams, R., … Erskine, W. (2012). Household food insecurity in Timor-Leste. *Food Security*, *5*(1), 83–94. doi:10.1007/s12571-012-0228-6

Curran, S. (2013). *Nutrition-Sensitive Agriculture Programs in Timor-Leste A Mapping and Gap Analysis* (p. 23). Dili.

De Garine, I., & de Garine, V. (1999). Antropología de la alimentación: entre Naturaleza y Cultura. In *Alimentación y cultura: actas del congreso internacional, 1998, Museo Nacional de Antropología, España* (pp. 13–34).

Delgado Rosa, F. (2012). Uruvatju e Tjiapu: Genealogias invisíveis da etnografia mossionária em Timor-Leste. In A. Fidalgo Castro & E. Legaspi Bouza (Eds.), *Léxico Fataluco-Português* (pp. 11–39). Dili: Salesianos de Dom Bosco Timor-Leste.

Do Amaral de Carvalho, D. (2011). Local Knowledge of Timor Leste! In *Based on the national workshop on "Promoting LINKS and SIDS Programmes in Timor Leste" Dili, Timor Leste, 7 – 8 June 2011* (Vol. 5). Jakarta: UNESCO Jakarta.

Fanzo, J., & Curran, S. (2013). *Nutrition Sensitive Agriculture for Timor-Leste. A Compendium of Resources* (p. 60). Dili.

FAO, & WFP. (2003). Special Report, FAO/WFP Crop And Food Supply Assessment Mission To Timor- Leste, 1 June 2003. Retrieved December 17, 2013, from ftp://ftp.fao.org/docrep/fao/005/y9571e/y9571e00.pdf

Fidalgo Castro, A. (2009). Análisis del problema de los IDPs (refugiados internos) en Timor Oriental y del papel de la intervención internacional en la gestión de la crisis. In *Memoria del Diploma de Estudios Avanzados 2008-2009. Lenguaje, Ciencia y Antropología Social.* (pp. 111–141). Ferrol: Universidade da Coruña.

Fidalgo Castro, A. (2010a). Estruturas de sustentação. In L. A. Gárate Castro & C. Asís (Eds.), *Património Cultural de Timor-Leste. As Uma Lulik do Distrito de Ainaro* (pp. 151–165). Ferrol: Secretaría de Estado da Cultura da República Democrática de Timor-Leste.

Fidalgo Castro, A. (2010b). O mundo dos objectos. In L. A. Gárate Castro & C. Asís (Eds.), *Património Cultural de Timor-Leste. As Uma Lulik do Distrito de Ainaro* (pp. 223–234). Ferrol: Secretaría de Estado da Cultura da República Democrática de Timor-Leste.

Fidalgo Castro, A. (2010c). Os elementos adjectivos nas uma lulik. In L. A. Gárate Castro & C. Asís (Eds.), *Património Cultural de Timor-Leste. As Uma Lulik do Distrito de Ainaro* (pp. 209–221). Ferrol: Secretaría de Estado da Cultura da República Democrática de Timor-Leste.

Fidalgo Castro, A. (2010d). Os materiais de construção. In L. A. Gárate Castro & C. Asís (Eds.), *Património Cultural de Timor-Leste. As Uma Lulik do Distrito de Ainaro* (pp. 167–176). Ferrol: Secretaría de Estado da Cultura da República Democrática de Timor-Leste.

Fidalgo Castro, A. (2012a). A Religião em Timor-Leste a partir de uma Perspectiva Histórico-Antropológica. In A. Fidalgo Castro & E. Legaspi Bouza (Eds.), *Léxico Fataluco-Português* (pp. 79–118). Dili: Salesianos de Dom Bosco Timor-Leste. Retrieved from http://hdl.handle.net/2183/9927

Fidalgo Castro, A. (2012b). Sacred Houses in Timor-Leste: Traditional Architectural Knowledge and Practice (Unofficial English translation). In D. do Amaral de Carvalho (Ed.), *Local Knowledge of Timor!* (pp. 2–12). Jakarta: Haburas Foundation, Timor Leste National Commission for UNESCO and the UNESCO Regional Science Bureau for Asia and the Pacific in Jakarta. Retrieved from http://www.unesco.or.id/download/SCS-LINKS book_ENGLISH version.pdf

