



**ASOCIACIÓN HONDUREÑA PARA EL DESARROLLO
(AHDESA)**

FINAL REPORT

**PROJECT “IMPROVING THE COOKING SYSTEM OF THE LADIES THAT
MAKE TORTILLAS FOR A LIVING IN CHOLUTECA’S CITY”**

BACKGROUND

The project “Improving the Cooking System of the Ladies that make Tortillas for a Living in Choloteca’s City” has been developing since April 2009 and on which we have submitted a progress report of the project in September from last year.

In that progress report we informed several aspects, such as: the base line lift, which had the necessary information in order to develop the contemplated activities. We also mention in it; the communities meetings, presentations related with the project benefits, home visit promotions and the distribution of printed material as other material that allowed promote the project. This effort was directed to social entities like the beneficiaries that had leadership in different suburbs and neighborhoods of Choloteca’s city.

At that time we had already implemented 72 Eco Stoves and in the same report we mention the obstacles we had been having, like: the project acceptance, because of the political situation that Honduras had and still having the target population mistrust outsiders and projects in general and also because some of the beneficiaries had delays or difficulties in getting the local materials.

Detailed below are the activities done during the last period of the project, which were done between the months of October and December:

PROMOTION AND SOCIALIZATION OF THE PROJECT

We had to incorporate other beneficiaries to the project because the fist ones didn’t believe in the project and then we had to extend the promotion to other suburbs and neighborhoods of Choloteca to find and see who will really want or needed an Eco Stove.

In this period of the project, the promotion of it was not so difficult because there were beneficiaries that already had used the Eco Stove and see by their own the benefits this Stove had when comparing it with the traditional ones. Then this beneficiaries with such positive experiences help socialize better the project and



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people willing to have one had a better attitude because they could see that the Eco Stove worked pretty well. Besides the exchange of experience these ladies had with the future beneficiaries in small meetings we transmitted two television ads at a local channel called Choluvisión, where people could see the benefits of the Eco Stove.

It's important also to mention that we participated in a local radio station; beneficiaries exited by the benefits the Eco Stove brought to them shared there experience in the program and this brought a lot of calls asking more details related with the project, such as: the source of it, resources, projections, etc. These undoubtedly contributed to arouse interest in other families or ladies that could be benefited by this project.



Mrs. Mildanis Gutiérrez, in the promotion visit, you could see her working in her traditional stove (in the subsequent picture you could see her working in her new Eco Stove).

For the realization of the promotion meeting we prepared and develop the following plan with the following content:



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COMMUNITARIAN PROMOTION JOURNEY

No	Objectives	Topic	Methodology	Materials
1	Introduction of the personnel and the participants.	Self presentation.	In the plenary each participant shares its name.	
	Introduced the purpose of the day.	Objectives of the working day.	Explanation in the plenary of the objectives.	Plan of the journey.
2	Make them think about and improve the local vision on environmental issues regarding the use of traditional stoves.	Use of the traditional stove.	Show in plenary the effects the smoke produce in health, tidiness of the house, the high levels of fire wood used in each house and there cost an impact.	Work sheets of the content previously elaborated.
3	Introduce the objectives of the project.	The project and its objectives.	In plenary through Reading and generated questions, the project document was analyze and clear doubts of it.	Work sheets previously elaborated with the objectives and other aspects of the project.
4	Tell to the beneficiaries the local materials necessary to build the Eco Stove.	Requirement of the local materials.	Explaining to the beneficiaries the materials required (nonlocal and local materials). A hand sheet with the list of the materials required was distributed and read.	Photocopies of the hand sheets with the list of local materials (according to number of participant).
5	Preliminary identification of the beneficiaries.	Identification of the beneficiaries.	Preliminary listing of the people that have interest in the Eco Stove, establishing a tentative date in when to build it.	Chart with the list.
6.	End of the Event.			



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The old Eco Stove used by Mrs. Esperanza Pinto, in San Pedro Sur's Neighborhood.



MANUFACTURE, MOVING AND STORAGE OF THE MATERIALS

The materials were manufactured in the Association's Workshop and they were given to the beneficiaries as they had the requirements needed. The Eco Stove was not built to some of the beneficiaries that were established at the beginning of the project and this for several reasons such as: the misperception they had of the origin of the project, there were delays or difficulties in buying or getting the local materials (their symbolic contribution for the project), etc. Once we had the lists of the beneficiaries that had all of the requirements, we moved the same amount of materials from Tegucigalpa to Choluteca's suburbs and neighborhoods. These nonlocal materials were stored in strategic places in order to facilitate the distribution of them to each beneficiary.



