

**Residential Child Population of Batey 2, Esperanza, Province of
Valverde, Mao, according to gender and age group, March 2017**

DEMOGRAPHIC, SOCIAL AND ECONOMIC STUDY OF THE COMMUNITY BATEY 2

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FOR THE ATTENTION OF:

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INTRODUCTION

Batey 2 is located in the North East of the Dominican Republic between the cities of Mao, Valverde and Navarette de Santiago. The community was founded in 1952 for Haitian migrants who worked in the sugar mill of Esperanza cutting sugar cane.

Batey 2 represents a sample of the bateys existing throughout the territory of the Dominican Republic. It is identified by its precarious conditions of life for its inhabitants who still have no access to basic public services such as: medical attention, education, electricity and treatment of sewer water.

The bateys are rural communities of Haitian migrants that emerged around the sugar industry in the Dominican Republic. These communities were established inside the Dominican Republic at the beginning of the 19th century when sugarcane plantations expanded the use of Haitian manual labor which was both itinerant and unregulated.

In the Batey, the level of malnutrition of the children is lamentable, with the presence of *marasmo* (a form of malnutrition where carbohydrates and lipids are lacking) and *Kwashiorkor* (a form of malnutrition where protein is lacking). The reality of infant malnutrition in Batey 2 is dramatic; the majority of these children are severely malnourished comparing their age, weight and height with current standards. This state of malnutrition is caused by low food intake and the lack of nutrients in the body. Chronic malnutrition and bad food are consequences of extreme poverty.

In addition this brings with it serious infectious diseases derived from ingesting food in bad condition as well as contaminated water, among other things. This inhibits, at the same time, normal cognitive mental development of the children which is consequently reinforced by the inaccessibility to education within the conditions they suffer. Childhood malnutrition can have consequences at various levels that follow a person throughout their life. During infancy, the children suffering from acute malnutrition can manifest the following physio pathologies:

- a) Decreased growth of brain tissue.
- b) Decreased cardiac muscle mass.
- c) Decreased oxygen consumption.
- d) Decreased weight of renal plasma flow.
- e) Anemia

We are grateful for the great work of the team that made possible the completion of this important Project, principally the 12 people—census takers, supervisors and community leaders who knocked on doors and arrived in places they had never surveyed before. At the same time we are grateful to Dr. Thomas M. Kelly for his support in the census, and without his collaboration, this Project would have been difficult to complete. Also, we wish to thank those who received us in their homes and shared information with enthusiasm and honesty.

METHOD OF TABULATION

The data obtained was collected, tabulated and graphed on a sophisticated program of the Center for the Control and Prevention of Disease (CDC), known as EPIINFO version 3.5, which is a computerized software free to use but of high quality and very trustworthy.

The work was ethically and morally responsible and did not affect the integrity of the physical or mental health of the participants or their surroundings.

Residential Child Population in Batey 2, Esperanza, Province of Valverde, according to gender and age group, March 2017

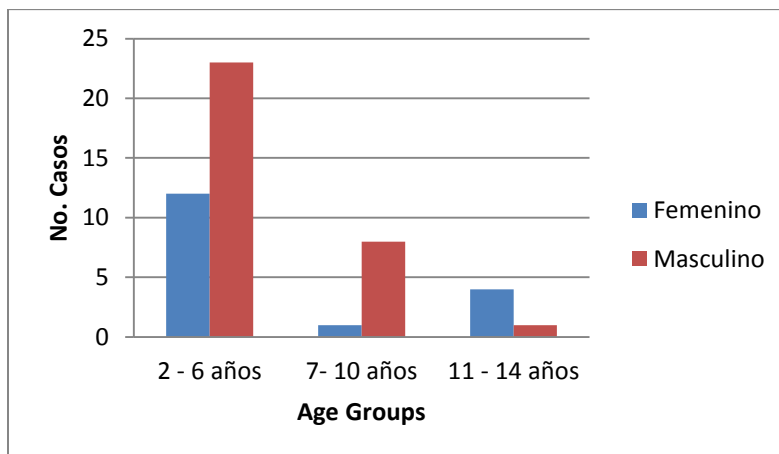
Chart no. 1

| Age | SEX | | | | TOTAL | % |
|--------------------|----------|------|-----------|------|-------|-------|
| | Feminine | % | Masculine | % | | |
| 2 - 6 years | 12 | 34.3 | 23 | 65.7 | 35 | 71.4 |
| 7- 10 years | 1 | 11.1 | 8 | 88.9 | 9 | 18.4 |
| 11-14 years | 4 | 80.0 | 1 | 20.0 | 5 | 10.2 |
| TOTAL | 17 | 34.7 | 32 | 65.3 | 49 | 100.0 |

It can be observed that in the child population of Batey 2, 71.4% are in the age group of 2-6 years old, followed by the group between 7-10 years old representing 18.4% and the 11-14 year group who comprise 10.2%. Note that the predominant gender is male with 65.3% of the total childhood population.