Fidalgo Castro, A. (2012c). Uma lulik iha Timor-Leste (matenek tradisionál arkitetoniku no pratika). In D. do Amaral de Carvalho (Ed.), *Matenek Lokal Timor nian! Haktuir husi (Links) workshop "Matenek Tradisional Riku soin ba Dezenvolvimentu" Dili, 7-8 Junhu 2011* (pp. 2–12). Jakarta: Haburas Foundation, Timor Leste National Commission for UNESCO and the UNESCO Regional Science Bureau for Asia and the Pacific in Jakarta. Retrieved from http://unesdoc.unesco.org/images/0021/002145/214540tet.pdf

Fidalgo Castro, A., & Alonso Población, E. (2013). The politics of ritual. Traditional authorities and social discourses in the nahe biti ritual in Faulara (Liquiçá district), Timor.Leste. In *Paper presented at 7th EuroSEAS Conference School of Social and Political Sciences -ISCSP. University of Lisbon - Lisbon, 02-05 July 2013*.

Fidalgo Castro, A., & Legaspi Bouza, E. (2012). *Léxico Fataluco-Português*. (A. Fidalgo Castro & E. Legaspi Bouza, Eds.) (p. 286). Dili: Salesianos de Dom Bosco Timor-Leste. Retrieved from http://ruc.udc.es/dspace/bitstream/2183/9927/2/Nacher_Dictioluku.pdf

Forman, S. (1981). Life Paradigms: Makassae (East Timor) Views on Production, Reproductions, and Exchange. *Research in Economic Anthropology*, *4*, 95–110.

Friedberg, C. (1990). *Le savoir botanique botanique des Bunaq. Percevoir et classer dans le Haut Lamakenen (Timor, Indonésie)*. Paris: Éditions du Muséum.

Gárate Castro, L. A., & Assís, C. (2010). *Património Cultural de Timor-Leste. As Uma Lulik do Distrito de Ainaro* (p. 277). Ferrol: Secretaría de Estado da Cultura da República Democrática de Timor-Leste.

García Arnáiz, M. (2007). Comer bien, comer mal: la medicalización del comportamiento alimentario. *Salud Pública Méx [online]*, *49*(3), 236–242. Retrieved from http://ref.scielo.org/gjb2hr

García, H. V. (2009). El contexto de la salud malaya: sistema humoral, medicina tradicional, reproducción y ritos de paso. *Revista de Dialectología Y Tradiciones Populares*, *LXIV*(2), 37–62.

Graeber, D. (2012). *En Deuda. Una historia alternativa de la economía*. Madrid: Ariel.

Hicks, D. (1977). Tetum Ecology. *Anthropology*, *1*(2), 165–169.

Hicks, D. (1984). *A Maternal Religion: The Role of Women in Tetum Myth and Ritual*. *Monograph Series on Southeast Asia* (Vol. Special Re). Illinois: Center for Southeast Asian Studies, Northern Illinois University.

Hicks, D. (1988). Literary Masks and Metaphysical Truths: Intimations from Timor. *American Anthropologist*, *Vol. 90, N*, 807–817. Retrieved from http://links.jstor.org/sici?sici=0002-7294(198812)2:90:4<807:LMAMTI>2.0.CO;2-C

Hicks, D. (1990). *Kinship and Religion in Eastern Indonesia*. Göteborg: Acta Universitatis Gothoburgensis. Gonthenburg Studies in Social Anthropology 12. Retrieved from https://docs.google.com/file/d/0ByoQ2rd_6yqqOFNnZzlMcFN0Y2M/edit?usp=sharing

Insawang, T., Selmi, C., Cha'on, U., Gershwin, M. E., Yongvanit, P., & Prasongwattana, V. (2013). Response to Dr. Roger's letter: further studies are necessary in order to conclude a causal association between the consumption of monosodium L-glutamate (MSG) and the prevalence of metabolic syndrome in the rural Thai population. *Nutrition & Metabolism*, *10*(1), 10. doi:10.1186/1743-7075-10-10

King, M. (1965). Fishing Rites at Be Malai, Portuguese Timor. *Records of the South Australian Museum*, *15*(1), 109–117.

