4.2 ミニッツ（エルサルバドル）（英文）

MINUTES OF MEETINGS
BETWEEN
JAPANESE FINAL EVALUATION TEAM
AND
THE MINISTRY OF PUBLIC HEALTH AND SOCIAL ASSISTANCE
OF THE REPUBLIC OF El SALAVADOR
ON
JAPANESE TECHNICAL COOPERATION
FOR
CHAGAS DISEASE CONTROL PROJECT

The Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Final Evaluation Team (hereinafter referred to as "Japanese Team"), headed by Dr. Kyo HANADA, to the Republic of El Salvador from April 8 to 14 and May 4 to 17, 2007, for the purpose of conducting the joint final evaluation for the Chagas Disease Control Project (hereinafter referred to as "the Project").

The Joint Evaluation Team (hereinafter referred to as "the Team"), which consists of members from Japanese Team and members from the Ministry of Public Health and Social Assistance, was jointly organized for the purpose of conducting the final evaluation and preparation of necessary recommendations to the respective governments.

After intensive study and analysis of the activities and achievements of the Project, the Team prepared the Final Evaluation Report (hereinafter referred to as "the Report") and presented it to the Joint Coordinating Committee.

The Joint Coordinating Committee discussed the major issues pointed out in the Report, and agreed to recommend to their respective governments the matters referred to in the document attached hereto

Done in duplicate in the English and Spanish languages, each text is equally authentic. In case of any divergence of interpretation, the English text shall be prevail.

San Salvador, May 14, 2007

Dr.Kyo HANADA
Leader
Japanese Final Evaluation Team
Japan International Cooperation Agency
Japan

Dr. José Guillermo Maza Brizuela
Minister
Ministry of Public Health and Social Assistance
The Republic of El Salvador

Witness

Dr. Priscilla Rivas-Loria
Representative of PAHO/WHO, El Salvador

ATTACHMENT

FINAL EVALUATION REPORT
ON
THE CHAGAS DISEASE CONTROL PROJECT
IN
THE REPUBLIC OF EL SALVADOR

San Salvador

May 14, 2007

JOINT EVALUATION TEAM

CONTENTS

1. Introduction and Outline of the Project

1.1 Objectives of the Evaluation

The evaluation study was conducted with the purpose of;

(1) To verify the level of achievements and performance of the Project based on the Record of Discussions (R/D), Plan of Operations (P/O), and Project Design Matrix (PDM),

(2) To evaluate the Project in terms of the five evaluation criteria, and

(3) To draw useful recommendations to the Project and lessons learned from the Project.

1.2 Members of the Joint Evaluation Team

(1) Japanese Evaluation Team

	Field in Charge	Name	Position/ Organization
1)	Leader	Dr. Kyo HANADA	Senior Advisor (Public Health), Institute for International Cooperation, Japan International Cooperation Agency (JICA)
2)	Cooperation Planning	Mr. Kohei TAKIMOTO	Infectious Disease Control Team, Group IV (Health II), Human Development Department, JICA
3)	Evaluation Analysis	Mr. Masahiro OSEKO	Consultant, Nevka Co., Ltd.
4)	Interpreter	Ms. Aki HIGUCHI	Training Coordinator, Japan International Cooperation Center (JICE)

(2) Salvadorian Evaluation Team

	Field in Charge	Name	Position/ Organization
1)	Leader	Dr. Mario Serpas Montoya	Director of Health Surveillance, Ministry of Health and Social Assistance (MSPAS)
2)	Member	Dr. Héctor Ramos	Reponsible for Chagas Disease Control Program, MSPAS
3)	Member	Mr. Eduardo Romero	Entomologist, Chagas Disease Control Program, MSPAS

1.3 Schedule of the Evaluation

From April 8 to April 14, and May 4 to May 17, 2007

1.4 Background of the Project

Chagas disease is called a "neglected disease" or an "illness of the poor stratum". The insect vectors (*Triatominae*) thrive in houses with mud walls and thatch roofs feeding on humans and transmit *Trypanosoma cruzi* – causative agent of Chagas disease. There are treatment medicines for acute cases, but not for chronic cases leading death by heart problem a decade to two decades after infection.

Chagas disease is considered to be one of the serious tropical diseases with malaria and dengue fever in Central and South America. The number of patients in the region is estimated more than 20 million. In

Central America, it is supposed that about 2.44 million people are infected, which is about 9% of the total population. In case of El Salvador, it is assumed that about 0.32 million people (43% of population) are infected.

It is technically feasible to control Chagas disease unlike other insect vector-borne diseases such as malaria and dengue fever. Central American populations of *Triatominae* have no resistance to insecticide to date, and the possibility of development of tolerance in the near future is considered to be low. Therefore, in general terms, Chagas disease control in Central America can be seen as a highly advantageous intervention through 1) insecticide spraying, 2) information, education and communication (IEC) activities, 3) entomological surveillance with social participation, and 4) improvement of houses. Seven countries in Central America (Guatemala, Honduras, Belize, El Salvador, Nicaragua, Costa Rica and Panama) and PAHO/WHO, launching regional initiative against Chagas disease, are taking measures targeting the purpose of "Transmission of Chagas disease will be interrupted in Central America by the end of 2010". And the Project was started to cooperate with this Initiative, following the preceding project carried out in Guatemala as a technical cooperation by the Japanese government from July 2000 to July 2005.

The Project in El Salvador was started as a technical cooperation for four years from September 2003 to September 2007. The project purpose is to interrupt the transmission of vector-borne Chagas disease in 3 selected departments (Santa Ana, Ahuachapan and Sonsonate) border on Guatemala, applying lessons learned from the project in Guatemala.

1.5 Summary of the Project

1.5.1 Objectives of the Project

(1) Overall Goal

1. Transmission of Chagas disease will be interrupted in Central America by 2010.
2. Transmission of Chagas disease will be interrupted in El Salvador by 2010.

(2) Project Purpose

Transmission of Chagas disease by vectors is decreased in 3 selected departments[1].

(1) The absence of *R. Prolixus* is confirmed in the areas of 5 SIBASIs[2] of 3 departments.
(2) *T. dimidiata* is reduced in the areas of 5 SIBASIs of 3 departments.
(3) Entomological Surveillance Systems with social participation are established.
(4) An Information System is established for the project director between SIBASIs and MSPAS[3] Central.

(Refer to the PDM revised version in Annex 1 for details.)

2. Methodology of Evaluation

The evaluation study is conducted by the Joint Evaluation Team consisting of Salvadorian and Japanese members. The Salvadorian members were nominated by MSPAS and Japanese members were nominated by

[1] Three departments are Santa Ana, Ahuachapan and Sonsonate.
[2] Five SIBASIs were Santa Ana, Ahuachapan, Sonsonate, Chalchuapa and Metapan. However, due to the health sector decentralization, these 5 SIBASIs were integrated into 3 SIBASIs, i.e. Santa Ana, Ahuachapan and Sonsonate.
[3] MSPAS: Ministry of Public Health and Social Assistance

JICA. The evaluation is conducted based on the "JICA's Guideline for Project Evaluation", revised version of March 2004". The evaluation activities include documents analysis, field survey, interviews to persons concerned, and discussions with official staff concerned to the Project based on the five evaluation criteria listed below:

(1) Relevance

Relevance refers to the validity of the Project Purpose and the Overall Goal in connection with the development policy of El Salvador Government as well as the needs of beneficiaries.

(2) Effectiveness

Effectiveness refers to the extent to which the expected benefits of the Project have been achieved as planned, and examines if the benefit was brought about as a result of the Project (not as that of external factors).

(3) Efficiency

Efficiency refers to the productivity of the implementation process, and examines if the Inputs of the Project was efficiently converted into the Outputs.

(4) Impact

Impact refers to direct and indirect, positive and negative impact caused by implementing the Project, including the extent to which the Overall Goal has been attained.

(5) Sustainability

Sustainability refers to the extent to which the Salvadorian side can further develop the Project, and the benefits generated by the Project can be sustained under El Salvador's policies, technologies, systems and financial state of the Salvadorian side.

3. Performance of the Project

3.1 Inputs to the Project

3.1.1 Inputs by the Japanese side

(1) Dispatch of experts

1) Long-term experts

Field of assignment	Name	Period of assignment
Chagas disease control	Ms. Kyoko Ota	Dec. 1, 2004 – Sep. 30, 2007

2) Short-term experts

Six (6) short-term experts were dispatched in total. (See Annex 2)

3) Third Country Expert

A third country expert was dispatched from Brazil. (See Annex 2)

4) Japanese Overseas Cooperation Volunteers (JOCVs)

Eight (8) JOCVs were dispatched in total. (See Annex 2)

(2) Training of Counterpart personnel

1) Regional Training Course

The Regional Training Course on Medical Entomology was conducted twice in El Salvador and thirteen (13) Salvadorian counterparts participated. (See Annex 4)

2) In-country Courses

Thirty-two (32) personnel engaged in Chargas disease control participated in the 4-month diploma courses on medical entomology held in collaboration with El Salvador University and University of Santa Ana.

(3) Provision of equipment

The Japanese side has provided insecticide sprayers, insecticide, vehicles, computers and computer related equipment and others. Total amount of expenses for equipment is 682 thousand US $. (See Annex 5)

(4) Local operation expenses borne by the Japanese side

Total amount of local operation expenses born by the Japanese side is 413 thousand US$. Expenses by year are as follows. (See Annex 6)

Year	JFY2003	JFY2004	JFY2005	JFY2006	JFY2007	Total
Local operation expenses (Unit: thousand US$)	78	53	119	112	51	413

JFY: Japanese Fiscal Year (from April to March of the next year)

3.1.2 Inputs by the Salvadorian side

(1) Assignment of counterpart personnel

Forty five (45) counterparts are assigned from the central office of MSPAS and 5 SIBASIs. (See Annex 3)

(2) Provision of land, buildings and facilities

The Salvadorian side provided necessary facilities, such as office space for Japanese experts and JOCVs, storage and space for machinery, equipment and materials.

(3) Allocation of Budget by the Salvadorian side

Budget allocated by the Salvadorian side is as follows. (See Annex 7)

Year	2003 (Sep. – Dec.)	2004	2005	2006	2007 (Jan. – Apr.)	Total
Budget (Unit: thousand US$)	62	77	206	172	20	537

3.2 Progress of Activities of the Project

See Annex 8

3.3 Achievements by the Project

3.3.1 Achievement of the Overall Goal

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
1. Transmission of Chagas disease will be interrupted in Central America by 2010	Seroprevalence	Evaluation by PAHO/WHO Annual meeting of IPCA	Other C.A. countries implement the Chagas disease control.
2. Transmission of Chagas disease will be interrupted in El Salvador by 2010	Seroprevalence	Report of serological survey	Other departments of El Salvador implement the Chagas disease control.

1) It would be difficult to meet the deadline of the year 2010, although MSPAS makes various and extensive efforts for Chagas disease control.
2) While these Overall Goals are derived from the goals set by IPCA, PAHO/WHO is expanding its view beyond the year 2010 with the new global Chagas disease control initiative.

3.3.2 Achievement of the Project Purpose

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Transmission of Chagas disease by vectors is decreased in 3 selected departments	Infestation index (less than 5% in the pilot areas where entomological surveillance system were established)	SIBASI's report	Chagas disease control continues to be a priority for MSPAS. Transfusional transmission is controlled.

1) The Project Purpose is achieved as follows.
2) The absence of *R. prolixus* population was confirmed in the three (3) targeted departments by the entomological baseline survey conducted by the Project.
3) Infestation indices of *T. dimidiata* decreased to be less than 5% in four (4) areas out of five (5) pilot areas as shown in the table below. It is in the process of confirmation in a pilot area of municipality of San Antonio del Monte.

	Name of Site	Basic data		Entomological Survey (2003)			1st Spray (2004-06)		2nd Spray (2006)		Entomological Evaluation		
		No. house	Population	No. House		II (%)	No. house		No. house		No. house		II (%)
				Investigated	Positive		Sprayed	not sprayed	Sprayed	not sprayed	Investigated	Positive	
Santa Ana	Mun. Chalchuapa	7,727	25,462	1,580	271	17.2	7,239	106	6,700	205	1,466	4	0.3
	Mun. Masahuat	1,074	3,945	303	87	28.7	958		749		670	3	0.4
	Mun. Santa Ana, Caton. La Primavera	5,602	19,107	1,260	163	12.9	5,340	262	5,426	243	180	3	1.7
Sonsonate	Mun. San Antonio del Monte, Caton. las Hojas	67	305	—	—	—	162	15	163	24	—	—	—
Ahuachapa	Mun. Atiquizaya, Caton. Joya del Zapote	596	2,980	180	21	11.7	541	55	437	159	165	7	4.2

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3.3.3 Achievement of Outputs

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
1. The absence of *R. prolixus* is confirmed in the areas of 5 SIBASIs of 3 departments	Dispersion index	SIBASI's report of entomological survey	Other *Triatomine* species dose not infest fumigated areas. Re-infestation of T.d dose not rise drastically. U/S and health Promoters participate actively. The information system is integrated with national information system of epidemiological vigilance
2. *T. dimidiata* is reduced in the areas of 5 SIBASIs of 3 departments	Infestation index (less than 5%)	SIBASI's report of entomological survey and surveillance	
3. Entomological Surveillance Systems with social participation are established.	Number of health unit (unidad de salud) with established surveillance system (a health unit in each SIBASI, total 5 units) (definition of indicators to verify the sustainability of entomological surveillance system with social participation is subject to be made later)	SIBASI's report	
4. An Information System is established for the project director between SIBASIs and MSPAS central.	(1) Information necessary in attack phase (dispersion index and infestation index in house) is accumulated and utilized. (2) Data of infestation index in house, sero-prevalence of infant (less than 5 years) and surveillance system is accumulated and shared in SIBASIs and MSPAS central.	SIBASI's report	

(1) Achievement of Output 1

Output 1 "The absence of *R. prolixus* is confirmed in the areas of 5 SIBASIs of 3 departments."