Residential Child Population in Batey 2, Esperanza, Province of Valverde, according to gender and age group, March 2017

Graphic no. 1



Resident Child Population in Batey 2, Esperanza, Province of Valverde, according to prominent language, March 2017

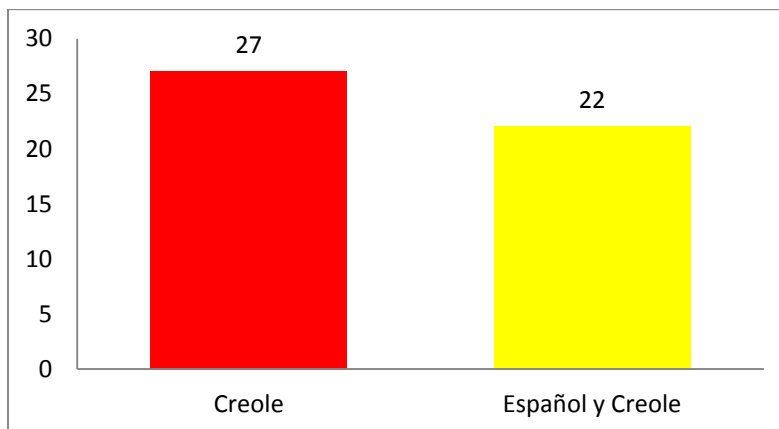
Chart no. 2

| Languages Spoken | Numbers | Percent |
|--------------------|---------|---------|
| Creole | 27 | 55.10% |
| Spanish and Creole | 22 | 44.90% |
| Total | 49 | 100.00% |

This demonstrates that 55.1% of the children use the Creole language while 44.9% use both Creole and Spanish.

Resident Child Population in Batey 2, Esperanza, Province of Valverde, according to prominent language, March 2017

Graphic no. 2



Resident Child Population in Batey 2, Esperanza, Province of Valverde, according to age and school attendance, March 2017

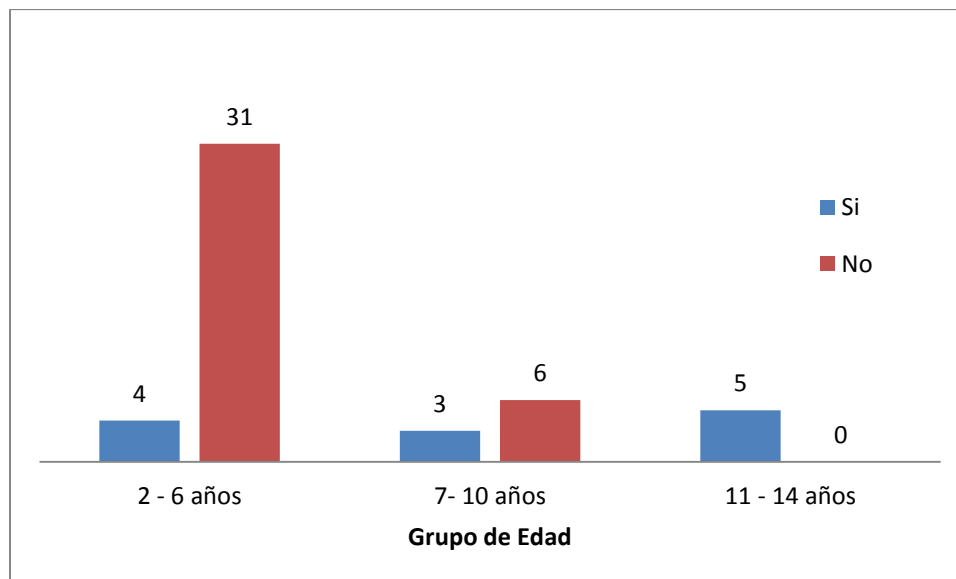
Chart no. 3

| Age | ATTEND SCHOOL | | | | TOTAL | % |
|----------------------|---------------|-------------|-----------|-------------|-----------|--------------|
| | Yes | % | No | % | | |
| 2 - 6 years | 4 | 11.4 | 31 | 88.6 | 35 | 71.4 |
| 7- 10 years | 3 | 33.3 | 6 | 66.7 | 9 | 18.4 |
| 11 - 14 years | 5 | 100.0 | 0 | 0.0 | 5 | 10.2 |
| TOTAL | 12 | 24.5 | 37 | 75.5 | 49 | 100.0 |

This demonstrates that 24.5% of the children studied attend school, which the dominate age group of between 11-14 years old. It should be emphasized that 75.5% do not attend school, comprising the majority of children between the ages of 2 to 6 years of age.