Lekede'e Study Group. (2006). Lia Fuan ou Termu Adat Ema Tokodede Likisá. Liquiçá: Lekede'e Study Group ( LSG ) & Timor Lorosa'e –Nipon Culture Center ( TNCC ). Retrieved May 21, 2013, from http://www.geocities.ws/dalen_tokodede/termu-lisan.htm

Lisón Tolosana, C. (1987). *Brujería, Estructura social y Simbolismo en Galicia*. Madrid: Akal.

National Statistics Directorate (NSD), & ICF Macro. (2010). *Timor-Leste Demographic and Health Survey 2009-10* (p. 136). Dil: NSD [Timor- Leste] and ICF Macro.

NSD & UNFPA. (2011). *Population and Housing Census of Timor-Leste, 2010 Volume 3: Social and Economic Characteristics* (Vol. 3). Dili. Retrieved from http://www.mof.gov.tl/wp-content/uploads/2011/06/Publication-3-English-Web.pdf

Park, M. A. (2011). *Introducing Anthropology: An Integrated Approach* (5th ed.). New York: McGraw-Hill.

Pascoal, E. E. (1967). *A Alma de Timor vista na sua Fantasia. Lendas, fábulas e contos*. Braga: Barbosa & Xavier, Lda.

Pati Ojha, G. (2011). *Baseline Survey. Hadia Agriculture no nutrisaun (HAN)* (p. 57). Dili.

Peace Corp. (2004). Health Terms Tetun-English. Retrieved April 21, 2013, from http://bairopiteclinic.tripod.com/pdf/MedicalTetun.pdf

Pena Castro, M. J. (2010a). Introdução às estruturas cosmovisivas e aos princípios básicos da organização social tradicional em Ainaro. A uma lulik e a vida cerimonial. In L. A. Gárate Castro & C. Asís (Eds.), *Património Cultural de Timor-Leste. As Uma Lulik do Distrito de Ainaro* (pp. 45–68). Ferrol: Secretaría de Estado da Cultura da República Democrática de Timor-Leste.

Pena Castro, M. J. (2010b). Las casas sagradas de Timor Oriental como estrategia de consolidación de la identidad nacional en un joven estado. In C. Ordaz Benet, N. Feliu Beltrán, C. Jiménez Rico, J. Kirby, B. Martín Domínguez, & M. Martínez Valenzuela (Eds.), *Libro de actas del IV Congreso Internacional de Patrimonio Cultural y Cooperación al Desarrollo. 16, 17 y 18 de junio de 2010. Sevilla (España)* (pp. 327–334). http://www.iaph.es/export/sites/default/sites/patrimonioydesarrollo/LibroActas.pdf: Instituto Andaluz de Patrimonio Histórico. Retrieved from http://digital.csic.es/bitstream/10261/25880/3/2010_Actas IV Congreso Internacional Patrimonio Cultural.pdf

Pena Castro, M. J., Gárate Castro, L. A., & Fidalgo Castro, A. (Col. . (2010). *As uma lulik de Ainaro. Identidades sociais e rituais em Timor-Leste* (p. 70). Dili.

Pond, W. G., Nichols, B. L., & Brown, D. L. (2009). *Adequate food for all. Culture, Science, and Technology of Food in the 21st Century* (p. 436). Boca Raton, London & New York: CRC Press.

Renard-Clamagirand, B. (1982). *Marobo, une société ema de Timor*. Paris: Langues et Civilisation de L'Asie du Sud-Est et du Monde Insulindien 12, SELAF.

Rogers, M. D. (2013). Further studies are necessary in order to conclude a causal association between the consumption of monosodium L-glutamate (MSG) and the prevalence of metabolic syndrome in the rural Thai population. *Nutrition & Metabolism*, *10*(1), 14. doi:10.1186/1743-7075-10-14

Sanyu Consultants Inc. (2009). *The Study on Project Promotion of Agribusiness in Timor-Leste. Interim Report* (p. 123).