Cutting the materials



Assembling and welding the pieces

BUILDING THE ECO STOVES

The following steps were done in order to built the Eco Stove:

- a) Making up the walls, were the combustion chamber goes.
- b) Assembling the ceramic code that works as the combustion chamber.
- c) Making the soot remover for the chimney and corresponding tower.
- d) Situating the chimney before the perforation of the roof.
- e) Making a wooden framework and the metal sheet that goes above the combustion chamber that melts around the metal sheet.
- f) Drying out and using the Eco Stove, after 12 hours.

Once the Eco Stove was built we proceed to give the necessary recommendations, such as, how to use it and how to give maintenance to it in order to achieve its optimal performance.

A total of 147 Eco Stoves were built, 75 of them at the beginning of the project and 72 at last. These beneficiaries showed a lot of interest in having in there homes a technology that helped them reduce the use of fire wood and smoke from there kitchen.

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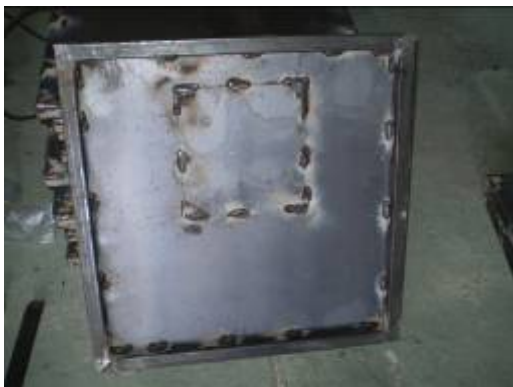
Some of the beneficiaries that participated in the construction of the Eco Stove showed a lot of interests, much interest that they help resolve functioning problems to others, for example; when the heat that the Eco Stove generated decreased.



A technician building an Eco Stove at a home of one of the beneficiaries of the project

MATERIALS NEEDED IN ORDER TO BUILT THE ECO STOVE (nonlocal materials moved from Tegucigalpa to Choluteca's city).

Description	Amount (units)	Pictures number
Strengthen metal sheet of 22" X 22"	1	1
Ceramic combustion chamber	1	2
Galvanize chimney of 6 feet tall	1	3
metallic soot remover	1	4



Picture # 1



Picture # 2



Picture # 3



Picture # 4

LOCAL MATERIALS OBTAINED IN EACH COMMUNITY (the upper side of the Eco Stove could be built with bricks, cement bricks or clay bricks):



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Eco Stove built with Bricks:

Description	Amount
Bricks of 2 inches	70 units
Cement for the upper side	1 bag
Rod of 3/8 inches	¼
Sand	2 quintals
Ashes	1 quintal
Nails of 3 inches	10 units
Wooden rules of 1x2x59 inches	4 units
Card box	1 units

Eco Stove built with Cement Blocks:

Description	Amount
Cement Blocks	7 units
Bricks of 2 inches	35 units
Cement for the upper side	1 bag
Rod of 3/8 inches	¼ units
Sand	2 quintals
Ashes	1 quintal
Nails of 3 inches	10 units
Wooden rules of 1x2x59 inches	4 units
Card box	1 units

Eco Stove built with Clay Bricks:

Description	Amount
Clay bricks	7 units
Bricks of 2 inches	25 units
Cement for the upper side	25 lbs
Rod of 3/8 inches	¼ units
Sand	1 pail of 5 gallons
Ashes	1 quintal
Nails of 3 inches	10 units
Wooden rules of 1x2x59 inches	4 units
Card box	1 units



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TRAINING THE BENEFICIARIES IN HOW TO TAKE RECORDS OF THERE ACTIVITIES:

In the first report we explained the difficulty we had when we try to implement a format that the ladies could used in order for them to take records of there costs, as well as there incomes of there sales. At the beginning 11 of them put it on practice and we achieve to incorporate 15 more, but at the end of the project we had a negative result, because only 6 of them put it into practice.

The explanation of this weakness is given by the women involved in this project and they said that it is a routine activity, which lends itself to that in a practical way it could be establish a difference between what they spend in fire wood before and after, establishing that they save 50.55% in fire wood.

SUPERVISION AND MONITORING

Few projects like the one performed with Tides have enjoy of a continue supervision and monitor from part of the Associations team. This happened because of the disaggregation of the constructions and the need to certificate most of them or all of the Eco Stoves. The above, because it is a new project in a urban area and we wanted they reduce 100% of the fire wood and indoor pollution, just like it was establish in the initial objectives of the project.