Resident Child Population in Batey 2, Esperanza, Province of Valverde, according to age and school attendance, March 2017

Graphic no. 3



Resident Child Population in Batey 2, Esperanza, Province of Valverde, according to weight in Kilograms, March 2017

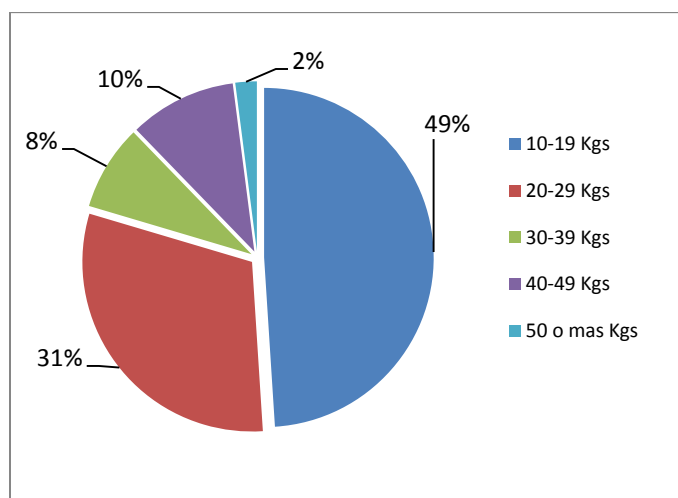
Chart no. 4

| Weight | Numbers | Percent |
|-------------------------------------|---------|---------|
| 10-19 Kgs (21-42 lbs.) | 24 | 49.00% |
| 20-29 Kgs (44-63 lbs.) | 15 | 30.60% |
| 30-39 Kgs (66-86 lbs.) | 4 | 8.20% |
| 40-49 Kgs (88-108 lbs.) | 5 | 10.20% |
| 50 o more Kgs (>110 lbs.) | 1 | 2.00% |
| Total | 49 | 100.00% |

About 49% of the residential children studied in Batey 2, presented a body weight of between 21-42 lbs., while 30.6% weighed in between 44-63 lbs. 10.2% weighed between 88-108 pounds.

Resident Child Population in Batey 2, Esperanza, Province of Valverde, according to weight in Kilograms, March 2017

Graphic no. 4



Residential Child Population in Batey 2, Esperanza, Province of Valverde, according to height in centimeters, March 2017

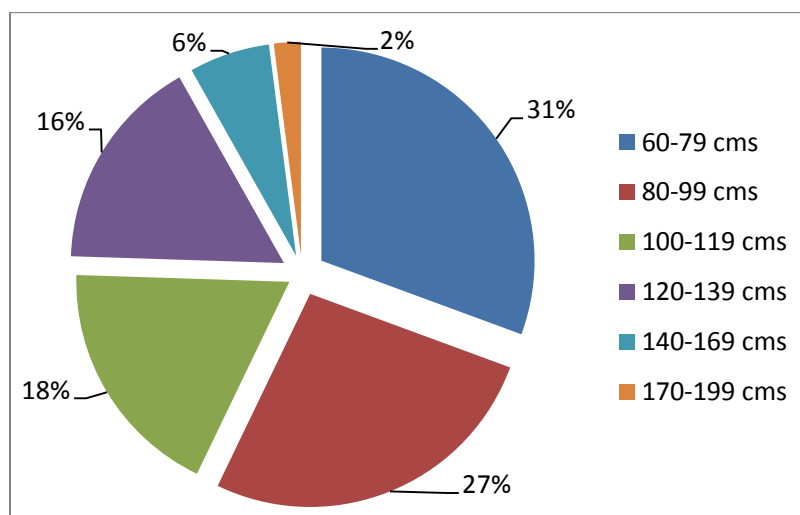
Chart no. 5

| 6. Height | Numbers | Percent |
|--------------|-----------|----------------|
| 60-79 cms | 15 | 30.60% |
| 80-99 cms | 13 | 26.50% |
| 100-119 cms | 9 | 18.40% |
| 120-139 cms | 8 | 16.30% |
| 140-169 cms | 3 | 6.10% |
| 170-199 cms | 1 | 2.00% |
| Total | 49 | 100.00% |

It is clear that 30.6% have a height of between 60 to 79 centimeters, while 26.5% measured at a height of between 80 to 99 centimeters.