Indicator "Dispersion index"

1) Output 1 is fully achieved.

2) The absence of *R. prolixus* population was confirmed in the three (3) targeted departments by the

entomological baseline survey conducted by the Project.

(2) Achievement of Output 2

Output 2 "*T. dimidiata* is reduced in the areas of 5 SIBASIs of 3 departments."

Indicator "Infestation index (less than 5%)"

1) Output 2 is nearly achieved.
2) Infestation indices of *T. dimidiata* decreased to be less than 5% in four (4) areas out of five (5) pilot areas as stated in the above section of "3.3.2 Achievement of the Project Purpose." The evaluation is in the process in one pilot area.

(3) Achievement of Outputs 3

Output 3 "Entomological Surveillance Systems with social participation are established."

Indicator "Number of health unit (unidad de salud) with established surveillance system (a health unit in each SIBASI, total 5 units) (definition of indicators to verify the sustainability of entomological surveillance system with social participation is subject to be made later)"

1) Output 3 is partly achieved.
2) Surveillance systems were formulated and started their activities in collaboration with local governments and communities in five (5) pilot areas.
3) A surveillance system is built up with various actors such as SIBASIs, ETV[4], health educators, health units, health promoters, environmental health inspectors, and health volunteers. And these actors implement activities, in a systematic manner, for long-term institutional and community-based surveillance including bugs collection, insecticide spraying, acute case detection and monitoring of treatment.
4) In addition, collaborative relationships are realized with municipalities who extend financial assistance, for instance, for employing spraymen.
5) Further more, cross-sectoral cooperation has been started with the Ministry of Education, who plans to include the introduction of Chagas disease in the curriculum.
6) However, these activities have started shortly after the midterm evaluation selecting pilot areas in August 2006. With working experiences less than one year, it is too early to evaluate their effectiveness and sustainability.

(4) Achievement of Outputs 4

Output 4 "An Information System is established for the project director between SIBASIs and MSPAS central."

Indicators "(1) Information necessary in attack phase (dispersion index and infestation index in house) is accumulated and utilized.

(2) Data of infestation index in house, seroprevalence of infant (less than 5 years) and

[4] ETV: Vector Transmitted Disease Programme

surveillance system is accumulated and shared in SIBASIs and MSPAS central."

1) Output 4 is partly achieved.
2) Data formats for attack phase (ex. entomological survey, seroprevalence survey and residual house spraying) are prepared and utilized widely in the three (3) targeted departments.
3) Data formats for maintenance phase or for surveillance are prepared and utilized, and in the process of socialization.

3.4 Implementation process

Some specific activities are picked up and elaborated here as distinguished features of the implementation process of the Project.

3.4.1 Residual spraying for high infested area of *T dimidiata*

From 2003 to 2004, the Project conducted entomological baseline survey in the three western departments, covering 73 % of all localities (1690 investigated in 2310 localities), and found the very high domestic infestation rate of *T dimidiata*. The Project accordingly judged that two times of insecticide spraying would be necessary in order to ensure the decrease of infestation. Two times of residual spraying was thus planned, and the second time spraying was already completed in all pilot areas.

3.4.2 IEC activities

The Project has implemented extensive IEC (Information, Education, Communication) activities as follows.

1) Several types of booklets and leaflets were developed and utilized. For example, a picture book titled "Pedrito and Chagas disease" was edited and issued by the Project, together with UNICEF and other institutions, and currently used in schools nation wide.
2) MASPS established the "Day of Chagas" and is conducting related activities with the Ministry of Education. Designation of Chagas disease day would be an opportunity to systemize surveillance activities with community participation such as bugs collection campaign.
3) Various media and visual materials, such as TV and radio programs, a documentary film and videos were extensively utilized to disseminate information concerning Chagas disease control at both national and local level. (See Annex 9.)

3.4.3 Collaboration with the Ministry of Education

An agreement between MSPAS and the Ministry of Education was made at the western region level through the mediation of the Project. Under this agreement, the Chagas disease issue is expected to be included in school curriculum.

3.4.4 House improvement

In municipality of Guaymango, house improvement is carried out instead of the second insecticide spraying. This is a trial to find out the results of vector control combined with residual spraying and house improvement,

since house improvement is indispensable for a long-term vector control of Chagas disease

3.4.5 Activities of JOCVs in the Project

Eight (8) JOCVs (Japan Overseas Cooperation Volunteers) were sent in total since the beginning of the Project, assigned to SIBASIs and the MSPAS headquarters. Their activities significantly contributed to the Project at local level improving information management and data analysis, and facilitating communication among related organizations. Followings are some of the noteworthy activities conducted by JOCVs.

(1) School contests

Some JOCVs planed and conducted various kinds of school contests such as essay contest, picture contest and handicraft contest on the theme of Chagas disease. They have involved cross-sectoral stakeholders in the process of preparing these contests such as schools, the Ministry of Education, municipalities, NGOs and private companies.

(2) IEC materials

Wide variety of IEC materials were created by JOCVs, such as posters, booklets, leaflets, wall newspapers, a video clip, an animated cartoon and songs, involving school teachers, school children and others. For example, a JOCV assigned in Metapan produced an educational animated cartoon on Chagas disease with the help of JOCVs, staff of SIBASI, school teachers and school children.

4 Evaluation Results

4.1 Relevance

Relevance of the Project is evaluated "**Very High**" from the following perspective.

(1) Consistency with the national policy of El Salvador

1) Salvadorian national plans such as "Safe country (2004-2009)" and "Opportunity (2005)" aims at poverty reduction and improvement of rural living conditions. Since Chagas disease is an illness of poor stratum, the direction of the Project targeting the elimination of Chagas disease is in high conformity with the direction of Salvadorian national policy.

(2) Consistency with the ODA policy of Japan

1) Chagas disease control project was selected as one of the regional cooperation projects for SICA[5] countries in the action plan of "Tokyo Declaration" adopted by the second Central American Summit Meeting in August 2005.

2) "Regional ODA Task Force Meeting" was held by the Japanese ODA related organizations in El Salvador in March 2007. The task force designated mathematics, disaster prevention and Chagas disease as themes of regional cooperation for Central America.

[5] SICA: Central American Integration System

(3) Consistency with the regional/ global trend against neglected diseases

1) Dr. Margaret Chan, Director General of WHO announced in a conference in Thailand in January 2007 that WHO was expanding the global effort to control neglected tropical diseases including Chagas disease.
2) It is planned that Director General of WHO and Director of PAHO/WHO will declare in July 2007 a new initiative "Revisiting Chagas Disease: from a Latin American health perspective to a global health perspective."

(4) Consistency with the needs of the target areas

1) Various data such as the results of the PAHO's evaluation conducted in 2002 and blood bank data accumulated since 1997 indicate the high concentration of Chagasic patients in the western part of the country. Therefore, the need of the intervention was and is high in the three departments selected as the Project's target areas.
2) In order to prevent cross-border infestation from Guatemala, it is required to carry out control measures along the border in the western three departments.

(5) Technical approach and methodology of the Project

1) The design of the Project was made based on the experience of the previous project implemented in Guatemala. And some educational materials made by the Guatemalan project were made most use of by the Project.
2) However, the direct application of the project plan of Guatemala created some inefficiency in El Salvador due to the epidemiological and political differences between two countries. Therefore, the Project has been managing its operation flexible employing the approach and methodology best suited to the situation in El Salvador.

4.2 Effectiveness

Effectiveness of the Project is evaluated "**High**" from the following perspective.

1) The absence of *R. prolixus* population was confirmed in the three (3) targeted departments.
2) Infestation indices of *T. dimidiata* decreased to be less than 5% in four (4) areas out of five (5) pilot areas.
3) Effectiveness of the Project is evaluated high because the Project Purpose concerning *R. prolixus* and *T. dimidiata* is highly achieved as stated above.

4.3 Efficiency

Efficiency of the Project is evaluated "**High**" from the following perspective.

1) Inputs such as Japanese experts, Salvadorian counterparts, training courses on medical entomology and equipment provided were appropriate on the whole and contributed to the activities of the Project. However, the achievements of Outputs are partial as shown below.

Output 1 (the absence of Rp) is fully achieved.
Output 2 (infestation index of Td) is nearly achieved.
Output 3 (surveillance system) is partly achieved.
Output 4 (information system) is partly achieved

2) Even though the achievements of Outputs are confined to be partial, the evaluation team evaluated the Efficiency high by weighing the achievement of Output 1 and 2 heavily.
3) Since the decentralization of health sector was in process, the assignment of counterparts was unstable especially at the MSPAS and SIBASI levels in the first half of the implementation period. But it became stable in the latter half of the period.
4) Administrative decentralization also affected the Salvadorian side's human resources, particularly the contract of insecticide spraymen, since it became impossible to increase the number of spray workers with the budget of the MSPAS.
5) This difficulty was overcome by employing spray workers with the Japanese side's operation cost. And also the MSPAS and SIBASIs are making considerable efforts to attract financial support from municipalities and it has been successful over this period.

4.4 Impact

Although the Overall Goal would not be achieved, Impact of the Project is evaluated "**High**" from the following perspective.

(1) Achievement of Overall Goal

1) It would be difficult to meet the deadline of the year 2010, although MSPAS makes various and extensive efforts for Chagas disease control.
2) While these Overall Goals are derived from the goals set by IPCA, PAHO/WHO is expanding its view beyond the year 2010 with the new global Chagas disease control initiative.

(2) Other impacts

1) The first "Technical Standard for the Prevention and Control of Chagas Disease (Norma Tecnica de Prevencion y Control de la Enfermedad de Chagas) was authorized by the Minister of Health in April 2007. And MSPAS is preparing the 5-year strategic national plan for Chagas disease control in cooperation with the Project.
2) With the initiative of MSPAS, surveillance has been carried out in other areas other than the Project's pilot areas, and the infestation indices in these areas decreased close to be 5 %.
3) Placing high valuation on the diploma course on medical entomology conducted by the Project, MSPAS started copy courses outside the Project area by its own initiative.
4) Acute cases of Chagas disease are discovered nation-wide where the cases had not been found previously. This is a far-reaching influence caused by the Project's educational activities targeting various levels of people including communities, health promoters, ETV, doctors and administrators.

5) Educational materials produced by the Project like printed and audiovisual materials are widely used in the country.
6) A TV program on Chagas disease control related to the Project was broadcasted nation-wide, and the people's knowledge and awareness on Chagas disease was widened and deepened.
7) As a result of information exchange, house improvement method for healthy house construction was included in a manual produced by another technical cooperation project of JICA titled "Enhancement of Technology for the Construction of Popular Earthquake Resistant Housing" conducted in El Salvador.
8) Influenced by the activities of the Project, NGOs employing health promoters have included terms of reference concerning Chagas disease control in their contracts with MSPAS.

4.5 Sustainability

Sustainability of the Project's effects is evaluated "**Fair**" from the following perspective.

(1) Political aspect
1) Political backup can be observed in the elaboration and publication of the technical standard "Norma" and the preparation of the 5-year strategic national plan for Chagas disease control.

(2) Organizational aspect
1) Administrative decentralization in the health sector is becoming settled, and further confusion is estimate to be low.
2) Surveillance systems are formulated and in the process of implementation in all pilot areas. However, these activities have started only about a half a year ago, and it is too early to evaluate its effectiveness and sustainability.
3) But the actors of surveillance systems such as the Health Surveillance Division, the Regional Health Office, SIBASIs, local level offices and health promoters are highly motivated and continuing their efforts in a positive manner. Therefore, the systems have potential to be effective and sustainable if they receive appropriate support for their activities.

(3) Financial aspect
1) MSPAS prepared about half of the insecticide, which is one of the most important inputs of the Project. This is highly evaluated as a Salvadorian side's financial contribution.
2) However, the decentralization suppresses the budget of MSPAS, and it causes the shortage of insecticide sprayers. While the supplementary sprayers were employed by the Japanese operation cost during the Project implementation period, terms of their employment will be terminated with the end of the Project.
3) In order to secure enough number of sprayers, MSPAS negotiated with municipalities, and more than ten municipalities have been providing sprayers on their budgets. But this is not a stable supply since these budgets are limited.
4) Fund for poverty reduction "Programa de Red Solidaria (2005-2009)" is one of the opportunities of support, and the negotiation is ongoing. It is strongly recommended MSPAS to keep making efforts to manage these financial supports for the benefit of Chagas disease.