When we detected the bad perception the project had, the Supervision permitted redesign the promotion campaign, since they thought that the project was associated to capture political sympathies. In order to change the point of viewing the project, we change the strategy; beneficiaries that already own an Eco Stove promote there experience with it by television and radio presentations, they also interchange there experience with future beneficiaries. This like a promotion “from the inside”, which gave excellent results in the future Eco Stoves that were built.

The monitoring of the use, efficiency and satisfaction was permanent; it was done by the coordinators and the technicians that stay in the area and had a close contact with the beneficiaries. This permitted make minor corrections to the Eco Stoves and repair damages in the combustion chamber, this last, because, the beneficiaries were accustomed to introduce thick fire wood sticks in the traditional stoves and they thought that in the improve stove they had to do this in order to increase heat, they were not following the instruction the technicians told them to do (to use only two thin fire wood sticks).



Mrs. Mildanis Gutiérrez, using her new Eco Stove in Ciudad Nueva's Neighborhood.

PROJECTS IMPACTS

1. The total of Eco Stoves built during this project contributed to save 2205 wood sticks per day (15 wood sticks saved per day X 147 Eco Stoves built). The reduction of the use of fire wood will benefit the forest that is nearby the community.
2. The economy of the beneficiaries has improved because they now save 15 wood sticks per day and each wood stick cost 2.50 Lempiras, saving 37.50 Lempiras per day.
3. The environmental conditions of 147 kitchens were improved and in general of there houses when eliminating indoor pollution and soot from there walls.
4. This project has contributed to decrease the negative effects that the smoke produces in the health of the beneficiaries, specifically: eye tears, headaches and lung problems.
5. This projects has offer to the community population an energetic alternative that is economic, safe, renewable and environmentally friendly, without changing there communities traditions of using a fire wood Stove.

An achievement of the project: although at the beginning of the project there were some restlessness in this, almost all women express there needs to participate in an alternative way of a credit opportunity, that is to say, a credit



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opportunity that didn't come from traditional credits, since they didn't own possessions that could be useful to that purpose, instead in credit programs that had flexible conditions: low interest rates, terms that fit to their incomes and with a diverse orientation: improvement of the floor and roof of their homes, purchase of machines for making tortillas, and materials such as: large pans, tablecloth, etc.

Respect to the above, a program of such nature could have always a positive effect and besides the institutional structure they had, it could be created a local structure (integrated by the beneficiaries) in order to support; a credit that they could handle, recovery plans and all that is related, in order to guarantee a recovery of the funds that were loan.

The full publicity that was given to the project, the benefits that the people socialize between them and the demand of the Eco Stoves that was observed, guarantee the possibility to incorporate new projects with the purpose to spread out an improve technology that guarantees; a low consume of fire wood, health protection, economy improvement, this not only to small groups but to the population in general.

THE LESSONS THAT REMAIN AND HOW TO TAKE ADVANTAGE OF THEM

Usually the benefit of a project is establish by the person that executes the project and some times that's not enough in order to obtain that the beneficiaries adapt and accept the project. We were not the exception of this and what we did to transcend this was to incorporate to the television and radio ads the beneficiaries that already had the Eco Stove, this worked pretty well, because it helped people now that the improve stove was efficient.

The initiation of a project in the middle of an economic or political juncture incise in that the target population suspected that the project wanted to benefit at there expenses or suspect of the legitimacy of the project, refusing to participate in it, just like happened to us. A lot of people were scared to participate in the project because they thought that the project came from the government, they wanted to avoid future compromises or manipulation.

The participation of local people in the promotion of the project helped offset this perception because local people some how now each other and make them have more trust in that the Eco Stoves were good.

Been extensive involved during the project (from the beginning till the end) allowed us obtained better results when making corrections at the right time of the weakness or failures that occurred during the project. This project has



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showed us two things: 1. That is important to incorporate beneficiaries in different stages of the project. 2. That the monitor has to be permanent and close. We will consider this two aspects in future projects.