Residential Child Population in Batey 2, Esperanza, Province of Valverde, according to height in centimeters, March 2017

Graphic no. 5



Residential Child Population in Batey 2, Esperanza, Province of Valverde, according to Nutritional State with the Body/Mass Index/age and gender, March 2017

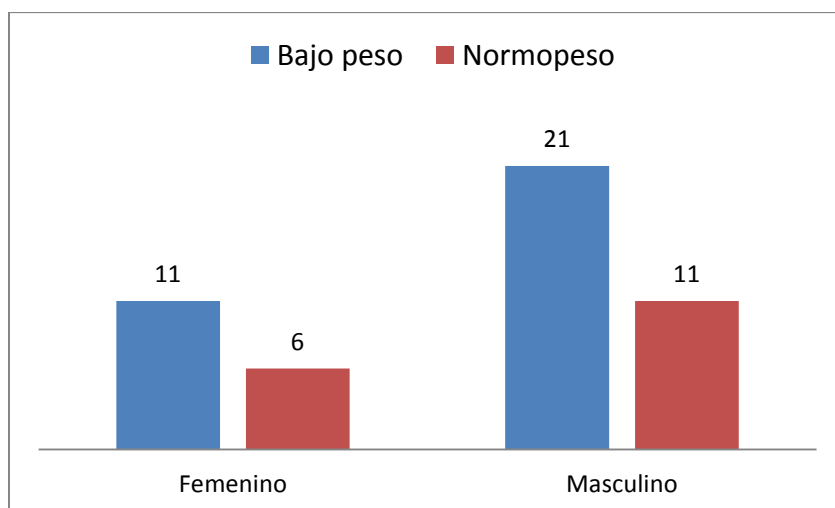
Chart no. 6

| Nutritional State according to IMC/Age | Gender | | | | TOTAL | % |
|--|----------|------|-----------|------|-------|-------|
| | Feminine | % | Masculine | % | | |
| Under weight | 11 | 34.4 | 21 | 65.6 | 32 | 65.3 |
| Normal weight | 6 | 35.3 | 11 | 64.7 | 17 | 34.7 |
| TOTAL | 17 | 34.7 | 32 | 65.3 | 49 | 100.0 |

Over 65% of the resident children in Batey 2, city of Esperanza, presented as underweight, in comparison with 34.7% who weighed in at normal weight.

**Residential Child Population in Batey 2, Esperanza, Province of Valverde, according
Nutritional State with the Body/Mass Index/age and gender, March 2017**

Graphic no. 6



**Residential Child Population in Batey 2, Esperanza, Province of Valverde, according
Nutritional State with the Body/Mass Index/age and gender, March 2017**

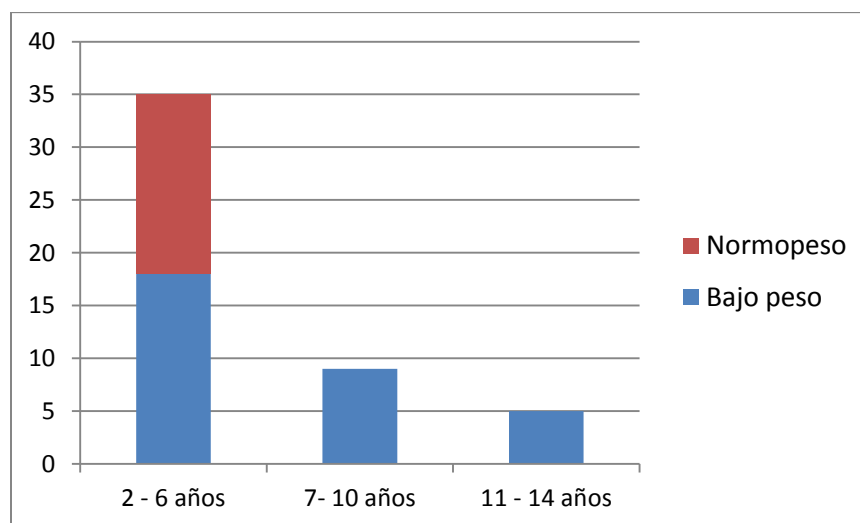
Chart no. 7

| Age | NUTRITIONAL STATE ACCORDING TO IMC/AGE | | | | TOTAL | |
|----------------------|--|-------|---------------|------|-------|-------|
| | Low Weight | % | Normal Weight | % | | |
| 2 - 6 years | 18 | 51.4 | 17 | 48.6 | 35 | 71.4 |
| 7- 10 years | 9 | 100.0 | 0 | 0.0 | 9 | 18.4 |
| 11 - 14 years | 5 | 100.0 | 0 | 0.0 | 5 | 10.2 |
| TOTAL | 32 | 65.3 | 17 | 34.7 | 49 | 100.0 |

According to the present relationship between nutritional state and body/mass index and age, it should be noted that the greatest number of underweight cases was observed in the age group of 2 to 6 years old, representing 51.4%, followed by the *entire* age group of 7 to 10 years old, as well as the *entire* age group between 11 to 14 years old.

