School Gardens Project 2

gives

phase

one

Rotary Club of Granada.

Narrative technical report of activities carried out from September 1, 2018 to

November 30, 2018.

School Gardens Project 2

gives

phase

Schools benefited:

Mercedes Mondragón

José de la Cruz Mena

Juan Diego Rural Public Nucleus

Epiphany Rural Public Nucleus

GRANADA NICARAGUA, DECEMBER 2018

Page 2

School Gardens Project 2

gives

phase

two

Summary

Phase II of the Huertos Project officially began in September 2018

Scholars under the supervision and administration of *the Rotary Club of Granada* in four schools in the municipality of Granada-Nicaragua, two schools in the area

urban , Mercedes Mondragón School and José de la Cruz Mena . And two in the rural area in the rural public schools **Epifanía** in the El Hormigón y **Juan community**

Diego in the community of Tepeyac.

Until the dates the most relevant activities are the following:

- ✓ Construction of school gardens.
- ✓ Facilitation of 7 methodological designs in 4 schools: Among the most important achievements

Significant 331 schoolchildren trained during the first quarter are identified of the project in the four schools in the last quarter of 2018.

- ✓ Establishment of school gardens.
- ✓ Meeting with parents.
- ✓ Construction of micro-tunnels.

Established 7 seedbeds in two schools Mercedes Mondragón and Epifanía (Tomato, Rábano, Cucumber, Chiltoma, Eggplant, Pipián), with students of sixth grade, seventh and eighth grade, for being short cycle species and easy to handle. Likewise, a plant nursery was installed of cocoa of the variety popularly known as *Yellow Cocoa or Stranger* (*Theombroma cacao*), which will be used in the future for experimentation in the center Epiphany school.

		Page
School Gardens Project 2		J
gives		
phase		
3		
Table of Contents		
1. Introduction		5
2. Development		6
2.1. Activities carried out in the last quarter of 2018:	6	
Construction of infrastructure of school gardens	6	
Establishment of school gardens:	6	
Facilitation of methodological designs		6
Meeting with parents	10	
Construction of micro-tunnels		. 10
3. Conclusions		. eleven
4. Annexes		12
Annex 1. Construction of infrastructure of school gardens	12	
Annex 2. Establishment of school gardens	16	
Annex 3. Facilitation of methodological designs		25
Annex 4. Meeting with parents	26	
Annex 5. Construction of micro-tunnels		28
School Gardens Project 2		Page
gives		Page
gives phase 4		Page
gives phase 4 Table of Contents		Page
gives phase 4 Fable of Contents Table 1 Topics provided during the last quarter of 2018		
gives phase 4 Table of Contents Table 1 Topics provided during the last quarter of 2018		
gives phase 4 Table of Contents Table 1 Topics provided during the last quarter of 2018 Table 2 Average monthly attendance per school center Table of photos.	••••••	9
Photo 1. Construction of School Garden infrastructure. Epiphany College	•••••••••••••••••••••••••••••••••••••••	9
gives phase 4 Table of Contents Γable 1 Topics provided during the last quarter of 2018 Γable 2 Average monthly attendance per school center Table of photos. Photo 1. Construction of School Garden infrastructure. Epiphany College Photo 2. Infrastructure construction School gardens. Epiphany College, being	ng	9
phase 4 Table of Contents Table 1 Topics provided during the last quarter of 2018 Table 2 Average monthly attendance per school center Table of photos. Photo 1. Construction of School Garden infrastructure. Epiphany College Photo 2. Infrastructure construction School gardens. Epiphany College, being supervised by the board of directors of Rotary Club of Granada	ng	9 12 12
phase 4 Table of Contents Table 1 Topics provided during the last quarter of 2018	ng	9 1212
phase 4 Table of Contents Table 1 Topics provided during the last quarter of 2018	ng rectors Clu	9 12 12 13 b
phase 4 Table of Contents Table 1 Topics provided during the last quarter of 2018	ng rectors Clu	9 12 12 13 b 13
Photo 5. Delivery of tools and supplies in Epifania garden.	ng rectors Clu	9 12 12 13 b 13
Photo 5. Delivery of materials and tools by Rotary Club treasurer Granada. Photo 5. Delivery of materials and tools by Rotary Club treasurer Granada.	rectors Clu	9 12 12 13 b 13 14
phase 4 Table of Contents Table 1 Topics provided during the last quarter of 2018	rectors Clu	9 12 12 13 b 13 14 n 16
phase 4 Table of Contents Table 1 Topics provided during the last quarter of 2018	rectors Clu	9 12 12 13 b 13 14 n 16
phase 4 Table of Contents Table 1 Topics provided during the last quarter of 2018	rectors Clu	9 12 12 13 b 13 14 n 16
phase 4 Table of Contents Table 1 Topics provided during the last quarter of 2018	rectors Clu	9 12 12 13 b 13 14 n 16 17 18