ANNEXES

BENEFICIARIES OF THE ECO STOVES		
No.	NAME	ID NUMBER
1.	Virginia Aguilera	0601 1987 03587
2.	Elena Herrera	0601 1978 02628
3.	Gloria Alejandrina	0601 1968 00132
4.	Esperanza Lagos	0601 1967 01173
5.	Melva Betanco	0601 1962 02987
6.	Rosa Zepeda	0601 1985 01748
7.	María Neri Cerrato	0601 1970 02796
8.	Enriqueta Berríos	0601 1981 05688
9.	Mirna Zambrano	0601 1983 04668
10.	Sandra Emilia Carranza	0601 1974 00100
11.	Virginia García	0609 1979 01119
12.	Xenia Guerrero	0601 1991 01445
13.	Ramona M. Aguilar	0603 1985 01554
14.	José Filiberto Blanco	0801 1960 05827
15.	Lety Azucena Cruz	0601 1978 01463
16.	Doris Raquel Aguilar	0601 1964 05832
17.	Norma Gradiz	0615 1954 00618
18.	Aurora de Carranza	0615 1978 00610
19.	María Amador Vílchez	0601 1984 02602
20.	Venancia Alicia Medina	0601 1980 04021
21.	Santos Matamoros E.	0607 1951 00030
22.	Rafaela Ordóñez	0602 1984 00705
23.	Estebana Rodríguez	0610 1984 01416
24.	Emma Aguilera A.	0615 1964 00240
25.	María de c. Baquedano	0601 1979 03813
26.	Yeni Carolina Ramos	0318 1974 00346
27.	Ulises Torres Maradiaga	0605 1977 00540
28.	María Lidia Martínez	0610 1955 00043
29.	Transito Aguilera	0601 1984 01177
30.	Kenia Waldina Godoy	0801 1972 10735



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31..	Lastenia Jesús Reyes	No tiene tarjeta de identidad
32.	Rosa López Álvarez	0601 1995 00702
33.	Luz Idalia Baca	0601 1976 01061
34.	Maritza Isabel Gómez	1703 1981 00952
35.	María Griselda Ortiz	1703 1989 00116
36.	Félix Armando Estrada	0601 1976 01656
37.	Felipa Aguilera	0610 1980 01198
38.	Ivonilda Cárcamo	0802 1961 00017
39.	Marta Ruiz Sánchez	0610 1981 00392
40.	Amanda Rodríguez	0602 1960 00332
41.	Leila Campos	0601 1984 00130
42.	Dilenia Sánchez	0609 1979 01119
43.	Alicia Quiroz	0603 1981 02134
44.	Narcisa Zambrano	0601 1972 02939
45.	Alfredo Berríos	0601 1983 00760
46.	Rubenia Aguilar	0609 1980 00549
47.	Maritza Meza	0601 1982 00293
48.	Digna Baca	0501 1981 04091
49.	Ana Julia Cruz	0609 1982 00254
50.	Digna Jacqueline Betanco	0605 1955 00015
51.	Maricruz Raudales	0601 1979 00781
52.	Alba Gonzáles	0601 1983 00043
53..	Rosalinda Ordóñez	0601 1983 03033
54.	Lilian Margarita Sánchez	0601 1970 02141
55.	Marlene Díaz	0601 1973 00130
56.	Ana Francisca William	0605 1945 00060
57.	Alba Luz Aguilar	0602 1982 00086
58.	Emma Merlo	0603 1981 00741
59.	Alexi Carrasco	0606 1970 00092
60.	Claribel Cadalso	0606 1972 00235
61.	Celia Herrera	0605 1984 01655
62.	Luz Marina Zambrano	0601 1975 02657
63.	María Gertrudis Zelaya	0616 1976 00077
64.	Francisca Aguilera	0601 1966 00542
65.	Sandra Yamileth Izaguirre	0601 1977 00511
66.	Leticia Quiroz	0601 1985 00154
67.	Julia Georgina Elvir	0611 1971 00987



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68.	Maura Castillo	0601 1980 04827
69.	Belky Lizzeth Sánchez	0601 1973 01947
70.	Antonia Sánchez	0601 1981 04601
71.	Dinora J Cadalso	0606 1954 00172
72.	Jessica Maldonado	0606 1986 00129
73.	María Flores Picado	0603 1968 00397
74.	Karen yesenia Rodríguez	0707 1984 00638
75.	Mildanis Gutiérrez	0609 1979 00354
76.	Aída Santos López	0607 1969 00715
77.	Paula Lagos	0601 1970 00355
78.	Teresa Baquedano	0601 1995 00841
79.	Teodora Torres	0707 1984 00391
80.	Delmi Yanet Barahona	0601 1985 01444
81.	Evelyn Sánchez	0601 1986 00618
82.	Alejandrina Hernández	0601 1958 00318
83.	Adonias Sánchez Moreno	0606 1956 00367
84.	Noheni Matamoros	0601 1978 00247
85.	Xiomara Dávila	0707 1981 00435
86.	Patty Reyes	0615 1971 00704
87.	Teofila Martínez Flores	0607 1984 01184
88.	María Pérez	0707 1960 00057
89.	Jacoba Gómez	0707 1948 00180
90.	Bartola Hernández	0603 1966 00801
91.	Guadalupe Sánchez	No tiene tarjeta de identidad
92.	Blanca Álvarez	0601 1966 00766
93.	Alejandrina Betancourt	0605 1972 00473
94.	Lidia Álvarez	0601 1944 00432
95.	Melba Betancourt	0601 1972 02987
96.	Esperanza Pinto	0601 1971 00704
97.	Miriam Rodríguez	0607 1967 00381
98.	Vilma Rosa Flores	0707 1983 00348
99.	Ana Rosa Flores	1701 1973 00306
100.	Aldalina Gutiérrez	0603 1982 01507
101.	Eva Bustillo Moreno	0605 1967 00132
102.	Pablo Solano	0601 1984 00779
103.	Marta Flores	0601 1974 01993
104.	Guadalupe Aguirre	0603 1985 00319