**Residential Child Population in Batey 2, Esperanza, Province of Valverde, according
Nutritional State with the Body/Mass Index/age and gender, March 2017**

Graphic no. 7



**Residential Child Population in Batey 2, Esperanza, Province of Valverde, according
to Nutrition level and gender, March 2017**

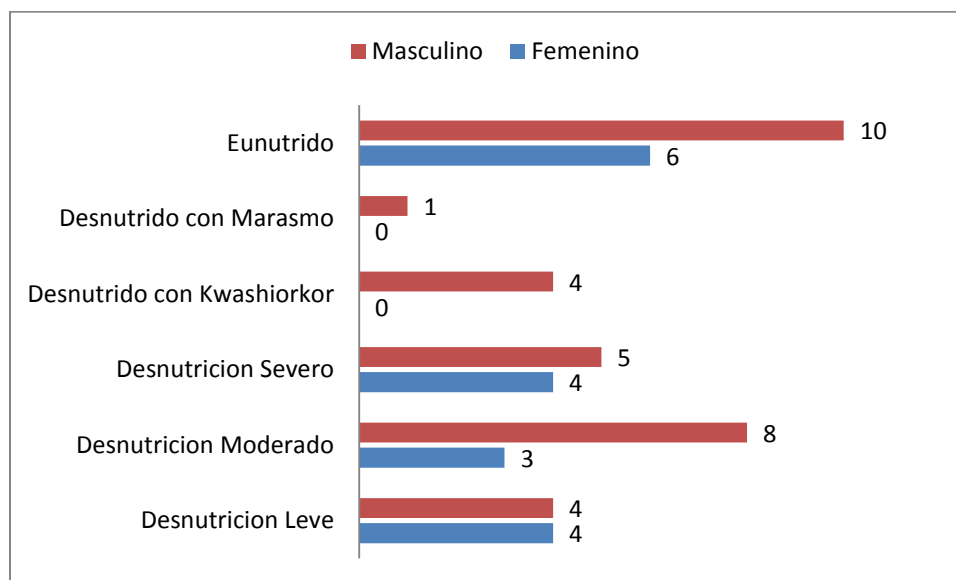
Chart no. 8

| Nutritional Level | Gender | | | | TOTAL | % |
|--------------------------------------|----------|------|-----------|-------|-------|-------|
| | Feminine | % | Masculine | % | | |
| Mild Malnutrition | 4 | 50.0 | 4 | 50.0 | 8 | 16.3 |
| Moderate Malnutrition | 3 | 27.3 | 8 | 72.7 | 11 | 22.4 |
| Severe Malnutrition | 4 | 44.4 | 5 | 55.6 | 9 | 18.4 |
| Malnutrition from Kwashiorkor | 0 | 0.0 | 4 | 100.0 | 4 | 8.2 |
| Malnutrition from Marasmo | 0 | 0.0 | 1 | 100.0 | 1 | 2.0 |
| Normal Nutrition/Weight | 6 | 37.5 | 10 | 62.5 | 16 | 32.7 |
| TOTAL | 17 | 34.7 | 32 | 65.3 | 49 | 100.0 |

Among the levels of nutrition according to professional evaluation, it is noted that the masculine gender was most affected presenting 8 cases of moderate malnutrition, meanwhile there were 5 cases of severe malnutrition and 4 among the feminine gender. The male gender presented 22 cases with some grade of malnutrition while the female gender registered 11 cases, thus making the proportion of male: female 2:1. For every malnourished female two males are malnourished.

Residential Child Population in Batey 2, Esperanza, Province of Valverde, according to Nutrition level and gender, March 2017

Graphic no. 8



Residential Child Population in Batey 2, Esperanza, Province of Valverde, according to Nutrition level and age, March 2017