Savcheniuk, O. A., Virchenko, O. V., Falalyeyeva, T. M., Beregova, T. V., Babenko, L. P., Lazarenko, L. M., … Spivak, M. Y. (2014). The efficacy of probiotics for monosodium glutamate-induced obesity: dietology concerns and opportunities for prevention. *The EPMA Journal*, *5*(1), 2. doi:10.1186/1878-5085-5-2

Seeds of Life. (2007). *Patterns of Food COnsumption and Acquisition During the Wet and Dry Season in Timor-Leste: A Longitudinal Case Study among Subsistence Farmers in Aileu, Baucau, Liquisa and Manufahi* (p. 49). Dili. Retrieved from http://seedsoflifetimor.org/wp-content/uploads/2012/09/Patterns-of-food-consumption-and-acquisition.pdf

Shimada, A., Cairns, B. E., Vad, N., Ulriksen, K., Pedersen, A. M. L., Svensson, P., & Baad-Hansen, L. (2013). Headache and mechanical sensitization of human pericranial muscles after repeated intake of monosodium glutamate (MSG). *The Journal of Headache and Pain*, *14*(1), 2. doi:10.1186/1129-2377-14-2

ThiThu, H. V. (2013). Epidemiological Studies of Monosodium Glutamate and Health. *Journal of Nutrition & Food Sciences*, *01*(S10). doi:10.4172/2155-9600.S10-009

Traube, E. G. (1986). *Cosmology and Social Life: Ritual Exchance among the Mambai of East Timor*. Chicago and London: The University of Chicago Press.

Tsujimura, T. N., Alonso Población, E., Amaral, L. dos R., & Rodrigues, P. (2012). *Safety at sea assessment in the Timor-Leste small-scale fisheries sector. Technical report*. Bangkok. Retrieved from http://www.fao.org/docrep/019/ar291e/ar291e.pdf

Vasco da Silva Miranda de Oliveira, N. (2008). *Subsistence Archaeobotany Food Production and the Agricultural Transition in East Timor*. Department of Archaeology and Natural History, Research School of Pacific and Asian Studies, College of Asia and the Pacific, The Australian National University.

Vasco da Silva Miranda de Oliveira, N. (2010). Food Security in Timor-Leste: Lessons from Archaeology. In D. Grenfell, M. Walsh, J. Soares, S. Anselmie, A. Sloman, V. Stead, & A. Trembath (Eds.), *Nation-building across the Urban and Rural in Timor-Leste: Conference Report* (pp. 52–54). Dili: RMIT University & Australian Volunteers International.

## Annex 1. Names, social groups and locations of interviewed people (interviews and FDG)

| Name | Location |
|---|---|
| Berta dos Santos (female adult) | Liquiçá, Dato, aldeia Kamalelara |
| Pascuela da Silva & daughter (female elder & female youth) | Liquiçá, Dato aldeia Kamalelara. |
| Humbelina da Silva & husband (female adult & male adult) | Liquiçá, Dato, aldeia Kamalelara |
| Inés da Costa Santos (female adult)<br>Julio da Costa Martin (male adult)<br>Berta da Crus (female elder) | Aldeia Hatmatilu, Asumanu |
| Alexander da Silva (male youth) | Aldeia Kirlelo, Asumanu. |
| Augusto dos Santos (male elder)<br>Delfin da Silva (male youth)<br>Florindo Sequeira Alves (male elder) | Aldeia Kirlelo, Asumanu. |
| Viriato do Nascemento (male youth) | Aldeia Hatmatilu, Asumanu. |
| Ana Luisa dos Santos Martins (female youth) | Aldeia Hatmatilu, Asumanu. |
| Marcelino Sampaio (male adult)<br>Maria Babo (female adult)<br>Lucia Mendonça (female youth) | Aldeia Hatmatilu, Asumanu. |
| Abrao Pinto (male adult) | Aldeia Siskolema, Asumanu. |
| Óscar Ximenes (male youth) | Aldeia Siskolema, Asumanu. |
| Tomas dos Santos (female adult)<br>Francisca de Deus (male adult) | Aldeia Malabe, suku Malabe, Atsabe |
| Carlos Monteiro (male adult) | Aldeia Malabe, suku Malabe, Atsabe |
| Ezequiel Maia Monteiro (male adult)<br>Lidia Gonçalves (female adult)<br>Fátima Reis de Deus (female elder) | Aldeia Ilat Kora, suku Malabe, Atsabe |