(4) Technical aspect

1) Technical sustainability of the attack phase in three departments is evaluated high, since technicians of ETV, who have long history of vector control and technical backgrounds, highly improved their ability through the Project.
2) And in addition, they have experienced the change of mind-set to be more participatory and cross-sectoral oriented, which is required in the intervention methodology developed by the Project. But further improvement in term of interactive instruction is expected.
3) Concerning the maintenance phase, the methodology is not yet developed enough, because the activities were started only about a half a year ago, and a variety of trials are ongoing in five pilot areas.

4.6 Establishment of Entomological Surveillance Systems

1) After the midterm evaluation in August 2006, the Project started surveillance activities with community participation, formulating structures composed of SIBASIs, ETV, health educators, health units, health promoters, environmental health inspectors and health volunteers. Activities are carried out systematically with stratified plans and strategic monitoring and evaluation.
2) Other actors such as municipalities extend their financial supports, for instance, for employing spraymen. This kind of assistance creates cross-sectoral collaborative surveillance system.
3) The collaboration with the Ministry of Education is one of the main characteristics of Salvadorian surveillance system. Under the official agreement with MSPAS, the Ministry of Education plans to include the introduction of Chagas disease in school curriculum. MSPAS extends educational programs for school teachers, and conducts monitoring and evaluation of this collaborative system together with the Ministry of Education.
4) Some checklists for the surveillance system were developed and used as effective tools to monitor the performance of the surveillance system. Developing the monitoring capacity of the people concerned, the checklists should be further improved to be appropriate performance indicators of the maintenance phase. (Annex 10)
5) However, these activities started only about a half a year ago, it is too early to evaluate effects they made. In order to make the system effective and sustainable, further capacity development of actors will be required, along with adequate resource supply by MSPAS.
6) In addition, it is important to pay special attention to the existence of the acute case treatment system, which has been functioning for some years, even from the time before the Project started. This is an integrated care system for acute cases, which includes acute case detection, treatment, domiciliary visit and residual spraying. This quick and reliable response mechanism has a high potential to be integrated into the surveillance system created by the Project.

4.7 Contribution of Regional Advisor

1) Since Chagas disease is a regional issue, the regional cooperation is indispensable. And the JICA's

regional advisor's contribution is highly evaluated. The advisor, stationed in PAHO/WHO-Honduras, is engaged in region-wide coordination and information activities covering Central American countries such as Honduras, El Salvador, Guatemala and Panama.

2) The advisor organized regional training courses on medical entomology in El Salvador, which were developed based on the Salvadorian experience of the diploma courses.
3) Visiting El Salvador with staff of PAHO/WHO, the advisor has been assisting the development of Salvadorian strategic national plan for Chagas disease control.
4) IEC materials developed by the Projects in Guatemala, Honduras and El Salvador were introduced to each other and to other country like Panama, and also to PAHO/WHO by the advisor, and thus the knowledge and good experiences are shared widely in Central American countries.

5 Conclusion

	Relevance	Effectiveness	Efficiency	Impact	Sustainability
Results	Very High	High	High	High	Fair

1) It is highly evaluated that absence of *R. prolixus* population was confirmed in three departments, and the attack phase against *T. dimidiata* is closely completed in pilot areas. The infestation indices of *T. dimidiata* in pilot areas are declined to be less than 5%.
2) The Project Purpose is almost fully achieved in five (5) pilot areas. But in the entire area of three departments, where were originally targeted by the Project Purpose, about 40% of communities are remained unsprayed for the first round. Salvadorian side, particularly the Regional Health Office and SIBASIs in these three departments, with the help of Health Surveillance Division, keep making efforts to complete spraying, and the Project is applying itself closely to help their efforts.
3) Surveillance systems have started their activities in collaboration with municipalities and the Ministry of Education. But, since these activities have started only about a half a year ago, it is too early to evaluate their effectiveness and sustainability. However, the results produced by these efforts are considered to be very positive.

6 Recommendations and Lessons Learned

6.1 Recommendations

6.1.1 Recommendations for remaining term

1) Since the community based surveillance systems are formulated and started implementation in all pilot areas, it is recommended to complete at least one cycle of surveillance, which is composed of collection of bugs, information analysis, action planning and residual spraying.
2) Since the 5-year strategic national plan for Chagas disease control is in preparation, it is strongly

recommended to complete the work and authorize the plan by the end of the Project.

6.1.2 Recommendations to MSPAS

1) While the Project Purpose is achieved in five (5) pilot areas, about 40% of communities are remained unsprayed for the first cycle in the entire area of three (3) departments. It is therefore expected to complete spraying in those areas.
2) The development of intervention strategy against *T dimidiata* suited to the situation in El Salvador is on the way. It is therefore recommended to socialize the surveillance system and its respective control methodology.
3) Since the average infestation index of *T dimidiata* is high in the country, it is expected the Salvadorian government to strengthen systematic intervention to those areas other than the Project's pilot areas.
4) In order to impede infestation from Guatemala and Honduras, surveillance along the borders is desirable to be conducted.
5) For realizing above mentioned recommendations, MSPAS is expected to manage sufficient budget and human resources along with the administrative and technical high-level commitment, maintaining the cooperative relationships with municipalities, the Ministry of Education, NGOs and other donors.

6.1.3 Recommendations to PAHO/WHO

1) The collaboration with PAHO/WHO is considered to be relevant, therefore the major participation and involvement of PAHO/WHO is recommended for effective and efficient implementation of these activities.

7 Lessons Learned

1) Social and community participation as well as inter-institutional and cross-sectoral coordination is important and indispensable for controlling endemic and neglected diseases such as Chagas disease.
2) Formalization of inter-institutional agreements, as MSPAS made with the Ministry of Education and municipalities, strengthens the performance of activities of a project, and the Project presents an instructive example to other initiatives.
3) Educational components at all levels are vital to the achievement of goals and maintenance of effects of health projects.

Annex 1 Project Design Matrix (PDM) original and revised version

PDM (original version)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATIONS	IMPORTANT ASSUMPTIONS
OVERALL GOAL			
1. Transmission of Chagas disease will be interrupt in Central America by 2010	Sero-prevalence	Evaluation by PAHO/WHO Annual meeting of the IPCA	Other C.A. countries implement the Chagas disease control.
2. Transmission of Chagas disease will be interrupt in El Salvador by 2010	Sero-prevalence	Report of serological survey	Other departments of El Salvador implement the Chagas disease control.
PROJECT PURPOSE			
Transmission of Chagas disease by vectors will be interrupt in 3 selected departments by July of 2007	Sero-prevalence, Infestation index	Report of serological survey, Infestation index of T. dimidiate (keep less than 5%)	Chagas disease control continues to be a priority for MSPAS. Transfusional transmission is controlled.
OUTPUTS			
1. The absence of R. Prolixus will be confirmed in the areas of 5 SIBASIs of 3 departments	Dispersion index	SIBASI's report of entomological survey	Other Triatomine species dose not infest fumigated areas.
2. T. dimidiata will be reduced in the areas of 5 SIBASIs of 3 departments	Infestation index (less than 5%)	SIBASI's report of entomological survey and vigilance	Re-infestation of T.d dose not rise drastically
3. An Entomological Vigilance System with community participation will be established.	Number of vigilance units installed.	SIBASI's report of trimester meeting	U/S and health Promoters participate actively.
4. An Information System will be established for the project director between SIBASIs and MSPAS central.	Information System established	SIBASI's report of trimester meeting	The information system is integrated with national information system of epidemiological vigilance.

ACTIVITIES	INPUTS		
	EL SALVADOR	JAPAN	
1.1 To execute entomological survey in the preparatory phase 1.2 To execute epidemiological (serological) survey in the preparatory phase 1.3 To execute residual fumigation with insecticides for positive and suspicious houses 1.4 To evaluate results of intervention using epidemiological and entomological survey 1.5 To mobilize communities, NGOs and other organizations for the house improvement 2.1-2.5 refer to 1.1-1.5 3.1 To produce materials and manuals for IEC 3.2 To execute social promotion of the Chagas disease control through Social consultant committees, Health Units, schools, Health Promoters, hospitals and collaborated volunteers 3.3. To establish vector surveillance system in each SIBASI with community participation 4.1 To identify information required at different levels for the Chagas disease control 4.2 To prepare and implement data forms required at different levels 4.3 To Establish information system connect the local level to the Central level	Materials Insecticides Manual sprayers Materials for IEC Operation costs Combustible Insurance for Vehicles Human Resources Vice-minister Directive Committee Technical Committee (epidemiologist, entomologist, Blood bank, etc.) ETZ of occident, 5 Directors of SIBASI, Personnel of Malaria, Health Promoters, Dengue Promoters	Insecticides Manual Sprayers Vehicles Reactive Computers Materials for IEC Volunteer superior Short-term experts Sub-regional experts Third country experts JOCVs Others Training in Japan or other countries	Trained personnel continue to work in the same post. Outbreak of other diseases dose not diminish resources for Chagas control.
	PAHO		**PRECONDITIONS**
	Cooperation in evaluation of the Project and National Program Technical Assistance Training on Geographic Information System Coordination with the IPCA		Local authorities and technical personnel recognize the importance of controlling Chagas disease.

PDM (revised version)

Project name: Chagas Disease Control Project in El Salvador Target area: Santa Ana, Ahuachapan and Sonsonate Departments

Implementation Agency of Salvadorian side: Ministry of Public Health and Social Assistance (central level and 5 SIBASIs in the target area)

Implementation Agency of Japanese side: Japan International Cooperation Agency Date of revision of PDM: June 13, 2006

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATIONS	IMPORTANT ASSUMPTIONS
OVERALL GOAL 1. Transmission of Chagas disease will be interrupted in Central America by 2010	Sero-prevalence	Evaluation by PAHO/WHO Annual meeting of the IPCA	Other C.A. countries implement the Chagas disease control.
2. Transmission of Chagas disease will be interrupted in El Salvador by 2010	Sero-prevalence	Report of serological survey	Other departments of El Salvador implement the Chagas disease control.
PROJECT PURPOSE Transmission of Chagas disease by vectors is decreased in 3 selected departments	Infestation index (less than 5% in the pilot areas where entomological surveillance system were established)	SIBASI's report	Chagas disease control continues to be a priority for MSPAS. Transfusional transmission is controlled.
OUTPUTS 1. The absence of R. Prolixus is confirmed in the areas of 5 SIBASIs of 3 departments	Dispersion index	SIBASI's report of entomological survey	Other Triatomine species dose not infest fumigated areas. Re-infestation of T.d dose not rise drastically U/S and health Promoters participate actively. The information system is integrated with national information system of epidemiological vigilance.
2. T. dimidiata is reduced in the areas of 5 SIBASIs of 3 departments	Infestation index (less than 5%)	SIBASI's report of entomological survey and surveillance	
3. Entomological Surveillance Systems with social participation are established.	Number of health unit (unidad de salud) with established surveillance system (a health unit in each SIBASI, total 5 units) (definition of indicators to verify the sustainability of entomological surveillance system with social participation is subject to be made later)	SIBASI's report	
4. An Information System is established for the project director between SIBASIs and MSPAS central.	(1) Information necessary in attack phase (dispersion index and infestation index in house) is accumulated and utilized. (2) Data of infestation index in house, sero-prevalence of infant (less than 5 years) and surveillance system is accumulated and shared in SIBASIs and MSPAS central.	SIBASI's report	

ACTIVITIES	INPUTS		
	EL SALVADOR	JAPAN	
1.1 To execute entomological survey in the preparatory phase 1.2 To execute epidemiological (serological) survey in the preparatory phase 1.3 To execute residual fumigation with insecticides for positive and suspicious houses 1.4 To evaluate results of intervention using epidemiological and entomological survey 1.5 To mobilize communities, NGOs and other organizations for the house improvement 2.1 To execute entomological survey in the preparatory phase 2.2 To execute epidemiological (serological) survey in the preparatory phase 2.3 To execute residual fumigation with insecticides for positive and suspicious houses 2.4 To evaluate results of intervention using epidemiological and entomological survey 2.5 To mobilize communities, NGOs and other organizations for the house improvement 3.1 To produce materials and manuals for IEC 3.2 To execute social promotion of the Chagas disease control through Social consultant committees, Health Units, schools, Health Promoters, hospitals and collaborated volunteers 3.3. To establish vector surveillance system in each SIBASI with social participation 4.1 To identify information required at different levels for the Chagas disease control 4.2 To prepare and implement data forms required at different levels 4.3 To Establish information system connect the local level to the Central level	<u>Materials</u> Insecticides Manual sprayers Materials for IEC Operation costs Combustible Insurance for Vehicles <u>Human Resources</u> Vice-minister Directive Committee Technical Committee (epidemiologist, entomologist, Blood bank, etc.) ETZ of occident, 5 Directors of SIBASI, Personnel of Malaria, Health Promoters, Dengue Promoters	Insecticides Manual Sprayers Vehicles Reactive Computers Materials for IEC Volunteer superior Short-term experts Sub-regional experts Third country experts JOCVs <u>Others</u> Training in Japan or other countries	Trained personnel continue to work in the same post. Outbreak of other diseases dose not diminish resources for Chagas control.
	PAHO		**PRECONDITIONS**
	Cooperation in evaluation of the Project and National Program Technical Assistance Training on Geographic Information System Coordination with the IPCA		Local authorities and technical personnel recognize the importance of controlling Chagas disease.

