

PRO-MESAS Honduras
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Canadian Cooperation Office
802, Av. de la Coruna
Colonia Matamoros
Tegucigalpa, Honduras

Subject: Control and prevention of Chagas disease among Lenca population contribution agreement
CA-M-014-2003 HON302/022

April 18th, 2006

Dear Camille Pomerleau,

On behalf of IDRC, I am pleased to enclose the final report on the implementation of the above mentioned project (IDRC file 102058). Overall, as one can see in the attached documents, relevant research outputs and outcomes were very promising, in spite of several challenges the project has faced. The enclosed report and annexes present an overall view of this experience. Comments and follow up acknowledgements from PRO-MESAS are welcome to be included in other activities of this file.

There are a few topics that I would like to highlight for your attention, mostly related to project sustainability, to assure that Chagas transmission is prevented through vector control, in the study area.

1. One relevant outcome that will facilitate long term Chagas control activities is the current knowledge about Chagas disease that the Lenca people have acquired as a result of the project. Vector surveillance activities have been particularly key for this knowledge dissemination.
2. The final report presents a long list of project outputs (video, journal article, magazine articles etc-see annex 7. A project inventory of these materials is under our attention. Correspondence has been exchanged with recipients to ensure we have the complete set of outputs from this project. World Vision has also implemented a project evaluation workshop. Respective outputs have been requested from WV, and will be part of the project inventory.
3. Piretroide fumigation has been used to eliminate the Chagas *Rhodnius* vector species, based on the efficiency of this procedure for this particular vector species. However, the project reports do acknowledge the continued occurrence of *Triatoma dimidiata* vector in the study area. Differently from *Rhodnius*, *T. dimidiata* is considered a difficult vector species to control with fumigation, due to the high probability of re-infestation if housing conditions are not changed accordingly, as indicated by project outputs of the Chagas Guatemala Ecohealth project (see annex 9). **It is recommended that peri-domiciliary management to eliminate the *T.dimidiata* vector species be followed up by the National Chagas Program in Honduras.** This follow up is very important for the sustainability of the projects` results.

4. World Vision external funds for reconstruction of around 387 houses have been key for the vector control sustainability. However, the final technical report stated that some houses were built without a kitchen, and for that reason, people have kept the old houses for cooking purposes, therefore threatening the vector control measures. Cultural aspects, including gender attention, of housing construction must be considered through community participation activities, so that community engagement in these activities will enhance the target outcomes.

5. From the technical report, we learned that after treatment, a serological survey to confirm treatment efficiency is recommended. It is our expectation that the National Chagas Program will be in charge of implementing the post- treatment serology survey to confirm the efficiency of all Chagas treated cases.

We suggest that Pro-Mesas endorses the dates for this procedure through an agreement protocol with the National Chagas Program.

6. We are pleased to keep working with WV team on the learning systematization sub component of this project. Funds and time have been allocated for that purpose.

7. Finally, given the long term demand for policy impact, and short term project duration, it is possible that **many of these vector control accomplishments may need further attention from the municipal government and communities leaders.**

With best regards,

Ana Boischio, PhD
Ecohealth Program Initiative

Cc: UNDP- Claudia Martinez
Pro-Mesas – José Ruben Gomez, LTA Health Sector

Final Report

**Review of Progress in Project Implementation
During the Second Year**

Control and prevention of Chagas disease among Lenca population

Contribution Agreement CA-M-014-2003 HON302/022

**by Ana Boischio, with the collaboration of Philippa Wiens,
on behalf of IDRC (Ecohealth, RPE, Honduras)**

March 2006

Documents included as annexes:

- 1. Operational August Report**
- 2. Technical August Report**
- 3. Integration of August Report**
- 4. Final Operational Report**
- 5. Final Technical Report**
- 6. Final Integrated Report**
- 7. Summary of project outputs & outcomes**
- 8. Minutes of OCC visit**
- 9. Proceedings of Antigua workshop**

Synthesis review of project implementation in second year

1. Administrative background

The project proposal was originally submitted to the Ecohealth Regional Funds call for Central America and Caribbean (CAC). It was not selected as one of the two proposals that were funded through this call, but was recommended nonetheless by the steering committee for future consideration. The IDRC-CIDA Honduras project, through PRO-MESAS, demonstrated interest to further develop it. It was eventually approved with financial and technical support from UNDP and CIDA, and under the technical responsibility of the Ecohealth PI and the IDRC Honduras Program. Ana Boischio is the main responsible PO for IDRC for this project. World Vision (WV) was the recipient institution. UNAH (faculty of biomedical sciences) was the collaborating institution. The total budget was CAD\$467,800, with a 24-month duration. Project commencement was February 2004.