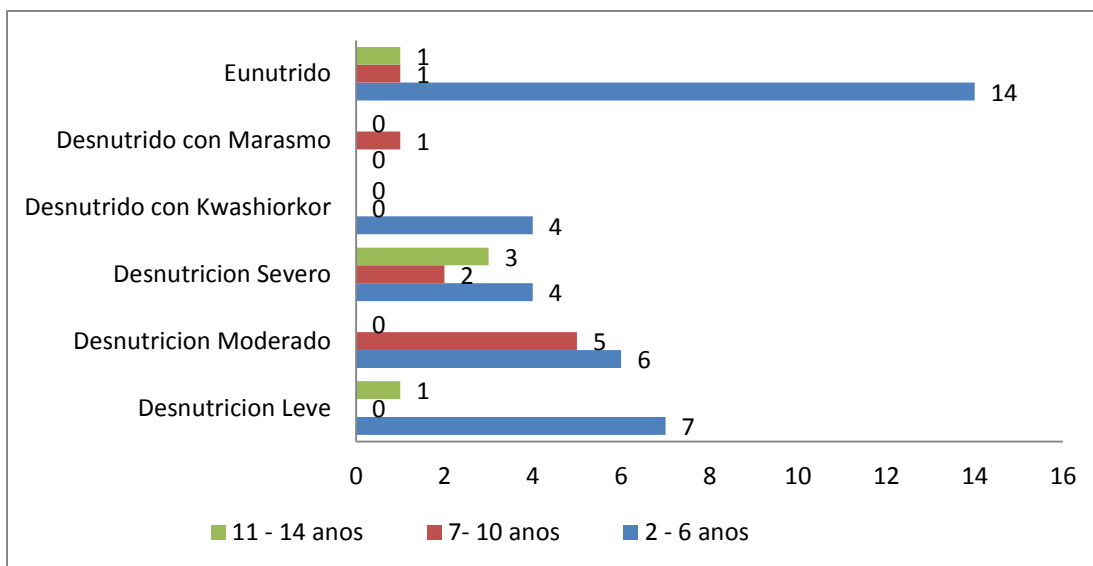
Chart no. 9

| Nutrition Level | AGE | | | | | | TOTAL | % |
|--------------------------------------|-------------|-------------|-------------|-------------|---------------|-------------|-----------|--------------|
| | 2 - 6 years | % | 7- 10 years | % | 11 - 14 years | % | | |
| Mild Malnutrition | 7 | 87.5 | 0 | 0.0 | 1 | 12.5 | 8 | 16.3 |
| Moderate Malnutrition | 6 | 54.5 | 5 | 45.5 | 0 | 0.0 | 11 | 22.4 |
| Severe Malnutrition | 4 | 44.4 | 2 | 22.2 | 3 | 33.3 | 9 | 18.4 |
| Malnutrition from Kwashiorkor | 4 | 100.0 | 0 | 0.0 | 0 | 0.0 | 4 | 8.2 |
| Malnutrition from Marasmo | 0 | 0.0 | 1 | 100.0 | 0 | 0.0 | 1 | 2.0 |
| Normal Nutrition and Weight | 14 | 87.5 | 1 | 6.3 | 1 | 6.3 | 16 | 32.7 |
| TOTAL | 35 | 71.4 | 9 | 18.4 | 5 | 10.2 | 49 | 100.0 |

It is noted that 21 children between 2-6 years of age presented some grade of malnutrition, with mild malnutrition being the most prominent. However, for children between the ages of 0 to 7 years old, 7 presented malnutrition of different levels with 5 cases of moderate malnutrition observed. Severe malnutrition was observed in 3 of the 4 cases of children between the ages of 11-14 years old.

Residential Child Population in Batey 2, Esperanza, Province of Valverde, according to Nutrition level and age, March 2017

Graphic no. 9



Residential Child Population in Batey 2, Esperanza, Province of Valverde, according to parental actions when children are sick, March 2017

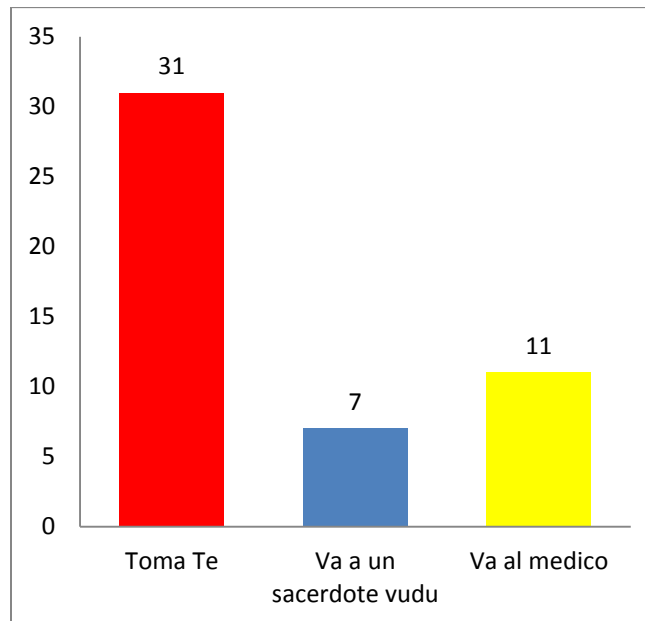
Chart no. 10

| What do you do when your children are sick? | Number | Percent |
|---|-----------|----------------|
| Have them drink tea | 31 | 63.30% |
| Go to the doctor | 11 | 22.40% |
| Take them to a voodoo doctor | 7 | 14.30% |
| Total | 49 | 100.00% |

It appears that 63% of the children interviewed were told to drink tea at the moment they began to feel sick, while 22.4% were told to go to the doctor when they felt sick and only 14.3% went to a voodoo priest to be attended to while sick.