| | |
|---|---|
| Aniceto Gomes (male elder) | |
| Geraldo Moises (male adult) | Aldeia Ilat Kora, suku Malabe, Atsabe |
| Antonino Gomes (male youth) | Aldeia Ilat Kora, suku Malabe, Atsabe |
| Batista da Crus Soares (male adult) | Aldeia Bob-Leta (kampung baru), suku Malabe. Atsabe |
| Carlota Soares (female elder) | Aldeia Bob-Leta (kampung baru), suku Malabe. Atsabe |
| Filomena Rosari (female adult)<br>Paulina Fernandes (female adult)<br>Maria da Silva (female youth)<br>Beatriz de Araujo (female youth)<br>Deolina de Jesus (female elder) | Aldeia Maumegi, suku Malabe. |

## Annex 2. Terms of Reference (ToR)



# Terms of Reference

## Consultant

**CARE International in Timor-Leste is looking for a Consultant to carry out the study on traditional cultural practices around food utilization and consumption**

### Background and rationale

Timor-Leste is one of the fastest growing Nations in Asia, with a per capita growth of 5 - 6 percent per annum (WB). Its official per capita income is USD 1,068 due to its oil and gas revenues[44]. Reconstruction of the country and its economy has been successful since full independence in 2002, and Timor-Leste is today a peaceful nation, having stabilised and recovered from the civil unrest of 2006-7. It is now in a rapid economic development phase.

Even with this oil wealth and swiftly changing economic environment, 41 percent of the country's population are living below the poverty line[45], and malnutrition an endemic problem, that will affect the country's ability to develop in line with its neighbours if it does not have a fit and healthy young population now.

[44] http://data.worldbank.org/indicator/NY.GDP.PCAP.CD
[45] http://data.worldbank.org/country/timor-leste

Approximately 80% of the population of Timor-Leste[46] live in rural areas or are dependent on subsistence agriculture, including forestry and coastal fisheries, for food and income. While great strides have been made to get public services to the rural areas, education levels remain low, and public extension services weak, hampered in part by the poor road systems, and the mountainous nature of the country.

Even though 25% of the total land area of Timor-Leste (14,500km$^2$) is suitable for crop and livestock production, on average 24% of rural households cultivate less than 0.5 hectare of agricultural land and 60% between 0.5 and 2.0 hectares[47]. The mountainous terrain is largely deforested with poor, soils as well as variable and unreliable rainfall and is subject to high erosion rates. Most of the agricultural land is rain-fed and irrigation accounts for a minor share of the total, and exclusively for rice production. Agriculture is practiced mainly on a subsistence basis with maize, rice, cassava, sweet potatoes and beans being the staple crops. With the exception of coffee, Timor-Leste produces no significant quantities of marketable surpluses, including marine fish. Data from recent reports from the Ministry of Agriculture and Fishery (MAF) and the World Food Program (WFP), regarding nutrition status in Timor-Leste, showed that over one-third of Timor-Leste's population regularly experiences food shortages. In some areas, such as the Western Highlands, the situation has worsened in recent years. Root causes of food insecurity include: population growth and human pressure on natural resources, poor soil, improper farming techniques such as slash and burn cultivation, watershed system degradation, lack of diversified farming, low yield of local crop varieties, and a lack of reliable post-harvest techniques.

The Government and many agencies, such as CARE, have worked with communities to tackle these issues, and have achieved significant and encouraging results for increased crop yields, better food storage, more food available for consumption and sale. With intense focus on small groups, improved health outcomes can be observed but, generally, national malnutrition rates, especially among young children and women, are not improving, and have even declined between 2004 and 2010, though we wait the results of the latest National Nutrition survey carried out by UNICEF. Where there is available income, there is a greater dependence on the imported goods that may be where people spend their money; on poor quality rice, palm oil and sugary goods, which may seem attractive additions, but provide no nutrient quality.