2. Major project accomplishments

The project has been implemented under two major components, referred to as ‘operations’ and ‘research’. The former sub team includes mostly WV staff, whereas the latter includes UNAH professors. This distribution seemed well accepted by CIDA, WV, and UNAH.

WV for this particular project had excellent and committed field workers that were very knowledgeable on the Chagas disease and vector dynamics, and very experienced in community mobilization. They had managed to engage local municipal authorities, school teachers, school students, and local indigenous LENCA groups; they had managed to explain and get people to understand the disease, its implications, and treatment needs. Community vector monitoring systems were in place and appear to be working.

Serological testing for Chagas disease was undertaken for children aged 6 months to 15 years old (3993 girls and boys) in the 40 communities targeted by the project. Of the 396 children who tested positive for Chagas disease, 394 were treated. Two cases of identified seropositive children without treatment refer to a deceased boy and a pregnant girl, who will be searched for treatment after the breastfeeding period, according to the team. Among 394 children under treatment, health adverse effects were found in 67 children, who have been under treatment for these side effects as well. There were 23 cases of treatment drop out, from which 22 were recovered. One boy of 14 years old had moved and was still under search for treatment completion.

All 40 targeted communities were fumigated for the elimination of the *Rhodnius prolixus* Chagas vector, which is the main Chagas vector in the area. (The less common Chagas vector, *Triatoma dimidiata*, is not eliminated through fumigation, but must be controlled through adequate peri-domiciliary management.)

The collective treatment of children involving community participation of parents, teachers, community leaders and the municipal authorities has been reported as the first of its kind in Honduras. This model of collective treatment of Chagas disease is significantly less costly than the traditional model of the exclusive patient-doctor relationship. The best practices of this model will be captured through the systematization activity of project activities that will be funded by IDRC and which will be undertaken between April and July of 2006. The model will be presented to the National Chagas Program for replication elsewhere in Honduras.

At the level of policy makers, the National Chagas Control Program is very interested in the success of the project in engaging the community and municipal authorities, and the lessons that can be

drawn from this and from the implementation of a large-scale treatment program for under 15-year olds .

The interest of the National Chagas Control Program is such that (paradoxically) we had a situation where Dr. Carlos Ponce, a senior Chagas researcher of international recognition, and a key player within the Health Ministry for the promotion of the National Chagas Program (a type of stakeholder who in other projects of this nature we seek to influence as a key expected outcome, rigours research and good results) has in this case agreed to mediate the friction between WV and UNAH, under the charge of providing an integration of these two project components (operational and research). This interest and involvement of a key national player in Chagas disease in Honduras has been important, and will provide a channel through which to maximize the extent to which the lessons learned from this experienced of treating Chagas and the model developed thereof are applied to other contexts in Honduras where Chagas continues to be a significant problem.

The project has been very successful in involving major stakeholders working on Chagas disease in Honduras, and in making course adjustments to the project to take advantage of offers from these stakeholders to support the project's work on eradicating Chagas disease. Key examples include the partnership with JICA to carry out fumigation activities in all the communities of San Francisco de Opalaca and six other communities in the area, and a partnership with FUNDEVI for the construction of new houses in these communities. These activities developed as the project unfolded and partnerships were developed with different stakeholders.

3. Project outputs/ outcomes comments

From the approved project, planned interventions and research results utilization were oriented to accomplish the following planed outputs/ outcomes:

- a. Participatory activities to control Chagas transmission;**
- b. Treatment of sero-positive children;**
- c. Research component**
- d. Other project accomplishments and challenges**
- e. Project results dissemination**

a. Participatory activities to control Chagas transmission

The general structure for participatory approaches involves the strengthening of actions and research implementation with local communities. In this project, participants included community leaders, parents of school children, school children, teachers, health volunteers, municipal authorities, and local members of the local research (CLIA—Comité Local de Investigacion-Accion) committees. Parents have also been trained to assist in the logistical requirements for the treatment of children found positive for Chagas disease.