Annex 2 Dispatch of Japanese Experts and JOCVs

1) Long-term Japanese Experts

No.	Name of Expert	Field	Period of Assignment							
			From	To	MM	2003	2004	2005	2006	2007
1	Ms. Kyoko Ota	Chagas disease control	Dec 1, 2004	Sep. 30, 2007	34					

2) Short-term Japanese Experts

No.	Name of Expert	Field	Period of Assignment							
			From	To	MM	2003	2004	2005	2006	2007
1	Dr. Soichiro Tabaru	Medical Entomology	Feb. 1, 2004	Feb. 14, 2004	0.5					
2	Dr. Yoichi Yamagata	Project Management	May 10, 2004	Jun. 6, 2004	0.9					
3	Dr. Tomoyuki Hashimoto	Medical Entomology	Apr 9, 2005	Apr 23, 2005	0.5					
4	Dr. Tomomi Kozaki	Socio-Economic Analysis on Chagas disease control	Aug. 8, 2005	Aug. 15, 2005	0.3					
5	Dr. Tomomi Kozaki	Socio-Economic Analysis on Chagas disease control	Aug. 8, 2006	Aug. 16, 2006	0.3					
6	Ms. Satuski Yanagihara	IEC (Information, Education, Communication)	Oct. 16, 2006	Dec. 13, 2006	2					

3) Third Country Expert

No.	Name of Expert	Field	Period of Assignment							
			From	To	MM	2003	2004	2005	2006	2007
1	Dr. Sumie H. Shimizu	Diagnóstico y tratamiento de la enfermedad de Chagas	Feb. 9, 2004	Mar. 12, 2004	1.1					

3) JOCV (Japan Overseas Cooperation Volunteers)

No.	Name of Expert	Field	Period of Assignment							
			From	To	MM	2003	2004	2005	2006	2007
1	Ms. Kyoko Ota	Senior Volunteer	Oct. 5, 2002	Oct. 1, 2004	24.0					
2	Ms. Yuko Hishida	Santa Ana SIBASI	Jul. 14, 2003	Jul. 13, 2005	22.0					
3	Mr. Daisuke Higasikawa	Ahuachapán SIBASI	Jul. 14, 2003	Jul. 13, 2005	22.0					
4	Mr. Takero Nonami	Sonsonate SIBASI (Short-term JOCV)	Oct. 30, 2003	Oct. 28, 2004	12.0					
5	Mr. Tsuyoshi Ishii	Sonsonate SIBASI → Chalchuapa SIBASI	Jul. 12, 2004	Jul. 11, 2006	24.0					
6	Ms. Yukiko Yamazaki	Ahuachapán SIBASI → La Libertad SIBASI	Jul. 11, 2005 Jun. 14, 2006	Nov. 15, 2005 Jul. 10, 2007	17.0					
7	Ms. Tomoko Murayama	Metapán SIBASI → Ahuachapán SIBASI	Jul. 11, 2005 Jan. 1, 2007	Dec. 31, 2006 Jul. 10, 2007	24.0					
8	Mr. Yasuhiro Kasahara	Morazán SIBASI	Mar. 28, 2006	Mar. 27, 2009	24.0					

Annex 3: Assignment of Counterpart Personnel

	No	Name	Title	Organization	Year / Month	2003 4 7 10 1 3	2004 4 7 10 1 3	2005 4 7 10 1 3	2006 4 7 10 1 3	2007 4 7 10 1 3
MSPAS* (POLITICAL & ADMINISTRATIVE) LEVEL	1	Dr. Mario Serpas	Director of Epidemiological Control and Vigilance	Direction of Epidemiological Control and Vigilance						
	2	Dr. Genoveva Morales	Director of Epidemiological Control and Vigilance	Direction of Epidemiological Control and Vigilance						
	4	Dr. Héctor Ramos	Chief of Chagas Disease Control Program	Direction of Epidemiological Control and Vigilance, Epidemiological Unit						
	5	Ing. Eduardo Romero	Entomologist for Chagas Disease Control Program	Direction of Epidemiological Control and Vigilance, Vector Control Unit						
	6	Dr. Jaime Alemán	Responsable of Chagas Disease Control	Direction of Epidemiological Control and Vigilance, Vector Control Unit						
	7	Ing. Edith Hernández	Responsable of Chagas Disease Control	Direction of Epidemiological Control and Vigilance, Vector Control Unit						
	8	Lic. Roberto Cardoza	Responsable of Chagas Disease Control	Direction of Epidemiological Control and Vigilance, Vector Control Unit						
	10	Dr. Miguel Elas	Chief of Vector Control Unit	Direction of Epidemiological Control and Vigilance, Vector Control Unit						
	11	Dr. Humberto Urbina	Director General of Health Quality	Direction of Health Quality						
	12	Dr. Julio Castro	Director General of Health Quality	Direction of Health Quality						
REGIONAL (ADMINISTRATIVE) LEVEL	13	Dr. Sandra de Marroquin	Director of Occidental Region	Direction of Health Quality						
	14	Lic. Melvin Sanabria	Chief of Vector Control	Occidental Regional Office						
	15	Lic. Carmen Paspari	Educator	Occidental Regional Office						
	16	Mr. Juan José Sandoval	Coordinator of Health Promotores	Occidental Regional Office						

	No	Name	Title	Organization	Year / Month	2003 4 7 10 1 3	2004 4 7 10 1 3	2005 4 7 10 1 3	2006 4 7 10 1 3	2007 4 7 10 1 3
SIBASI (OPERATIONAL & DEPARTAMENTAL) LEVEL	17	Dr. Rony Vanegas	Director, SIBASI of Santa Ana	SIBASI of Santa Ana						
	18	Dr. Ramón Solís	Director, SIBASI of Santa Ana	SIBASI of Santa Ana						
	19	Dr. Guerra Alarcón	Director, SIBASI of Santa Ana	SIBASI of Santa Ana						
	20	Dr. Jaime Salmán	Director, SIBASI of Santa Ana	SIBASI of Santa Ana						
	21	Dr. Domingo Figueroa	Epidemiólogist	SIBASI of Santa Ana						
	22	Dr. Gardamez	Epidemiólogist	SIBASI of Santa Ana						
	23	Mr. Alexandro Jaco	Chief of Vector Control	SIBASI of Santa Ana						
	24	Lic. Melvin Sanabria	Chief of Vector Control	SIBASI of Santa Ana						
	25	Lic. Sandra Flores	Educator	SIBASI of Santa Ana						
	26	Lic. Efrain A. Campos	Educator	SIBASI of Santa Ana						
	27	Lic. Silvia de Dominguez	Director, SIBASI of Chalchuapa	SIBASI of Chalchuapa						
	28	Lic. Ana Maria Mendoza	Epidemiólogist	SIBASI of Chalchuapa						
	29	Lic. Efrain A. Campos	Educator	SIBASI of Chalchuapa						
	30	Mr. Alexandro Jaco	Chief of Vector Control	SIBASI of Chalchuapa						
	31	Dr. René Magaña	Director, SIBASI of Metapán	SIBASI of Metapán						
	32	Dr. Ramón Solís	Director, SIBASI of Metapán	SIBASI of Metapán						
	33	Dr. Luis Sermeño	Epidemiólogist	SIBASI of Metapán						
	34	Mr. Carlos Galdamez	Chief of Vector Control	SIBASI of Metapán						
	35	Dr. Silvia de Olivo	Director, SIBASI of Sonsonate	SIBASI of Sonsonate						
	36	Dr. Eduardo Josa	Director, SIBASI of Sonsonate	SIBASI of Sonsonate						
	37	Dr. Carlos Figueroa	Epidemiólogist	SIBASI of Sonsonate						
	38	Lic. Victor Ramos	Chief of Vector Control	SIBASI of Sonsonate						
	39	Lic. Reina	Educator	SIBASI of Sonsonate						
	40	Dr. Mauricio Ramos	Director, SIBASI of Ahuachapán	SIBASI of Ahuachapán						
	41	Dr. Maria Carballo	Director, SIBASI of Ahuachapán	SIBASI of Ahuachapán						
	42	Dr. Hernández	Epidemiólogist	SIBASI of Ahuachapán						
	43	Mr. Ricardo Alvanéz	Chief of Vector Control	SIBASI of Ahuachapán						
	44	Mr. Marvin Grijalva	Chief of Vector Control	SIBASI of Ahuachapán						
	45	Lic. Betty Calorina	Educator	SIBASI of Ahuachapán						

* MSPAS: Ministry of Public Health and Social Assistance
** SIBASI: Basic System of Integral Health

Annex 4: Participants to the Regional Training Course on the Medical Entomology

No.	Name	Post and Organization		Period of training	
				From	To
1	Marvin Leon Grijalva	Entomologist, MSPAS Ahuachapán	First course	Sep. 19, 2005	Sep. 23, 2005
2	Dalvin Grijalva	Assistant Entomologist, MSPAS Ahuachapán		Sep. 19, 2005	Sep. 23, 2005
3	Roberto Lemus	Entomologist, MSPAS Sonsonate		Sep. 19, 2005	Sep. 23, 2005
4	Marlon Valladares Días	Assistant Entomologist, MSPAS Sonsonate		Sep. 19, 2005	Sep. 23, 2005
5	Oscar M. Sanabria	Chief of Vectors, MSPAS Santa Ana		Sep. 19, 2005	Sep. 23, 2005
6	Everio Cartagena Días	Assistant Entomologist, MSPAS Santa Ana		Sep. 19, 2005	Sep. 23, 2005
7	Eduardo Romero	National Entomologist, MSPAS central		Sep. 19, 2005	Sep. 23, 2005
8	Roberto Lemus	MSPAS Sonsonate	Second course	Feb. 20, 2006	Feb. 24, 2006
9	Oscar Melvin Sanabria	MSPAS Santa Ana		Feb. 20, 2006	Feb. 24, 2006
10	Marvin Leon Grijalva	MSPAS Ahuachapán		Feb. 20, 2006	Feb. 24, 2006
11	Eduardo Romero	MSPAS central		Feb. 20, 2006	Feb. 24, 2006
12	Héctor Ramos	MSPAS central		Feb. 20, 2006	Feb. 24, 2006
13	Alfonso González	MSPAS central		Feb. 20, 2006	Feb. 24, 2006

Annex 4: Training of Counterpart Personnel

	No	Name	Title	Organization	C/P Training
MSPAS* (POLITICAL & ADMINISTRATIVE) LEVEL	1	Dr. Mario Serpas	Director of Epidemiological Control and Vigilance	Direction of Epidemiological Control and Vigilance	TDR-WHO meeting in Argentine/ 2005
	2	Dr. Genoveva Morales	Director of Epidemiological Control and Vigilance	Direction of Epidemiological Control and Vigilance	
	4	Dr. Héctor Ramos	Chief of Chagas Disease Control Program	Direction of Epidemiological Control and Vigilance, Epidemiological Unit	Tropical disease in Brazil/ 1998, Parasitology course in Japan/ 2004, Eco-Epidemiology of Chagas in Colombia/ 2005, Regional course in El Salvador/ 2005, IPCA meeting/ 2005 & 2006, ECLAT-JICA-WHO workshop on sustainable Chagas disease control in C.A./ 2006
	5	Ing. Eduardo Romero	Entomologist for Chagas Disease Control Program	Direction of Epidemiological Control and Vigilance, Vector Control Unit	Diploma course in El Salvdor/ 2004, INCOSUR meeting/ 2005, Regional course in El Salvador/ 2005
	6	Dr. Jaime Alemán	Responsable of Chagas Disease Control	Direction of Epidemiological Control and Vigilance, Vector Control Unit	Tropical disease in Brazil/ 2004, IPCA meeting/ 2004
	7	Ing. Edith Hernández	Responsable of Chagas Disease Control	Direction of Epidemiological Control and Vigilance, Vector Control Unit	
	8	Lic. Roberto Cardoza	Responsable of Chagas Disease Control	Direction of Epidemiological Control and Vigilance, Vector Control Unit	
	10	Dr. Miguel Elas	Chief of Vector Control Unit	Direction of Epidemiological Control and Vigilance, Vector Control Unit	Parasitology course in Japan/ Oct-Nov.2003, IPCA meeting/ 2003
	11	Dr. Humberto Urbina	Director of Health Quality	Direction of Health Quality	
	12	Dr. Julio Castro	Director of Health Quality	Direction of Health Quality	
REGIONAL (ADMINISTRATIVE) LEVEL	13	Dr. Sandra de Marroquín	Director of Occidental Region	Direction of Health Quality	R. prolixus control meeting in Guatemala/ 2003
	14	Lic. Melvin Sanabria	Chief of Vector Control	Occidental Regional Office	(Transfered from SIBASI-Santa Ana)
	15	Lic. Carmen Paspari	Educator	Occidental Regional Office	
	16	Mr. Juan José Sandoval	Coordinator of Health Promotores	Occidental Regional Office	