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105.	Gerardo Enrique Mejia	0601 1978 02793
106.	Marta Álvarez	0714 1960 00320
107.	Ritzi Lorena Cruz	0601 1979 00160
108.	María Antonia Moncada	0603 1985 00143
109.	Cruz del Carmen Lagos	0610 1968 00226
110.	Alejandra Díaz García	0611 1963 00536
111.	Reina Isabel	0601 1963 00536
112.	Gregori Ordóñez	0601 1969 01562
113.	Irmá Cerrato	0601 1944 00180
114.	Elsy González	0801 1974 01413
115.	María Julia Acosta	0801 1937 01696
116.	María Valeria Ramírez	0610 1953 00105
117.	Maries Yánez	0610 1974 00429
118.	Marta Guevara	0605 1968 00230
119.	Edita Galo	0601 1957 00728
120.	Transito Reyes	0601 1947 00353
121.	Dora Osorio	0605 1965 00171
122.	Delia María Álvarez	0601 1952 00274
123.	Yenni Corrales	0601 1975 01065
124.	Berta Aguilar	1601 1953 00358
125.	Floris Elba Portillo	0601 1961 00042
126.	Walesca Perdomo	0601 1965 00678
127.	Gloria Esperanza Cruz	0609 1955 00184
128.	Arcadia Baquedano	0602 1981 00083
129.	María Magdalena Miranda	0605 1980 00172
130.	Noelia Cerrato	0601 1985 04148
131.	Paula Araceli Quiroz	0601 1972 01140
132.	Santos Sánchez	0610 1981 00302
133.	María Elena Elvir Flores	1703 1971 00031
134.	Marta Trejo	0601 1980 03021
135.	Ceferina Carranza	0601 1966 01279
136.	Zulema Carrasco	0601 1984 02283
137.	Sandra Lizet Ramírez	0601 1980 03501
138.	Ana Esperanza Flores	0602 1967 00167
139.	Marlen Elizabet Sánchez	0611 1979 00354
140.	Joaquina Aguilera	0707 1998 00129
141.	María Ignacia Gómez	0603 1984 00513
142.	Raúl Urbina	0601 1968 00059



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143.	Esperanza Ondina Figueroa	1505 1944 00020
144.	Sonia Georgina Sánchez	0601 1963 00209
145.	Cristina Herrera Rivera	0601 1935 00297
146.	Virginia Elba Portillo	0601 1984 00477
147.	Walesca Perdomo	0601 1965 00678

January, 2010.



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REPORTE FINANCIERO

Descripción	Saldo del Balance al 11 de sept-09 (en Lps.)	Saldos al 31 enero 2010	Total en Dólares (18,8951)
A. Salaries			
Project leader	0,00		
Promoter	- 12.29	(-12.29)	(-12.29)
Stove Technician	17,511.07		
B. Travel and Pendiem			
Project leader	6,941.52		
Promoter	18,456.22		
Stove Technician	14,495.22		
C. Enroute Travel Expenses			
Materials Transportation	11,172.72		
Transportation of promotion and socialization personnel	23,033.00	174.00	174.00
Transportation of capacitating and supervisión personnel	459.00		
D. Construction of Improve Stoves	112,537.96		
E. Other Direct Cost			
1. Communication (Telephone/fax)	9.10	111.00	5.87
2. Printing/Photocopy	178.16	157.00	8.31
3. Postage and Express Fees	1,411.20	48.00	2.54
4. Workshop / Conference Cost (if relevan)	4,003.60	94.00	4.97
5. Production Materials	6,665.95		
6. Food	1,340.13		
7. Office Supplies			
8. Consultant Services	10,224.00	224.00	11.85
9. Translation	25,224.00	142.15	7.52
10. Rent of vehicle	11,938.48	113.00	5.98
Totals	265,588.95	Lps. 1,050.86	55.60