Photo 13. Radish cultivation.	
twenty	
Photo 14. Preparation of cocoa seeds twent	ty-
one	
Photo 15. Explanation on how to prepare cocoa seeds before being placed for	
germinate	
twenty-one	
Photo 16. Cocoa seeds germination	
Photo 17. Cocoa seedlings 8 days after germination	
Photo 18. Cocoa seedlings with 30 days	3
Photo 19. Preparation of the Juan Diego School garden area	
Photo 20. Methodological design evaluation: What foods do we need to improve	
the diet?	5
Photo 21. Student explaining what are the nutritional contributions of food and its	
classification according to their nutritional content.	
25	
Photo 22. Meeting with parents, with the participation of the Board of Directors of Club	
Rotary Granada	,
Photo 23. Meeting of parents, with the participation of the Board of Directors of Club	
Rotary Granada	1
Photo 24. Meeting with parents and director of the school Juan Diego and Epifania.	
Photo 25. Construction of microtuneles	}
Photo 26. Micro tunnel construction	
Photo 27. Micro tunnel construction	
Photo 28. Micro tunnel in the process of completion	••
Photo 29. Micro tunnel completed.	30

Page 5

School Gardens Project 2

gives

phase

5

1. Introduction

GENERAL INFORMATION PROJECT HUERTO ESCOLARES GRANADA

Project Name: School Gardens Project Granada Phase II

Funded by: Rotary International, Cheyenne Club, Laurie Sunrise Beach, Laramie,

Fanwood Scotch Plains.

Administered and supervised: Rotary Club of Granada.

Duration: 12 months.

Location: Granada-Nicaragua, Municipality.

The project is located in four schools centers of the municipality of Granada-Nicaragua, two schools in the urban area , **Mercedes Mondragón School** and **José of the Mena Cross** . And two in the rural area in the rural public school centers **Epifania** in the El Hormigon community and **Juan Diego** in the Tepeyac community.

Project general description:

The Project is aimed at developing cognitive abilities of students of fifth, sixth grade of primary education and seventh and eighth grade of education secondary school in the centers involved in the project with the objective of producing vegetables and

vegetables in schools to improve the quality and variety of the diet of the school

Also strengthen the technical capacity of teachers, parents and directors and other school staff, on how to produce healthy foods from a friendly way with the environment.

Included is the development of the study plan and the evaluation system for the gardens school

The most outstanding students will receive scholarships to establish gardens in their homes, products of these should be contributed to the diet of the homes of schoolchildren and their families

17 methodological designs will be provided in total which are based on the plan of **Comprehensive School Nutrition Program-PINE**. The project is totally coherent with the public policy / priority of MINED.

Page 6

School Gardens Project 2

gives

phase

6

2. Development

2.1. Activities carried out in the last quarter of 2018:

In the quarter from September 1 to November 30, 2018 the following activities for the Project **Huertos Escolares Segunda Fase**:

Infrastructure construction of school gardens

Two infrastructures were built in two schools: **Epifanía and Juan Diego** (see in annex 1) for the installation of school gardens and a classroom for the facilitation of the training in the respective topics of the methodological designs, in which were assigned a blackboard and 35 desks respectively, as well as tools and seeds.

Establishment of school gardens:

Among the initial tasks for the establishment of school gardens were purchased the following seeds:

Beetroot, chiltoma, cabbage, tomato, yellow onion, radish, zucchini, cucumber, watermelon, lettuce.

As part of the preparation of the area and soil of the school gardens,

leveling, cleaning and preparation of the land within the area of the garden, pruning and thinning of trees surrounding the area of the orchard in order to open the canopy for the management of

shade in order to make use of the area for crops that require more space in the respective schools where there is availability. Likewise, the substrate preparation which would be used in the seedbeds (See Annex 2).

Seven seedbeds were established in two Mercedes Mondragón and Epifanía schools of the following

species Tomato, Radish, Cucumber, Chiltoma, Eggplant, Pipian, in school gardens with Sixth Grade, Seventh and Eighth Grade students . It should be noted that these were chosen for being short cycle species and easy to handle. Likewise, a plant nursery was installed of cocoa of the variety popularly known as *Yellow Cocoa or Stranger*

(*Theombroma cacao*), which will be used in the future for experimentation in the center Epiphany school.

Facilitation of methodological designs

The methodological designs were elaborated based on the **Integral Program of School Nutrition-PINE**, being totally attached to the public education policy of the Ministry of Education MINED.

From September to November, 7 methodological designs of a total of 17 were provided proposed in the "Methodological **Guide**: **Methodological Guide** and **Curriculum** on

Agriculture

Sustainable, Food Security and Nutrition for the Establishment of Gardens " (see table 1) thus achieving the training of 331 school children in the four schools in first quarter of the project, of the 500 that were set as the total goal for the duration

Page 7

School Gardens Project 2

gives

phase

7

total of the project. Table 2 shows monthly average attendance results by School center.