Residential Child Population in Batey 2, Esperanza, Province of Valverde, according to parental actions when children are sick, March 2017

Graphic no. 10



Residential Child Population in Batey 2, Esperanza, Province of Valverde, according to frequent illnesses, March 2017

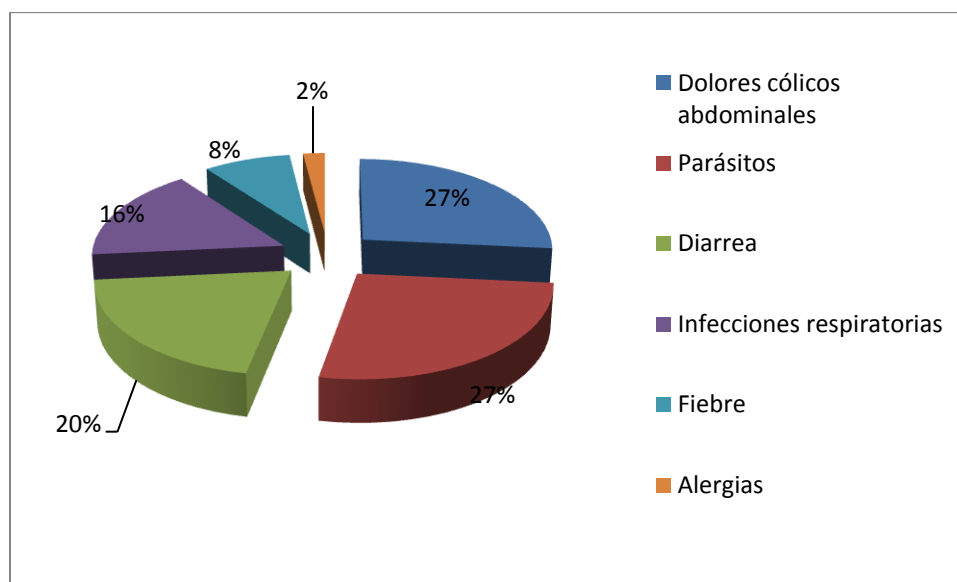
Chart no. 11

| Frequent Illnesses | Numbers | Percent |
|------------------------|-----------|----------------|
| Stomach Aches | 13 | 26.50% |
| Parasites | 13 | 26.50% |
| Diarrhea | 10 | 20.40% |
| Respiratory Infections | 8 | 16.30% |
| Fever | 4 | 8.20% |
| Allergies | 1 | 2.00% |
| Total | 49 | 100.00% |

Stomach aches and parasites were the most frequent illnesses identified among the child population studied representing 26.5% of the illnesses reported. It appears that diarrhea and respiratory infections occupy second the third place, with 20.4% and 16.3% respectively.

**Residential Child Population in Batey 2, Esperanza, Province of Valverde, according
frequent illnesses, March 2017**

Graphic no. 11



**Residential Child Population in Batey 2, Esperanza, Province of Valverde, according
to the source of potable water they consume, March 2017**

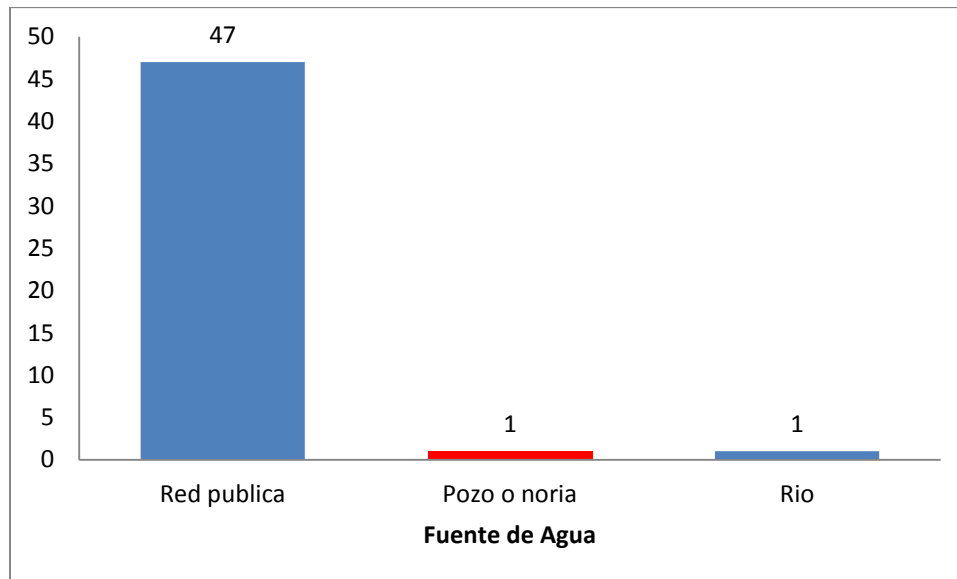
Chart no. 12

| Source of Water Consumed | Numbers | Percent |
|--------------------------|-----------|----------------|
| Public Network | 47 | 95.90% |
| Well | 1 | 2.00% |
| River | 1 | 2.00% |
| Total | 49 | 100.00% |

It is noted that 95.9% of the resident children in Batey 2, consume water from the public system. Only two cases show consumption from a well and river.