	No	Name	Title	Organization	C/P Training
SIBASI (OPERATIONAL & DEPARTAMENTAL) LEVEL	17	Dr. Rony Vanegas	Director, SIBASI of Santa Ana	SIBASI of Santa Ana	
	18	Dr. Ramón Solís	Director, SIBASI of Santa Ana	SIBASI of Santa Ana	(Transfered from SIBASI-Metapán)
	19	Dr. Guerra Alarcón	Director, SIBASI of Santa Ana	SIBASI of Santa Ana	
	20	Dr. Jaime Salmán	Director, SIBASI of Santa Ana	SIBASI of Santa Ana	
	21	Dr. Domingo Figueroa	Epidemiólogist	SIBASI of Santa Ana	
	22	Dr. Gardamez	Epidemiólogist	SIBASI of Santa Ana	Diploma course in El Salvador/ 2004
	23	Mr. Alexandro Jaco	Chief of Vector Control	SIBASI of Santa Ana	(Transfered from SIBASI-Chalchuapa)
	24	Lic. Melvin Sanabria	Chief of Vector Control	SIBASI of Santa Ana	Diploma course in El Salvador/ 2004, JOCV training/ 2004, IPCA meeting/ 2004, GIS training in Argentine/2005, Regional course in El Salvador/ 2005, ECLAT-JICA-WHO International workshop in Honduras/ 2007
	25	Lic. Sandra Flores	Educator	SIBASI of Santa Ana	
	26	Lic. Efrain A. Campos	Educator	SIBASI of Santa Ana	(Transfered from SIBASI-Chalchuapa)
	27	Lic. Silvia de Dominguez	Director, SIBASI of Chalchuapa	SIBASI of Chalchuapa	(Integrated to SIBASI- Santa Ana from Jan. 2007)
	28	Lic. Ana María Mendoza	Epidemiólogist	SIBASI of Chalchuapa	Diploma course in El Salvador/2004, Serological study course in Guatemala/2005
	29	Lic. Efrain A. Campos	Educator	SIBASI of Chalchuapa	JOCV training in Honduras/ 2004
	30	Mr. Alexandro Jaco	Chief of Vector Control	SIBASI of Chalchuapa	
	31	Dr. René Magaña	Director, SIBASI of Metapán	SIBASI of Metapán	(Integrated to SIBASI- Santa Ana from Jan. 2007)
	32	Dr. Ramón Solís	Director, SIBASI of Metapán	SIBASI of Metapán	
	33	Dr. Luis Sermeño	Epidemiólogist	SIBASI of Metapán	Diploma course in El Salvador/2004
	34	Mr. Carlos Galdamez	Chief of Vector Control	SIBASI of Metapán	
	35	Dr. Silvia de Olivo	Director, SIBASI of Sonsonate	SIBASI of Sonsonate	
	36	Dr. Eduardo Josa	Director, SIBASI of Sonsonate	SIBASI of Sonsonate	
	37	Dr. Carlos Figueroa	Epidemiólogist	SIBASI of Sonsonate	Diploma course in El Salvador/2004
	38	Lic. Victor Ramos	Chief of Vector Control	SIBASI of Sonsonate	Diploma course in El Salvador/2004
	39	Lic. Reina	Educator	SIBASI of Sonsonate	
	40	Dr. Mauricio Ramos	Director, SIBASI of Ahuachapán	SIBASI of Ahuachapán	
	41	Dr. María Carballo	Director, SIBASI of Ahuachapán	SIBASI of Ahuachapán	
	42	Dr. Hernández	Epidemiólogist	SIBASI of Ahuachapán	Diploma course in El Salvador/2004
	43	Mr. Ricardo Alvanéz	Chief of Vector Control	SIBASI of Ahuachapán	
	44	Mr. Marvin Grijalva	Chief of Vector Control	SIBASI of Ahuachapán	Diploma course in El Salvador/2004, JOCV training in Honduras/2004, Regional course in El Salvador/ 2005
	45	Lic. Elizabeth	Educator	SIBASI of Ahuachapán	

* MSPAS: Ministry of Public Health and Social Assistance
** SIBASI: Basic System of Integral Health

Annex 5: Provision of Equipment by Japanese side (Expenses by year)

(Unit: US dollar)

Year	2003	2004	2005	2006	2007	Total
Provision equipment	225,619	0	145,763	179,998	0	551,380
Expert's accompanied	0	113,340	0	-	0	113,340
Local purchased	3,066	14,217	0	-	0	17,283
Total	228,685	127,557	145,763	179,998	0	682,003

Annex 5: Provision of Equipment by Japanese side (List of equipment)

(1) Year 2003

No	Type	Item	Product	Quantity	Amount ($)	Location	Purchase	Disposition	Existing	Usage	Maintenance	Management
1	Provision Equipment	4WD Pick-up	MITSUBISHI, Model: K74TGJENXFL, L200 4x4 DC, Manual, Double cabin, Diesel	3	60,000	SIBASI-Santa Ana, Ahuachapán & Sonsonate	Local	0	3	A	A	A
2	Provision Equipment	Manual spray	HUDSON, Model: X-pert 67362 WD, 8 litros	45	15,619	SIBASI-Santa Ana, Ahuachapán & Sonsonate	Local	0	45	A	B	A
3	Provision Equipment	Insecticide	BAYER, Pyrethroid, K-Othrine 5WP, Active ingredient: Deltamethrin 5%	2428kg	121,400	MSPAS central (SIBASI-Santa Ana, Ahuachapán & Sonsonate)	Local	0	0	A	A	A
4	Provision Equipment	Computer set (with printer, UPS)	PC (HURRICANE, Desk-top, Inter Pentium IV, Hard-disk 80HHDD, CD-ROM, Windows XP professional, Microsoft Office XP, Antivirus,), Printer (CANNON I350), UPS (500VA)	4	6,600	Vector Control Unit of MSPAS, SIBASI-Santa Ana, Ahuachapán & Sonsonate	Local	0	4	A	A	A
8	Provision Equipment	Digital projector	3M, Type: XGA	5	12,800	SIBASI-Santa Ana, Ahuachapán, Chalchuapa, Metapán & Sonsonate	Local	0	5	B	B	B
9	Provision Equipment	Computer	PC (HP Compaq D220/P, Desk-top, Inter Pentium IV, Hard-disk 80HHDD, CD-ROM, Windows XP professional, Microsoft Office XP, Antivirus), Printer (CANNON 120V), UPS (500VA)	2	3,000	SIBASI-Chalchuapa & Metapán	Local	0	2	A	A	A
10	Provision Equipment	GIS soft	ArcView 8.3	4	6,200	Project office, SIBASI-Santa Ana, Ahuachapán & Sonsonate	Local	3	1	A	A	A
TOTAL (Provision Equipment)					225,619							
1	Local purchased	Digital Camara	CANNON	5	2,026	SIBASI-Santa Ana, Ahuachapán, Chalchuapa, Metapán & Sonsonate	Local	0	5	B	B	C
2	Local purchased	USB Memory	KINGSTON, 64MB	6	360	Project office, SIBASI-Santa Ana, Ahuachapán, Chalchuapa, Metapan & Sonsonate	Local	0	6	A	A	B
3	Local purchased	Entomological Bo	Size: 50cm x 105cm x 35cm, Material: playwood, glass	3	510	SIBASI-Santa Ana, Ahuachapán & Sonsonate	Local	0	3	A	A	A
4	Local purchased	Telefax	SHARP	1	170	SIBASI-Auachapán	Local	0	1	A	A	A
TOTAL (Local purchased Equipment)					3,066							
TOTAL Year 2003					228,685							

(2) Year 2004

No	Type	Item	Product	Quantity	Amount ($)	Location	Purchase	Disposition	Existing	Usage	Maintenance	Management
1	Local purchased	sets of office furnitures	2 desks, 1 table, 6 chairs	1	2,243	Project office	Local	0	1	A	A	A
2	Local purchased	Shelf	PANAVISION	2	502	Project office	Local	0	2	A	A	A
3	Local purchased	Fotocopy machine	XEROX, Workcenter Pro45	1	7,000	Project office	Local	0	1	A	A	A
4	Local purchased	UPS	550VA	2	215	Project office	Local	0	2	A	A	A
5	Local purchased	UPS	2.2KVA	1	450	Project office	Local	0	1	A	A	A
6	Local purchased	GPS	GARMIN, Model: 200-1616	3	345	SIBASI-Santa Ana	Local	2	1	A	A	A
7	Local purchased	sets of office furnitures	1 Table, 1 Shelf	1	163	SIBASI-Sonsonate	Local	0	1	A	A	A
8	Local purchased	Desk		1	114	SIBASI-Chalchuapa	Local	0	1	A	A	A
9	Local purchased	Computer	HP, Windows XP, Office	1	1,805	Project office	Local	0	1	A	A	A
10	Local purchased	Digital projector	INFORCUS	1	1,275	Project office	Local	0	1	A	A	A
11	Local purchased	Color printer	CANNON	1	105	Project office	Local	0	1	B	A	A
TOTAL (Local purchased Equipment)					14,217							
1	Expert's accompanied	Entomological pin	SHIGA-pin No.2	100	26,200	Project office, SIBASI, National University	Japan	90	10	A	A	A
2	Expert's accompanied	Entomological Loupe	SHIGA, Two lenz 16x	20	22,040	Project office	Japan	20	0	A	A	A
3	Expert's accompanied	Tweezer	SHIGA, Size: 15cm	20	25,200	Project office	Japan	20	0	A	A	A
4	Expert's accompanied	Entomological bo	SHIGA, Size: 31.5cm x 22cm x 6cm	10	39,900	Project office, National University	Japan	9	1	A	A	A
TOTAL (Expert´s accompanied; Yen)					113,340							
TOTAL Year 2004					127,557							

(3) Year 2005

No	Type	Item	Product	Quantity	Amount ($)	Location	Purchase	Disposition	Existing	Usage	Maintenanc	Management
1	Provision Equipment	Manual spray	HUDSON, Model: X-pert 67362 WD, 8 litros	45	16,389	SIBASI-Santa Ana, Metapán, Chalchuapa, Ahuachapán & Sonsonate	Local	0	45	A	B	A
2	Provision Equipment	4WD Pick-up	MAZDA, Model: B2900, DC 4x4 MID, Manual, Double cabin, Diesel	2	30,520	SIBASI-Metapán & Chalchuapa	Local	0	2	A	A	A
3	Provision Equipment	Insecticide	HOCKELY, Pyrethroid, Active ingredient: Deltamethrin 5%	1800 Liters	77,364	MSPAS central (SIBASI-Santa Ana, Metapán, Chalchuapa, Ahuachapán & Sonsonate)	Local	0	0	A	A	A
4	Provision Equipment	Insecticide	HOCKELY, Pyrethroid, Active ingredient: Deltamethrin 5%	500 Liters	21,490	MSPAS central (SIBASI-Santa Ana, Metapán, Chalchuapa, Ahuachapán & Sonsonate)	Local	0	300 liters	A	A	A
TOTAL (Provision Equipment)					145,763							
TOTAL Year 2005					145,763							

(4) Year 2006

No	Type	Item	Product	Quantity	Amount ($)	Location	Purchase	Disposition	Existing	Usage	Maintenanc	Management
1	Provision Equipment	Manual spray	HUDSON, Model: X-pert 67362 WD, 8 litros	60	23,658	SIBASI-Santa Ana, Ahuachapán & Sonsonate	Local	0	60	A	A	A
2	Provision Equipment	Spare kits for manual spray	HUDSON, Model: X-pert 67362 WD, 8 litros	1	4,392	SIBASI-Santa Ana, Ahuachapán & Sonsonate	Local	0	1	A	A	A
3	Provision Equipment	Motorcycle	SUZUKI, Model: TS 185	9	20,700	SIBASI-Santa Ana, Ahuachapán & Sonsonate	Local	0	9	A	A	A
4	Provision Equipment	Insecticide	HOCKELY, Pyrethroid, Active ingredient: Deltamethrin 5%	5200 Liters	131,248	MSPAS central (SIBASI-Santa Ana, Ahuachapán & Sonsonate)	Local	0	0	A	A	A
5	Provision Equipment	Insecticide	HOCKELY, Pyrethroid, Active ingredient: Deltamethrin 5%			MSPAS central (SIBASI-Santa Ana, Ahuachapán & Sonsonate)	Local	0		A	A	A
TOTAL (Provision Equipment)					179,998							
TOTAL Year 2006					179,998							

TOTAL Year 2003-2006	682,002

Annex 6: Local Operation Expenses borne by Japanese Side

Unit: US dollar

No.	Category	JFY					Amount
		2003	2004	2005	2006	2007	
1	General	23,522	48,851	100,849	111,730	50,977	335,929
2	Region wide	27,369	0	0	0	0	27,369
3	Local applicable	0	0	0	0	0	0
4	International Training	0	0	18,190	0	0	18,190
5	Senior´s JOCVs fund	26,955	4,496				31,451
Total		77,846	53,347	119,039	111,730	50,977	412,939

*JFY: Japanese Fiscal Year (from April to March)

ANNEX 7: Expenses borne by Salvadorian Side (Ministry of Public Health and Social Assistance)

Unit: US dollar

Category	2003 (Sep. – Dec.)	2004	2005	2006	2007 (Jan. – Apr.)	Total
Local operation expenses	62,113	77,113	206,134	171,518	20,424	537,301

Annex 8: Progress of Activities of the Project

Final Evaluation of the Chagas disease control Project in Honduras (March 28, 2007)

*: Evaluation criteria: Judge the advance status of the activities and results in comparison with the operative plan of the project. (AAA: Completed, AA: Advanced than plan, A: As planned, B: Delayed, C: Very delayed and affecting the project, D: Not started and NA: Not clear or not possible to evaluate).