CARE has observed that even with the improved yields and increased amounts of nutritious foods available for family consumption that have been the result of intense interventions, malnutrition still pervades generally. CARE suggests that cultural practices, prohibitions on the consumption of certain foods at certain times, affect feeding practices for infants, and

[46] Current population of Timor-Leste is 1.21 million (National Census, 2012)
[47] Country Gender Assessment November 2005, Asian Development Bank and UNICEF, P1

food choices for pregnant women, and these may underlie attempts to improve the very low dietary diversity affecting the health status of women and children in Timor-Leste.

## CARE work on food security and nutrition

CARE established its operations in Timor-Leste in 1994, and has since 2007 shifted it is humanitarian response program towards strategic development focusing on the areas of education, health, community empowerment, income generation, and food security. In 2007, CARE, with other NGOs, began support to food security and livelihoods through the EU and funded project "Local Initiatives for Food Security Transformation" (LIFT) aligned to the "Seeds of Life" program in the Ministry of Agriculture and Fisheries. The LIFT project targeted food insecure and female headed households in Bobonaro and Liquiça districts to strengthen 166 community-groups to provide mutual support for achieving sustainable improvements in agricultural production, improved seed replication and food source diversification. From 2010 the EU funded project HAN (*Hadia Agricultura no Nutrisuan* [Improving Agriculture and Nutrition]) expanded the LIFT experience to a further 149 community groups food security in the same districts, adding Ermera district, that is one of the most food insecure in the country. HAN is working with approximately 2,800 at risk households, addressing the inter-related issues of food availability, access, utilisation and resilience to natural disasters. Approaches include interventions to improve agriculture and farm productivity, access to market, financial services for income, improvement of dietary practices and health services, and community based disaster management to improve better year round food security.

From December 2012, the Norwegian funded health program "Promoting Health Lives" (PROMISE) was established to improve health and nutrition in favour of the poorest households in the district of Ermera and Liquiça. PROMISE is working in synergy with the HAN project to achieving the first Millennium Development Goal (MDG), enhancing practices in the areas of maternal and child health, sanitation and hygiene and improving production and daily consumption of nutritious food at the household level. The activities carried out in the past include identifying and training Community Health Volunteers on health and nutrition topics in targeted communities. In addition, mothers groups have been established to promote through Behaviour Changes Communication (BCC) tools, good practices for food preparation and consumption, sanitation and hygiene as well as birth spacing. Malnutrition monitoring is an undertaken in each community to identify nutrition status among children under five and pregnant women for referral to health services when required.

## Relevance to understand the barriers that are affecting the improvement of malnutrition

Traditional feeding practices which restrict or prohibit certain food items, particularly for children and women have been largely reported in Timor-Leste. The local explanation is often that the forbidden foods would cause a young child or a pregnant woman to fall sick or die. It is important to know of, understand and analyse local beliefs, taboos and practices that exist and if they have an effect upon the nutritional status of vulnerable people. Therefore after having identified the local constrains determined about food items and feeding practices, interventions on agriculture, health and education can be addressed toward a behaviour change approach, emphasizing the dangers to health and potential good practices.

## Description of the target areas

In order to assess food habits in different communities located in the major agro-ecological zones of intervention, this study will focus on three areas within two western districts of Liquiça and Ermera. The three target areas include lowlands and mid-land slopes in Liquiça district and highlands in Ermera. Subsistence agriculture is the only livelihood for the majority of households in the two districts. Maize (*Zea mays)* is the major determinant crop for household food security. In line with HAN baseline data – maize is the principal crop for 86% target households in the target areas, during the cropping season 2012. Cassava cultivation (*Manihot esculenta*), next only to maize, can serve as a coping food due to its longer lasting quality – households follow in-situ storage even after full maturity and harvest when needed. Almost every household also grows a wide range of perennial food crops such as orange, papaya, mango, jackfruit, banana and coconut that represent an important source of diet diversification. Most households own livestock (cattle, water buffalo, goats, sheep, chickens and pigs), which are considered valuable assets for farmers, and cattle ownership largely determines social status in village communities. However, livestock do not represent a reliable source of food because farmers are reluctant to slaughter animals for their own consumption, except during special traditional events (funerals, festivals or wedding celebrations). Ermera and Liquiça districts are both important coffee and candle nut producers. Both of the cash crops are the major source of income for households. Being high-value-export crops, both activities create some seasonal demand for local labour around harvesting and processing time that vulnerable households can seek to meet their food security.