Residential Child Population in Batey 2, Esperanza, Province of Valverde, according to the source of potable water they consume, March 2017

Graphic no. 12



Residential Child Population in Batey 2, Esperanza, Province of Valverde, according to frequency of meals, March 2017

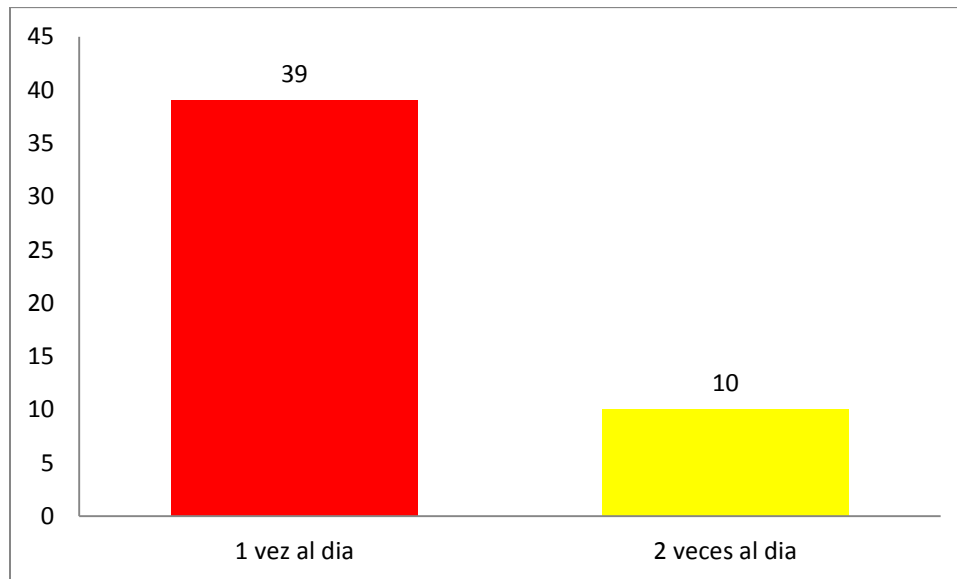
Chart no. 12

| How many times a day does your child eat? | Number | Percent |
|---|--------|---------|
| 1 time a day | 39 | 79.60% |
| 2 times a day | 10 | 20.40% |
| Total | 49 | 100.00% |

It should be emphasized that 79.6% of the cases studied show that only 1 meal a day is consumed while 20.4% eat twice a day.

**Residential Child Population in Batey 2, Esperanza, Province of Valverde, according
frequency of meals, March 2017**

Graphic no. 12



ANEXO

CUESTIONARIO

Entrevistador: _____ Fecha: _____

| | |
|--|---|
| <p>I Datos general</p> <p>1.1 Nombre del niño/a _____ 1.2 Fecha de nacimiento _____ edad _____ 1.3 ¿Asiste a escuela pública? <input type="checkbox"/> Sí <input type="checkbox"/> No 1.4 Peso: _____ 1.5 Talla: _____ 1.6 IMC: _____ 1.7 Sexo: _____</p> <p>2.1 Enfermedades frecuentes en los niños? <input type="checkbox"/> Diarrea <input type="checkbox"/> Fiebre <input type="checkbox"/> Infecciones respiratorias <input type="checkbox"/> Dolores cólicos abdominales. <input type="checkbox"/> Alergias <input type="checkbox"/> Parasitos <input type="checkbox"/> Otros _____</p> <p>2.0 ¿Que hace cuando está enferma? <input type="checkbox"/> Va al médico <input type="checkbox"/> Toma te <input type="checkbox"/> Va donde un sacerdote vudú <input type="checkbox"/> Otro _____</p> <p>3.0 ¿Idiomas que habla? <input type="checkbox"/> Español <input type="checkbox"/> Creol</p> <p>3.1 El agua que se consume el niño es de : <input type="checkbox"/> Botellón <input type="checkbox"/> Red pública <input type="checkbox"/> Pozo o noria <input type="checkbox"/> Camión vendedor de agua <input type="checkbox"/> Río, vertiente, estero, canal, lago, etc. 5.0 Aspecto general basando en edad, altura, y apariencia general del niño _____</p> | <p>7- Impresión diagnóstica</p> <p>4.0 ¿Cuantas veces comen al día? <input type="checkbox"/> 1 vez al día <input type="checkbox"/> 2 veces al día <input type="checkbox"/> 3 veces al día</p> <p>6.0 Exploración física <input type="checkbox"/> Aspecto general normal o anormal <input type="checkbox"/> Cabeza normal o anormal <input type="checkbox"/> Ojos normal o anormal <input type="checkbox"/> Boca normal o anormal <input type="checkbox"/> Cuellos normal o anormal <input type="checkbox"/> Tórax normal o anormal <input type="checkbox"/> Abdomen normal o anormal <input type="checkbox"/> Corazón normal o anormal <input type="checkbox"/> Pulmones normal o anormal <input type="checkbox"/> Sist. esqueléticos normal o anormal</p> |
|--|---|