<table>
<tr><th>Output</th><th>Activities</th><th>Progress of Activities (March, 2007)</th><th>Evaluation *</th></tr>
<tr><td rowspan="5">1. The absence of Rhodnius prolixus (Rp) is confirmed in the area of 5 SIBASIs of 3 departments.</td><td>1.1 Conduct entomological survey in the preparatory stage.</td><td>The infestation of Rp was not detected in the area of the Project by the entomological survey conducted in the preparatory stage from 2003 to August 2004.</td><td>AAA</td></tr>
<tr><td>1.2 Conduct epidemiological survey (serological) in the preparatory stage.</td><td>There was not need for making the epidemiological survey, since the infestation of Rp was not confirmed.</td><td>AA</td></tr>
<tr><td>1.3 Carry out the residual spraying with insecticide to the positive and suspicious dwellings.</td><td>There was not need for doing the spraying, since the presence of Rp was not confirmed.</td><td>AA</td></tr>
<tr><td>1.4 Evaluate the intervention results by serological and entomological survey.</td><td>It was not necessary.</td><td>AA</td></tr>
<tr><td>1.5 Carry out IEC activities for house improvement with the collaboration with communities, NGOs, and other institutions.</td><td>This activity is being carried out together with the control of Td.</td><td>A</td></tr>
<tr><td>2. Triatoma dimidiata (Td) is decreased in the area of 5 SIBASIs of 3 departments.</td><td>2.1 Conduct entomological survey for Td in the preparatory stage.</td><td>Result of the baseline survey in the 3 departments (of 2003 to August 2004)
<table>
<tr><th></th><th colspan="2">Total</th><th colspan="2">Done</th><th colspan="2">Pending</th></tr>
<tr><th></th><th>Number of objective localities</th><th>Number of localities</th><th>%</th><th>Number of objective localities</th><th>Number of localities</th></tr>
<tr><td>Localities infested</td><td>2,310</td><td>1,690</td><td>100</td><td>0</td><td>0</td></tr>
</table>
Note: The situation of the rest of the area of the Project could be estimated with the baseline survey that covered 73% of the localities. Therefore, it was not necessary to continue the survey.

With the baseline survey that covered almost 70% of the targeted localities, it was possible to predict the infestation of the areas, and obtained sufficient information for preparing the plan of spraying.
The index of infestation of the area of the Project was much higher than in Guatemala, Honduras, and South America countries, which means that the immediate need for applying insecticide was confirmed.
With the entomological survey conducted in the western area of El Salvador, the infestation of Td was confirmed up to the neighboring departments to Guatemala.
In the areas infested by Rp, there was also detected Td, and confirmed the extension of infestation of Td due to the change of the type of houses.
</td><td>AAA</td></tr>
</table>

<table>
<tr><th>Output</th><th>Activities</th><th>Progress of Activities (March, 2007)</th><th>Evaluation *</th></tr>
<tr><td></td><td>2.2 Conduct serological survey in the preparatory stage.</td><td>Result of the serological survey of children under 5 years old in the departments of Sonsonate and Ahuachapán (2004)
<table>
<tr><th></th><th colspan="2">Total</th><th colspan="2">Done</th><th colspan="2">Pending</th></tr>
<tr><th></th><th>Number of objective localities</th><th>Number of localities</th><th>%</th><th>Number of objective localities</th><th>Number of localities</th></tr>
<tr><td>Serological survey</td><td>6</td><td>3</td><td>50</td><td>3</td><td>50</td></tr>
</table>
➢ The index of seroprevalence of the municipality of Ahuachapán in Ahuachapán department was 3.2% (2 out of 155 children were positive) and the index of the municipality of Juayúa in Sonsonate department was 1.1% (3 out of 283 children were positive). The University of El Salvador conducted the serological survey for the children from 7 to 14 years old in the localities of Santa Ana department before doing the spraying.
➢ Baseline survey is currently conducting in the pilot areas in order to make the evaluation by seroprevalence possible in the future.</td><td>A</td></tr>
<tr><td></td><td>2.3 Carry out the residual spraying with insecticide to the positive and suspicious houses.</td><td>Spraying result in the 3 departments (at the end of December 2006)
<table>
<tr><th></th><th colspan="2">Total</th><th colspan="2">Done</th><th colspan="2">Pending</th></tr>
<tr><th></th><th>Number of objective localities</th><th>Number of localities</th><th>%</th><th>Number of objective localities)</th><th>Number of localities</th></tr>
<tr><td>First spraying</td><td>179,331</td><td>89,474</td><td>50</td><td>89,857</td><td>50</td></tr>
<tr><td>Second spraying</td><td>41,963</td><td>25,953</td><td>62</td><td>16,010</td><td>38</td></tr>
<tr><td>Third spraying</td><td>NUM</td><td>744</td><td>50</td><td>NUM</td><td>50</td></tr>
</table>
Note) From the results of the monitoring carried out after the first, it is expected that the number of houses subject to the second spraying will increase considerably. This is because of the infestation index of Td was extremely higher than expected. (Refer the evaluation result after the first spraying in the municipality of Guaymango in Ahuachapán department.) Although the Project does not plan to carry out the third spraying, measures will be taken in accordance with the state of entomological surveillance.</td><td>B</td></tr>
<tr><td></td><td>2.4 Evaluate the intervention results by epidemiological and entomological survey.</td><td>➢ The vector control personnel (ETV) conducted the pilot entomological survey in the areas of surveillance. The index of infestation of these areas where they were sprayed twice declined to 0 to 5%.
➢ In the pilot area of municipality of Atiquizaya in Ahuachapán department, there are sites where the index of infestation ranges from 7 to 10%. This municipality locates neighboring to Jutiapa department of Guatemala , in which high infested villages concentrate. In the municipality of Chalchuapa (located to the north of the municipality of Atiquizaya) Santa Ana department, there are highly infested communities along the border. These localities also neighboring to Jutiapa department. Since acute cases were found in the municipality of Atiquizaya even though the spraying was carried out twice, Atiquizaya will be the highly prioritized area of entomological surveillance .
➢ Due to the time constraints, the evaluation by serological indicators would not be conducted within the Project implementation period. (This was already discussed in the midterm evaluation.)</td><td>A

NA</td></tr>
</table>

<table>
<tr><th>Output</th><th>Activities</th><th>Progress of Activities (March, 2007)</th><th>Evaluation *</th></tr>
<tr><td></td><td>2.5 Conduct IEC activities for house improvement with the collaboration with communities, NGOs and other institutions.</td><td>➢ Exchange information with the Salvadorian NGOs specialized in the construction and improvement of housing, as well as with FUNDASAL, the JICA's aseismatic Project TAISHIN and the University of San Carlos of Guatemala.
➢ Together with the JJICA's TAISHIN Project, organized the "Workshop for the Healthy and Antiseismic Housing on Construction with Adobe in the Framework of the Control of Chagas' disease." The discussions sustained in this workshop will be summarized in a report and will be reflected in the manual on surveillance of Chagas disease.
➢ House improvement was carried out experimentally in the municipality of Guaymango in Ahuachapán department where is one of the pilot areas of the Project.</td><td>A</td></tr>
<tr><td rowspan="3">3. Entomological vigilance system with community participation will be established.</td><td>3.1 Prepare materials and manuals for promoting Chagas disease control.</td><td>➢ Activities were carried out for (1) making materials school teachers use in their classes (2) utilizing the educational TV program produced by the National Channel of TV, (3) making manuals on life improvement for health promoters (in preparation), (4) making fliers for health promoters, educators and school teachers.
➢ Checklists of surveillance activities are in preparation. This list will be included in the manual on surveillance in the future.</td><td>A</td></tr>
<tr><td>3.2 Carry out Chagas disease control activities with the collaboration with the Social Consultation Committee, Health Units, schools, health promoters, hospitals and volunteers in SIBASIs.</td><td>➢ By the initiative of Health Units in pilot areas according to the activity plan elaborated in the workshop of 2006, various activities were carried out such as training for all staff of Health Units and IEC activities in primary schools.
➢ At the mayors meeting held by the initiative of the Western Health Region, it was decided to sign an agreement by the Ministry of Education and MSPAS to establish the "Day of Chagas." With this agreement, it is expected to involve issues concerning Chagas disease control in curriculum of primary schools in three departments.</td><td>A</td></tr>
<tr><td>3.3 Establish vector surveillance systems with social involvement in jurisdiction area of SIBASIs.</td><td>Result of the establishment of the entomological surveillance system
<table><tr><th></th><th>Total</th><th colspan="2">Done</th><th colspan="2">Pending</th></tr><tr><th></th><th>Number of objective localities</th><th>Number of localities</th><th>%</th><th>Number of objective localities</th><th>Number of localities</th></tr><tr><td>Surveillance system</td><td>5 villages</td><td>6 villages＋4 municipalities</td><td>＞100%</td><td>0</td><td>0</td></tr></table>Note: Although 5 localities have been selected as pilot areas of surveillance in the midterm evaluation, the Project has decided to cover all villages in 6 cantons and 4 municipalities. This decision was made by the Health Units and the Project respected this initiative.</td><td>A</td></tr>
</table>

Output	Activities	Progress of Activities (March, 2007)	Evaluation *
4. Information system for the Project director connecting SIBASIs and the headquarters of MSPAS is established.	4.1 Identify the necessary information at the respective level involved in the control of Chagas disease.	➢ It was found that the information handled is different in the attack phase and in the maintenance phase. Also, the content of information, senders and receivers of information is differ from epidemiological information and vector control information. ➢ The headquarters of MSPAS produce and manage national level risk maps, the regional health office and SIBASIs produce and manage departmental and municipal level risk maps, Health Units produce and manage municipal level risk maps, and health promoters are responsible for village level risk maps. Currently, SIBASIs and Health Units are preparing risk maps.	A
	4.2 Prepare and make use of data formats for the respective level.	➢ Entomological survey formats have been prepared (baseline survey and evaluation survey after spraying) and used both as manual data and digital data. ➢ Pending issue to be further developed it how to share and manage entomological information between the Health Units and ETV in the phase of surveillance.	A
	4.3 Establish an information system connection local and central levels.	➢ Although the epidemiological information system was developed in cooperation with USAID, chronic case data and acute case data were sometimes mixed up, due to the lack of understanding on the definition of an acute case. However, the information system has been improved with the preparation of manuals on Chagas disease control and information dissemination. ➢ The experimental use of GIS has begun for analyzing the information in Santa Ana and Sonsonate departments.	A

Annex 9: Tangible Products of the Project

NO.	DATE IT WAS MADE	PRODUCTS	OBJECTIVE
1	2003.9	Posters and brochures with general information of Chagas.	Inform of the existence on chagas disease to all the population level in the western part of the country.
2	2003.9	Digitalization of the educational video made by Bayer.	To keep the existing images of the illness. Facilitate the audiovisual material. To give the information about chagas to doctors at all levels.
3	2003.9~	Exhibitor of chinches with plastic resin.	Incentive for school teachers, children and people to search for chinches.
4	2003.1	Promotional pen and button.	Facilitate the negotiations and coordination with other sectors. Incentives for the volunteer of the community and health staff.
5	2003.1	Promotional back-pag.	Incentive for the communitarian volunteers and the health workers.
6	2003.11~	Brochure on the generalities of Chagas Disease (level: communitarian leader and school teacher).	Training for the main entities of the community that are at risk.
7	2003~	Articles publishes in national newspapers (several)	To inform of the existence of Chagas nation wide.
8	2003/2004	Illustrated book for school kids *"Pedrito Chagas Disease"*.	To inform the children about the risks of chagas disease. Training of the teachers to elaborate the educational material, when the elaboration process is shared.
9	2003~	Transmission of chagas program through local media (radio and TV) in SIBASI-Metapán, Sonsonate, Chalchuapa, Ahuachapán.	To inform locally about chagas disease.
10	2004.2	Promotional Cap	Incentive for the communitarian volunteers and the health workers.
11	2004.2	Calendar wit periodical dates to clean the house.	Strengthening on entomologic surveillance by the community. Awareness for the people on hoe to clean and order their home.
12	2004.5~	Dried sample of chinches (3 departments).	To make the entomologic surveillance easier.
13	2004.9	Sticker of how to spay.	Control of the information of spraying. Promotion.
14	2004.9~	Flyer on how to prepare the house for residual spraying.	Make of spraying a easier process. Aware the people on the surveillance for chinches.
15	2005.3	Promotional folder	Make easier the negotiations and coordination with other sectors.
16	2005.5	Video on the residual spraying technique for Chagas disease.	To help on the training for spraying. Quality Control of spraying.
17	2005/5~	A fifteen day plan for the control of chagas disease (is in the process of being made).	Systemize the control activities. Facilitate the intervention in the risk areas of other departments.
NO.	DATE IT WAS MADE	PRODUCTS	OBJECTIVE