### *Ermera district*

Ermera is one of the three districts in the western region with an estimated population of 103,199. It comprises five sub-districts and has an average altitude above 900 meters. The district of Ermera is the main coffee-growing in the country, with more than 80% of households involved in coffee production. The excessive focus on one single cash crop is to

the detriment of food production and is a cause of reduced diet diversity and poor nutrition. From the 2007 national census, it emerged that more than 50% of households were reported as living below the poverty line and 50% of children under 5 years were found to be severely stunted[48].

### *Liquiça district*

Liquiça is one of the northern coastal districts and comprises 3 sub-districts with an estimated population of 54,834. The district area extends from the sea side to an altitude of 700 meters. Agriculturally[49], the district is not an important food crop producing area and relies mainly on coffee as a source of income. The district can be divided into two production zones - uplands where coffee is produced and the lowlands where maize is cultivated. Rice cultivation is very limited around Maubara sub-district. Due to its specialization on coffee, the district is a chronically food deficit area.

## Objectives of the Study

The purpose of this study is to highlight which traditions, cultural practices, beliefs and other factors related to food utilization and consumption within rural communities in Timor-Leste affect the nutrition status of people. If these are known, interventions to improve the quality of food security will be more effective in reducing malnutrition.

Traditional practices, behaviours, and beliefs relating to food processing, utilization and consumption are a mixture of theoretical knowledge and practical skills developed over time within a community, mainly through accumulation of experiences and understandings of the environment in a given culture. The case study will be focused in the specific areas of CARE implementation of food security interventions. The study will focus on three different agro-ecological zones in Timor-Leste (lowlands [below 100 m], highlands [between 200 to 700 m], and uplands [above 700 m]), in order to cover a broad geographical area and emphasize potential differences as well as uniformity amongst different communities. The selected target communities namely are *Dato*, *Açumanu* in Liquiça district and *Malabe* in Ermera district.

| No. | District | Sub-District | Suco | Altitude | Coordinate |
|---|---|---|---|---|---|

[48] Fanzo J., Curran S., Denning G. (2013). "A Nutrition Sensitive Agriculture Strategy" for the Ministry of Agriculture and Fishery of Timor-Leste and *Fini Ba Moris* (Seeds of Life).

49 FAO/WFP 2007 Crop and Food Supply Assessment Report, p16

| | | | | (AMSL) | |
|---|---|---|---|---|---|
| 1 | Liquiça | Liquiça | Dato | 54 | 8 35'49.96"S 125 18'52.60"E |
| 2 | Liquiça | Liquiça | Açumanu | 770 | 8 40 35.9 S, 125 20 58.5 E |
| 3 | Ermera | Atsabe | Malabe | 1,028 | 8 56 02.7 S, 125 23 31.7 E |

## Approach and Methodology

The study must consider the following activities and approaches:

Participatory methodologies (Key informant interviews, Focus groups discussions, etc);

Previous experience and relevant research;

Field work;

Contact with a range of organisations and groups involved in health, food security and nutrition

Application of a gender balance and women's empowerment perspective (utilize the CARE women's empowerment framework).

Taking into consideration the target geographical areas of study, the analysis and description of the relevant factors involved in food consumption must consider the following criteria:

Geographic patterns (rural-urban, coastal area, mountainous areas, accessibility, etc)

Gender relationships

Social patterns

Religious practice

Ethnicity

Seasonality and frequency of food consumption

Health and Hygiene practices in relation to food preparation and consumption

## Specific Objectives

The specific objectives of this study are:

To identify and describe the social factors, including traditional and cultural practices, behaviours and believes that are affecting nutrition;

To describe the effects (positive or negative) of these factors reflect on people nutrition.