Table 1 Topics provided during the last quarter of 2018.

N

or

General theme Month School center

Topics addressed

Y

shape

of

evaluation

1 Environment and

natural resources

September Epiphany / Juan Diego

Mercedes

Mondragón /

José de la Cruz Mena

Themes: Concept,

Problematic

Y

Solutions

C1
Shape
of
evaluation:
Qualitative
2 Climate Change September Epifanía / Juan Diego
Mercedes
Mondragón /
José de la Cruz Mena
Thematic
Specific:
Concept,
Problematic
Y
Adaptation.
Shape
of
~-
evaluation:
Qualitative
3 Agriculture
sustainable
September Epiphany / Juan Diego
Mercedes
Mondragón /
José de la Cruz Mena
Thematic
Specific:
Concept,
Beginning,
Components
Y
Practices.
Shape
of
evaluation:
Qualitative
4 Risk Management September Epifanía / Juan Diego
Mercedes
Mondragón /
José de la Cruz Mena
Thematic
Specific:
1
Concept,
Threats,
Vulnerability and
Risk.
Shape

of

evaluation:

Qualitative

5 Security

Y

Sovereignty

Food

Y

nutritional

October

Epiphany / Juan Diego

Mercedes

Mondragón /

José de la Cruz Mena

Thematic

Specific: Marco

general of the

Security

Y

sovereignty

School Gardens Project 2

gives

phase

8

food

Y

nutritional,

Programs

in

Nicaragua

Y

Benefits of

Gardens for Health and

Nutrition.

Shape

of

evaluation:

Qualitative

6 Comprehensive Program

of

Nutrition

Escolar-PINE-

MINED

October

Page 8

Epiphany / Juan Diego

Mercedes

Mondragón /

José de la Cruz Mena

Thematic

Specific:

general objective of

PINE program,

Components

Y

Activities

of the

PINE program.

Shape

of

evaluation:

Qualitative

7 What foods we

it is necessary to

improve the diet.

November Epiphany / Juan

Diego

Mercedes

Mondragón /

José de la Cruz Mena

information

timely

Y

useful orientations

help the

families

for

to get better

the

practices

of

feeding

Y

nutrition for a

good growth and

development of

childhood

Shape

of

evaluation:

Qualitative

School Gardens Project 2 gives phase Table 2 Average monthly attendance per school center **Months** Grade **Total** of students **Epiphany** Center School **Epiphany Assistance** average **Total Juan students** Diego Center **School** Juan Diego **Assistance** average **Total Students** Mercedes Mondragon **School center** Mercedes Mondragón **Assistance** average **Total Students** José from the Cruz Mena **School center** José from the

Cruz Mena Assistance average. September Fifth 25 twenty-one Sixth twenty 16 Seventh 29 22 Eighth 17 14 October Fifth 25 twenty twenty fifteen 35 (Section A)

27 (Section A)

33 (Section A) 30 (Section A)

Fifth B

27

twenty-one

38

28

Sixth

twenty

fifteen

twenty

17

27

22

Sixth C

24

22

Seventh

29

twenty-one

18

fifteen

Eighth

17

fifteen

eleven

eleven

Nineth

5

5

Tenth

3

two

November

Fifth

25

twenty

twenty

17

35 (Section A)

26 (Section A)

33 (section A)

28 (Section A)

Fifth B

27

22

38

35

Sixth

twenty

16

twenty

19

Sixth C

24

22

seventh

29

twenty

17

16

Eighth

17

12

eleven

eleven

Nineth

5

5

Tenth

3

one

Total

students.

Page 10

School Gardens Project 2

gives

phase

10

Meeting with parents

In October, the meeting with parents in the centers was organized school, under the coordination of the board of directors of *Rotary Club of Granada*, Directors of schools and the technical team of the project. At the meeting, He approached the parents to inform them of the project's objectives. There was a presence of 149 parents of whom 46 showed interest in belonging to the school gardens committee, be part of the parents trained in family farming, for the future establishment of patio gardens, a component that is considered one of the Main axes of the project. (See Annex 4)

Construction of micro-tunnels

The construction of 4 micro tunnels were built, which were built for the protection of vegetable plants from their first days of development until the stage of flowering, in order to prevent the transmission of diseases such as viruses that are transmitted by the whitefly, allowing a better quality in the harvests. (Watch Annex 5)

Page 11

School Gardens Project 2

gives

phase

eleven

3. Conclusions

The most significant advances of the project are:

- ✓ 331 students trained.
- ✓ Established four school gardens which will be ready to produce and provide food to the snack of school children in the 4 centers in the month February
- ✓ Four micro tunnels built in the 4 schools.
- ✓ As a goal, it is proposed to encourage school attendance and scholarships the integration of parents to activities.