18	2005.6.15	Contest of good and bad houses with school kids (SIBASI—Metapan).	Make the kids aware on chinches surveillance, cleaning and ordering inside and outside the house.
19	2005.7	Video clip with Chagas song, using the song made by a local singer from Guatemala with the support of Medics with no boundaries of Spain.	To inform of the risk of Chagas disease for the kids and the communities.
20	2005/9/28-29	Exhibition of the documentary of Argentina *"Chagas, A Hidden Affliction"*.	To inform of the risk of Chagas Disease Nation wide
21	2005/10	Transmission of the Program "Project X+ - *Chagas version*" by the national TV channel.	To inform of the risk of Chagas Disease Nation wide
22	2006/6	Contest on chagas stories wit the school Kids (SIBASI-Metapán).	Make the kids aware on chinches surveillance, cleaning and ordering inside and outside the house.
23	2006/6	Drawing contest with school kids (SIBASI-Chalchuapa)	Make the kids aware on chinches surveillance, cleaning and ordering inside and outside the house.
24	2006/10	List of the institutional capability evaluation for the surveillance of Chagas at health center, health promoter and community level.	Evaluation of the sustainability and effectiveness of the surveillance system of the Health Unit.
24	2006/12	Promotional cap	Incentive for the communitarian volunteers and the health workers.
25	2006/12	Transmission of the didactic program "*Adventure of Cipitío*" through the national channel	To inform about chagas disease nation wide.
26	2007/3	List of checkup of the activities for the control and surveillance at the deparmentalVector Unit Level.	Evaluation of the sustainability and effectiveness of the surveillance system at a departmental Vector Unit level.
27	2007/3	Flip-chart of the check version, for the health promoters and school teachers.	To inform of the surveillance on Chagas disease. To facilitate lectures to the health promoters.
28	2007/3	List of check-up activities for the surveillance at a national program level (in process).	Evaluation of the sustainability and effectiveness of the surveillance system at a rectory level.
29	2007/3	Norm for the diagnosis, treatment, and operational control for chagas disease.	Standardize the treatment. Improving the detection on time of sever cases. Quality control at a operational control.
30	2007/4	2 types of Posters from the check-up version.	To inform about chagas disease, giving the priority on surveillance through the community.
31	2007/5	Animation *"Pedrito and Chagas disease"*.	To inform the risk of chagas disease nationally.
32	2007/5	Handbook on the improvement of life and chagas at a Health Promoter level (in Process).	Spread the surveillance of Chagas disease. Facilitate the lectures to Health Promoters.

Annex 10: Checklist fro the entomological surveillance system

Checklist for Institutional Capacity of Surveillance

	Variable Factors	Compliance of Activities	Checking	Observation
Health Unit	(1) Handling of information	1. Bugs received from the community are recorded in the form.		
		2. There is a database on bugs recorded for analysis.		
		3. The risk map is updated and displayed in the waiting room.		
		4. Information on recorded bugs can be analyzed with a decision on the selective spraying system.		
	(2) Active epidemiological monitoring	1. Doctors have knowledge of the living condition of the patients and the risk area for the transmission of "chagas".		
		2. Doctors (including those during socialized medicine years) can detect patients suspected of being in the acute phase of the chagas disease.		
		3. Doctors are monitoring patients under medical treatment and health workers are monitoring treated patients.		
	(3) Management and leadership capacity for the community response	1. "A presentation was made on the chagas problem and the necessity for participatory monitoring, before the Social Consultation Committee"		
		1. "A presentation was made on the chagas problem and the necessity for participatory monitoring, before the Municipal Council"		
		2. A report on the results of activities conducted was drawn up and presented to the Social Consultation Committee.		
		2. A report on the results of activities was drawn up and presented to organizations collaborating with the municipality.		
		3. Negotiations are being carried out to receive the necessary resources as a prize for the educational competition, sprayers, refrigerators etc.		
		3. Incentives are being considered to acknowledge community collaborators.		
Heal Promotor	(1) Organizational capacity and leadership	1. The names of the important participants in the community such as the community leader, school director, church pastor or priest, store owners, can be mentioned.		
		1. Information is available on all families in the community.		
		2. Committees on health, pregnant women, adolescents etc. were organized.		
		2. A follow-up is being conducted for these organized committees.		
		3. Community meetings can be concluded with commitments of the community.		
	(2) Knowledge of the chagas disease	1. Training was received for control of the chagas disease.		
		2. The risk of sickness in the community can be explained.		
		3. An educational exchange can be conducted in the community and with school children.		
	(3) Entomological and epidemiological monitoring	1. The nymph and adult can be identified for T. dimidiata.		
		1. There is knowledge on the management of space, cleaning and the improvement of home.		
		2. Daily home visits for the handling of space, cleaning etc. can be suggested to the community.		
		2. Coordinate monitoring with healthy school activities.		

	Variable Factors	Compliance of Activities	Checking	Observation
Heal Promotor	(4) Acceptance of the community	1. The health worker will conduct periodic home visits.		
		1. Community leaders recognize the health worker (the leaders must be asked)		
		2. The population can identify the health worker (the community must be directly asked regarding its acceptance)		
		3. Try to visit reluctant families.		
Community	(1) Community leaders/volunteer collaborators	1. A community leader or collaborator is identified.		
		1. This leader or collaborator has knowledge of the chagas disease.		
		2. More than one collaborator, representing the different sectors or groups in the community.		
		3. Collaboration in the search for end reception of bugs.		
		3. Collaboration for the spraying system (ex community organization for the preparation of homes)		
	(2) Community organizations	1. There is at least one community organization.		
		2. The population will collaborate with this community organization.		
		3. This organization is participating in the detection of bugs or other disease control activities.		
	(3) Intersectoral support	1.The community organization has identified institutions which can collaborate in the chagas disease.		
		2. The community organization has knowledge of request management procedures.		
		3. The organization is conducting its own management to control the chagas disease, such as house improvement, insecticide spraying, the management of spaces in houses etc.		
	(4) Internal community relations	1. Notice regarding the search for bugs with the community through efficient means which will reach all persons, such as notices posted in stores and or "perifoneo".		
		2. Gender is considered in the selection of volunteer collaborators.		
		3. All families belong to a community organization.		

Checklist for ETV's Chagas Disease Surveillance Capacity

Name of SIBASI: Date:

Human Resources of ETV:

	Activities	Progress	Number of Staff Participated
Entomological Surveillance	1. All the ETV members know the hiding places of Triatominae in a house.		
	2. All the ETV members have participated conventional (improved) entomological survey or entomological evaluation at least one time.		
	2. Entomologists are able to distinguish hematophagous, carnivorous, phytophagous Triatominae.		
	3. There are members in ETV, who can teach health volunteers and/or community leaders the way to find Triatominae.		
	4. There is a manual and digital vector baseline data in ETV.		
	4. ETV shares the results of entomological survey with local health units.		
Insecticide Spraying	1. All the ETV members are able to explain the difference between the spraying method of malaria and Chagas disease.		
	1. Insecticide sparymen are able to clean up Hudson type suction pump.		
	1. Spraymen are able to mix residual insecticide.		
	2. ETV is planning and conducting insecticide spraying with local health units, and inform spraying schedule to communities in order to promote IEC activities for communities.		
	3. ETV coordinator participates in insecticide spraying doing supervising and spraying.		
	3. There are members in ETV, who can teach health volunteers and/or community leaders the way to spray insecticide.		
	4. ETV shares the results of insecticide spraying with local health units.		
	4. ETV shares the information concerning the progress of insecticide spraying with local health promoters, particularly the information of the date of spraying, houses sprayed and households who were reluctant to be sprayed.		
	5. ETV plans insecticide spraying specifying houses to be sprayed base on the data about the findings of Triatominae.		
Maintenance of Equipment	1. In ETV, there is at lease one member who is able to check up and repair Hudson type suction pumps.		
	1. Insecticide spraymen are able to disassemble and assemble pumps.		
	2. ETV regularly check up pumps under utilization and/or pumps lent to local health units or to other organizations.		
Information Management	1. In a ETV office, there is a department level risk map indicates baseline infestation data.		
	2. In a ETV office, there is a department level risk map indicates the progress of insecticide spraying.		
	2. ETV keep records about Triatominae found and reported after spraying.		
	2. ETV regularly submit reports to the regional health office.		
	3. ETV regularly update risk maps.		
	3. ETV keeps department level surveillance maps indicating bugs found after spraying, findings of acute cases, etc.		
Planning	3. ETV makes annual action plan in collaboration with local heal units.		

Annex 11: Evaluation Grid

Final Evaluation of the Chagas Disease Control Project in El Salvador

*) Evaluation criteria: to judge on the advances of the activities and the results comparing it to the operation plan of the Project (AAA: Finished, AA: More advanced than what it was planned initially, A: According to what it was planned, B: Delayed, C: Very Delayed and is affecting the Project, D: Has not begin NA: Not clear impossible to evaluate)

Result	Activities	Information Source
Output 1: The absence of R. Prolixus is confirmed in the areas of 5 SIBASIs of 3 departments	1.1 Carry out the entomologic survey of *R.p.*	Report of advances of the Project, documents and data elaborated by the Project and survey
	1.2 Carry out the serologic survey in endemic areas of *R.p.*	The same
	1.3 Carry out the first spraying cycle to 100% of the houses in the places where there is a positive existence of *R.p* and a second cycle to the places where it keeps being positive.	The same
	1.4 Evaluate the results of the intervention through a serologic and entomologic survey.	The same
	1.5 Negotiate for the support of the municipal government, NGO's and other institutions for the improvement of the houses.	The same
Output 2: T. dimidiata is reduced in the areas of 5 SIBASIs of 3 departments	2.1 Carry out the entomologic survey of *T.d.*	The same
	2.2 Carry out the seroprevalance survey of *T.d.*	The same
	2.3 In the places that are positive for *T.d*, carry-out one or two cycles of spraying according to the infestation rate.	The same
	2.4 Evaluate the results of the intervention through a serologic and entomologic survey.	The same
	2.5 Negotiate for the support of the municipal government, NGO's and other institutions for the improvement of the houses.	The same
Output 3: Entomological Surveillance Systems with social participation are established.	3.1 Elaborate and produce materials to promote the control of Chagas Disease.	The same
	3.2 Carry out promotion for the control of Chagas Disease throughout the health units, schools and voluntary collaborators.	The same
	3.3 Establish a surveillance system of vectors in every municipality with participation of the community.	The same
Outpu 4: An Information System is established for the project director between SIBASIs and MSPAS central.	4.1 Identify the required information at different levels for the control of Chagas Disease.	The same
	4.2 Elaborate and produce the formats of data required at different levels.	The same
	4.3 Elaborate an information system in a departmental and central level.	The same

Item	Result	Indicators (information and necessary data)	Method to obtain indicators
Output	Output 1: The absence of R. Prolixus is confirmed in the areas of 5 SIBASIs of 3 departments	Infestation Index	Entomological survey in SIBASIs. Project's progress reports, project documents, interviews and site visits.
	Output 2: T. dimidiata is reduced in the areas of 5 SIBASIs of 3 departments	Infestation Index (less than 5%)	Entomological survey and surveillance reports in SIBASIs. Project's progress reports, project documents, interviews and site visits.
	Output 3: Entomological Surveillance Systems with social participation are established.	Number of surveillance system established. (The evaluation of the surveillance system will be carried out separately)	Reports of SIBASIs. Project's progress reports, project documents, interviews and site visits.
	Output 4: An Information System is established for the project director between SIBASIs and MSPAS central.	(1) Information necessary in attack phase (dispersion index and infestation index in house) is accumulated and utilized. (2) Data of infestation index in house, seroprevalence of infant (less than 5 years) and surveillance system is accumulated and shared in SIBASIs and MSPAS central.	Reports of SIBASIs. Project's progress reports, project documents, interviews and site visits.