## Expected outputs

At the end of the field research and before the final submission of the Study Report, the Consultant will present the first findings to CITL and stakeholders.

At the end of the assignment the consultant will produce a Report to be submitted to the Project review committee, including CITL Country Director, CITL Program Officer, HAN and Health Program Managers. The consultant should ensure that at a minimum, the Study Report in clear English including the following sections:

Study title, Name of Project, Country, PN (Project Number), dates the study was implemented;

Names and contact information of those conducting the study;

Executive summary;

Limitation of the methodology;

Principal findings:

A list (matrix) of food available/accessible and the existence of behaviours in regard to each food item and specific groups of the community (women, child's, pregnant women, lactating women, elder people, men, etc);

A clear description of the behaviours, identifying origins, social implications, gender relationships, etc.;

A clear description of the effects of this practice on nutrition in regards to different members of the household (women, children, pregnant women, lactating women, elder people, men, etc);

A list of recommendations about how to address these factors, including lessons learned that could be useful to the wider CARE and development community and recommendations for future programmes / projects;

Annexes, at minimum, should include:

Terms of Reference;

Study methodology, including key research questions or hypotheses, operationalization of key concepts and data analysis procedures;

Data gathering instruments (observation guides, surveys, focus group discussion guides, etc.);

Data presentation and analysis;

List of people interviewed.

## Lines of Communication

Day to day support to the Consultant will be coordinated by the Agriculture Program Manager in coordination with the Health and Hygiene Program Manager and in consultation with the CARE Acting Country Director – Programs. Communication relating to the management of logistics/finance for the consultancy will also be performed by the Agriculture Program Manager.

## Length of Assignment

The assignment will start on the first week of November 2013 and it will last 20 working days. The following is an indicative time frame.

| No. | Action | Location | Time (days) |
|---|---|---|---|
| 1 | Meeting with HAN and PROMISE teams | Dili | 0.5 |
| 2 | Review and acceptance of the methodology | Dili | 0.5 |
| 3 | Review of HAN and PROMISE Program documents (Project documents, interim reports, review, etc.) | Dili | 1 |
| 4 | Interviews/FG (including travels) | Liquiça | 5 |
| 5 | Interviews/FG (including travels) | Atsabe | 5 |
| 6 | Elaboration of data and information: first outcomes | Dili | 1.5 |
| 7 | Presentation of the initial findings to CITL | Dili | 0.5 |
| 8 | Data analysis | Home base | 2 |
| 9 | Report writing | Home base | 4 |
| | **Total** | | **20** |

## Required knowledge and experience

Essential knowledge and experience of a high order are required in the following areas:

Relevant academic background (community development, anthropology, nutrition, psychology, or relevant area);

Demonstrated understanding of nutrition and food security concepts;

Experience in facilitating participatory activities in the field;

Demonstrated experience and understanding on Timor-Leste context.

## Personal Attributes & Skills:

Proven oral and written communication skills;

Experience working with people of different cultures;

Able to work under pressure and meeting deadlines;

Excellent analytical skills;

Patience and flexibility;

Commitment to social justice and gender equity;

Experience of travelling and working in remote locations and with basic facilities;

Fluency in English (both oral and written) is required. Knowledge of Tetum or Bahasa Indonesia or Portuguese languages are desirable assets.

## How to apply:

Interested candidates should submit their applications to the *Giacomo.Mencari@careint.org*, cc: *Celina.Exposito@careint.org*. Applications should include

CV

1 page (max) summary of proposed methodology

Daily rate in USD

Indication of availability

The closing date for applications is **25 October 2013**. Please note that only the shortlisted candidates will be contacted.

**CARE is an equal opportunity employer. Women are strongly encouraged to apply for this position.**

**CARE International Timor-Leste is committed to protecting the rights of children in all areas we work. Applicants are advised that CARE International Timor-Leste reserves the**