Item	Evaluation		Necessary Data	Information Source	Method for recollecting data
	General Evaluation	Detail Evaluation			
Result Verification	The input of the Project have been given according to the plan?	The contribution from the Japanese part has been adequate?	Data of invested inputs	Report on the advances of the Project, documents and data made by the Project and other reports.	Data Check up
		The contribution from the Salvadorian side has been adequate?	The same	The same	Data Check up
Verification of the implementation process	The plans have been executed according to what it was planned?	Has there been problems in the advances of the Project? In the case of problems , what were the problems?	Data comparison between the original chronogram and the advance result.	The same	Data Check up
	The method of transferring technology has been appropriate?	In case of being problems, which method has been problematic and in which field has there been problems? Is there a way to solve the problems?	Existence and absence of delays in transferring technology. Level of learning and understanding of C/P.	Report on the advances of the Project, documents and data made by the Project, Interview and other reports.	Interview
	The system of managing the Project has been appropriate?	Has a monitor mechanism been established? Is the decision making process an appropriate one?	Method and frequency of monitoring. Decision making process.	The same	Data Check up
		Has there been a good communication between the parts involved?	Communication opportunity and problem solutions.	The same	Interview
		Has there been a good communication between JICA Tokyo and JICA El Salvador?	Current state of communication and collaboration	The same	Interview
		Has there been a good communication with the Salvadorian side?	Current state of communication and collaboration.	The same	Interview
	The executing organization and C/P acknowledge the importance of the Project?	MSPAS and the regional health office has worked by its own initiative?	Budget disposition, communication and collaboration.	The same	Interview
		The municipal offices involved have worked by its own initiative?	Assignment of C/P and the continuity of the first stage.	The same	Interview
	The groups that were benefited and the organization related have been actively involved in the Project? Have you recognize the importance of the Project?	Participation and the will of the people involved.	Participation and the will of the people involved.	The same	Interview
	¿Have problems emerge in the process of the execution of the Project? What are the causes?		Problems and causes in the execution process.	The same	Interview

5 Evaluation points	Evaluation		Necessary Data	Source of Information	Methods of Data Recollection
	General Evaluation	Detailed Evaluation			
Relevance	The effect that the projects pretend to generate agrees with the politics of the Salvadorian government?	Relation between the Chagas Disease control and the national development plan of El Salvador.	Relation with the national politic	National Strategic Plan for Chagas Disease Control (in preparation)	Data Check up
	Agrees with the cooperation policy of the Japanese government?	The Project is related with the proprietary areas of cooperation of the Japanese government?	Japan's primary cooperation areas for El Salvador.	ODA policy for El Salvador from the government of Japan (MOFA-Foreign Relation Secretary) .	Data Check up
		It agrees with the cooperation plan for El Salvador from JICA?	It agrees with the cooperation plan for El Salvador from JICA?	JICA's cooperation plan for El Salvador.	Data Check up
	Agrees with the needs of the area of the Project and the society?	Agrees with the need for Chaga disease control of the area of the Project?	Needs and priorities of Chagas disease control. Opinion of people involved.	Related information. MSPAS, regional health office, C/P, experts and JOCV voluntary.	Data Check up Interview
	Has the method of the Project been adequate? Ha Has the grasp of the Project been appropriate?)	Ha Has the grasp of the Project been appropriate? The established methods and the experience gained through the Project in Guatemala have been taken advantage properly?	Opinion of people involved.	MSPAS, regional health office C/P, experts and JOCV volunteers.	Interview
		Have you collaborate and coordinate adequately with other sponsors and other projects of JICA?	State, result and effect of the collaboration and coordination. Opinión of related people	Related information. MSPAS, regional health office, experts and JOCV volunteers, PAHO and NGOs.	Interview

5 evaluation points	Evaluation		Necessary Data	Sauce of the Information	Method for gathering data
	General evaluation	Detailed Evaluation			
Effectiveness	Has accomplished the Outputs?		(According to the evaluation chart)	(According to the evaluation chart)	Data Check up
	Level of accomplishment of the Project Purpose: Transmission of Chagas disease by vectors is decreased in 3 selected departments	Index of infestation of *Triatoma dimidiate (Td)* will be less than 5%.	Infestation Index	SIBASIs' reports	Data Check up Interview
	The results of the Project have contributed to accomplish the objective of the project?	The results of the Project adequate to accomplish the objective of the project? The concept of "if all the results are accomplish, the objective of the Project can be accomplish" has been right?	Opinion of people involved.	MSPAS, regional health office, C/P and experts.	Interview
	Have favorable or unfavorable factors existed for the accomplishment of the objective of the Project?	The change or abandonment of the C/P post affected the Project?	Rate of post abandonment, cause of abandonment and number of C/P. Opinion of people involved.	Project's reports MSPAS, regional health office, C/P, experts and JOCVs	Data Check up Interview
		Have you had other problems?	Opinion of people involved	Project's progress reports MSPAS, regional health office, C/P, experts and JOCV volunteer	Data Check up Interview

5 evaluation points	Evaluation		Necessary Data	Source of Information	Method of Gathering Data
	General Evaluation	Detailed Evaluation			
	Have the results produce been adapt? (verification of the results)				
Efficiency	Have the quality, volume and the chronogram of input investment been adapt, from the point of view of the results reached?	Have the number of experts fit to the field of their specialty, capability, period and time they were sent?	Dispatch Result. Opinion of people involved.	Documents and data of the Project. C/P, experts and JOCV volunteer.	Data Check up Interview
		Have the type, amount and time of the installation of the equipment given been the appropriate?		Have the type, amount and time of the installation of the equipment given been the appropriate?	Data Check up Interview
		Have been the number of people trained, the content of the trainings, period and time of the training adequate?	Training Result. Opinion of people involved.	Result of people trained. C/P, experts and JOCV volunteer.	Data Check up Interview.
		Have the number of C/P, assignation period and capability of the C/P adapt?	C/P Assign. Opinion of people involved.	List of C/P assigned. C/P, experts and JOCV experts.	Data Check up Interview
		Have the quality, size and buildings facilities and or installations been adequate?	How the buildings and or installations are. Opinion of people involved.	How the buildings and or installations are. C/P, experts and JOCV experts.	Direct observation Interview
		Has the budget of the Salvadorian side been adequate?	Budget executed by the Salvadorian side Opinion of people involved.	Data of covered costs by the Salvadorian side. MSPAS, regional health office, C/P and experts.	Data Check up Interview
	Has the management of the Project been the adequate?	Has the Joint Coordination Committee worked adequately?	Opinion of people involved.	Report on the advances of the Project and other data. MSPAS, regional health office, C/P and experts.	Data Check up Interview
		Has the periodic meeting worked appropriately?	Opinion of people involved.	MSPAS, regional health office, C/P, experts and JOCV volunteer.	Interview
		Is there initiative from the Salvadorian side?	Opinion of people involved.	MSPAS, regional health office, C/P, experts and JOCV volunteer.	Interview
	Are there factors that promote and/or avoid the efficiency of the Project?	What effect has the collaboration with JOCV given from an efficiency point of view? Have there been problems working with volunteers?	Opinion of people involved.	MSPAS, regional health office, C/P, experts and JOCV volunteer.	Interview
		What influence have the qualitative change occurred in the project for Chagas disease control for the decentralization? What are the problems? What should be done?	Opinion of people involved.	MSPAS, regional health office, C/P, experts and JOCV volunteer.	Interview
		Other positive and negative factors.	Opinion of people involved.	MSPAS, regional health office, C/P, experts and JOCV volunteer.	Interview

5 evaluation points	Evaluation		Necessary Data	Source of information	Method for data recollection
	General evaluation	Detail Evaluation			
Impact	Can the Overal Goals be accomplished? Overall Goals: 1. Transmission of Chagas disease will be interrupted in Central America by 2010 2. Transmission of Chagas disease will be interrupted in El Salvador by 2010.	Evolvement of the number of patient detected through the serologic survey and inter-home infestation index (for the certification of the interruption of Chagas disease by PAHO/WHO).	Result of the serologic survey.	Report of the serologic survey	Interview
		There are factors that prevent the reach of the higher objective?	Information of people involved.	MSPAS, regional health office, C/P, experts and JOCV volunteer.	Interview
	The presumptions of the Overall Goals and the Project Purpose have not received changes? Can you hold the presumptions?		Information of people involved	MSPAS, regional health office, C/P, experts and JOCV volunteer.	Interview
	Are there other conjugated effects?	Information of people involved	Information of people involved	MSPAS, regional health office, C/P, experts and volunteers	Interview

5 evaluation points	Evaluation		Necessary Data	Source of Information	Method for gathering data
	General evaluation	Detail Evaluation			
Sustainability	Priority and policy of MSPAS on the Project. MSPAS is going to keep supporting the activities of the Project?		Opinion of people related	MSPAS.	Interview
	The institutions related with the Project (including MSPAS) have the capability to continue with the activities?	MSPAS and the organizations involved have the organizational capacity (personal assignation and process of decision making) to carry out activities in an effective way alter the Project ends?	Assignment and permanence of the staff. Opinion of people related.	Personal assignment. MSPAS, regional health office, C/P, experts and JOCV volunteer.	Revision of data Interview
		Has the initiative of the executing organizations (including MSPAS) been assured to continue the activities?	Opinion of people related.	MSPAS, regional health office, C/P, experts and JOCV volunteer.	Interview
		Has the budget been assured including gastos corrientes? Is the Salvadorian government assigning the budget?	Financial status of every organization. Opinion of people related.	Registration of budget execution. MSPAS, regional health office, C/P, experts and JOCV volunteer.	Data Check up Interview
		The Salvadorian government may assure the budget to make the same activities in other departments?	Opinion of people related.	MSPAS, regional health office, C/P, experts and JOCV volunteer.	Interview
	Is the transferred technology going to be establish?	The C/P staff has enough capability to carry out activities related with the Chagas Disease control?	Opinion of people related.	MSPAS, regional health office, C/P, experts and JOCV volunteer.	Interview
		The C/P staff is capable enough to transfer the acquired techniques to the technicians of Chagas control in other Departments?	Opinion of people related.	MSPAS, regional health office, C/P, experts and JOCV volunteer.	Interview
		Can the equipment and materials be adequately maintained?	Opinion of people related.	C/P, experts and JOCV volunteer.	Interview
	Which are the positive and negative factors that affect the sustainability?		Opinion of people related.	MSPAS, regional health office, C/P, experts and JOCV volunteer.	Interview

Annex 12: Interviewees List

Ministry of Public Health and Social Assistance (MSPAS)

José Guillermo Maza	Minister
José Ernesto Navarro	Vice Minister
Mario Serpas	Director of Health Surveillance
Héctor Ramos	In charge of Chagas Disease Control Program
Eduardo Romero	Entomologist, Chagas Disease Control Program
Sandra de Marroquín	Director, Occidental Region
Carmen Paspari	Educator, Occidental Region
Oscar Melvin Sanabria	Chief, Vector Unit, Occidental Regional Health Office
Efraín Campos	Educator, SIBASI Santa Ana
Carolina de Morán	Director, Health Unit El Porvenir, SIBASI Santa Ana
Manuel Roque	Environmental Health Inspector, Health Unit El Porvenir, SIBASI Santa Ana
Edgar Tejada	Health Promoter, Santa Rosa Senca Canton, SIBASI Santa Ana
Jucio Orruela	Health Promoter, No. 2 San Cristóbal Canton, SIBASI Santa Ana
María Elena Salas	Health Promoter, San Juan Chiquito Canton, SIBASI Santa Ana
José Ricardo Aguirre	Health Promoter, No. 1 San Cristóbal Canton, SIBASI Santa Ana
Alejandro Jaco Martínez	Chief, Vector Unit, SIBASI Santa Ana
Yuri Sandoval	Promoter Inspector, Vector Unit, SIBASI Santa Ana
Evelio Cartagena	Laboratory staff, Vector Unit, SIBASI Santa Ana
Marvin Grijalva	Chief, Vector Unit, SIBASI Ahuachapán
Betty Carolina Guillén	Educator, SIBASI Ahuachapán
Tomoko Murayama	JOCV, SIBASI Ahuachapán
Blanca Cuyuch Marroquín	Director, Health Unit Guaymango, SIBASI Ahuachapán
José Escalante	Health Promoter, Health Unit Guaymango, SIBASI Ahuachapán
Stanley Rodríguez	Environmental Health Inspector, Health Unit Atiquizaya, SIBASI Ahuachapán
Erasmo Castillo	Community Health Supervisor, Health Unit Atiquizaya, SIBASI Ahuachapán
Sandra Flores	Educator, Health Unit Atiquizaya, SIBASI Ahuachapán
Gonzalo Berrios Framenco	Chagas Inspector, Vector Unit, SIBASI Ahuachapán
Víctor Manuel Ramos	Chief, Vector Unit, SIBASI Sonsonate
Fidel Alvarenga	Field Chief, Vector Unit, SIBASI Sonsonate
Roberto Lémus	Entomologist, Vector Unit, SIBASI Sonsonate
Marlon Valladares	Statistics, Vector Unit, SIBASI Sonsonate
Edith Corado	Epidemiologist, SIBASI Sonsonate
José Pacheco	Promoter Supervisor, SIBASI Sonsonate

Ministry of Foreign Relations (MIREX)

Yanira de Cruz	Technical Staff, External Cooperation Bureau
Yukiko Haneda	Advisor, External Cooperation Bureau

PAHO/WHO El Salvador

Priscilla Rivas-Loría	Representative

Japanese Embassy in El Salvador

Akio Hosono	Ambassador
Goshi Tukamoto	Second Secretary

JICA El Salvador Office

Yoshitaka Misawa	Resident Representative
Satoshi Kimura	Sub Director
Yukinari Hosokawa	Deputy Resident Representative
María Alvarado de Rivera	Program Coordinator
Atsuhiko Nakano	JOCV Coordinator
Kyoko Ota	Chagas Disease Control Program Coordinator