In the first year of the project, attention was paid to the development of local committees for community participation in activities for entomological surveillance and fumigation, among other activities related to information regarding Chagas disease transmission, treatment and control. In the second year, more attention was given to peri-domiciliary management by residents assisted by these community committees.

Peri-domiciliary environment includes several ecological niches related to the vector occurrence, such as firewood, livestock, construction material, garden, fruits, etc. Special attention to the occurrence and ecology of *Triatoma dimidiata* is required. Management of these resources, including labour and infrastructure (such as solid waste removals), have been planned and

implemented by residents assisted by these committees. Gender spatial analysis results have indicated that women are in charge of the household, garden, and plants, whereas men are in charge of agriculture and game. As reported, each household has been visited by the community vector surveillance committees, and labelled accordingly for further follow up.

On the policy impact, the involvement of the municipality staff has been in assisting the implementation of the allocation of peri-domiciliary management (of five meters around the house) under the residents' responsibilities. There is the perspective of extending this peri-domiciliary area to 15 meters around the household to increase the coverage of these management activities, based on its relevance and efficiency for vector control.

It is interesting to note that policy enforcement has been implemented as agreed by these vector surveillance committees with norms, evaluations and fines, in the case of violations. Vector surveillance and knowledge dissemination by other community members has been implemented through informal conversations at households and community meetings.

Housing renovations

The type of house, especially rural houses with palm roofs, is an important factor strongly related to vector occurrence and control. It is fortunate that WV, in partnership with the national foundation for housing (Fundevi), has carried out housing renovations with parallel resources for this project. WV reports a total of 387 constructed houses and 13 renovated houses. The research report does mention the fact that these housing renovations need further attention. Accordingly, new houses were built without the kitchen, an essential component of the Lenca culture, especially for women; and old houses were not destroyed, so that people were still using the old kitchens, which could still work as vector niches, thus affecting the project vector control efforts. **This is an issue that deserves further attention.**

b. Treatment of sero positive children

A total of 396 children ranging from 6 months to 15 years old were found sero positive for Chagas disease. A total of 394 were submitted to treatment. Initially, two cases were excluded (one death and one pregnancy). In a second treatment stage, out of 23 children who had abandoned the treatment, 22 were found and re-scheduled for treatment; the child not re-scheduled for treatment had moved and he was under search by the operational team, according to their report. Side effects of 67 children (17%) have been under treatment and documentation. Two severe cases were referred to further clinical attention. Also, clinical evaluation previous to treatment found anemia in 22% of the 394 cases, and provided food supplements under medical attention.

This massive treatment in a rural setting has required a high degree of management, to overcome several challenges. Dispersed localization of children, including some living in more remote areas; attention to side effects severity and follow up; medicine intake according to body weights, especially in the case of more than one child subjected to treatment in the same household; nutritional conditions of children before, during and after treatment, rescue of treatment abandonment, and other factors had been under attention. A team of five doctors (Cubans and Honduran) involved with international cooperation were engaged in the treatment. Medical recommendations were explicit in the report, yet under unclear responsibilities. Generic recommendations, such as surveillance of new positive cases followed by treatment with nutritional attention, was made in the report (Annex 1). **It is strongly recommended to follow up with the project team regarding responsibilities for the post-treatment serology survey, so as to confirm treatment results and/or respective required measures.**

It is interesting to observe that treatment of sero positive children has promoted relevant awareness of Chagas disease in the community. Yet, the fact that adult Chagas morbidity was not

targeted has been reported as creating a negative and frustrated attitude among people. As mentioned in section 5d, treatment of pregnant women and adults are planned to be under attention by the national Chagas program, in the future.

It is unfortunate, as mentioned to the team, that the report does not reflect the challenges faced by the treatment implementation. Treatment delay (as mentioned by one municipality staff – see section 5d) was not acknowledged in the report. Age borderline children left without treatment is uncovered. The relevance of this mass treatment experiences will be subjected to a learning systematization activity, through a sub component project, as recently (March 2006) granted by IDRC. **It is recommended that the systematization cover also the challenges of this mass treatment experience.**

c. Research component

Research results indicate that Lenca people did not have an explicit and direct knowledge and reference for Chagas disease, which is rather considered an external element of their lives. But local curandeiros do treat several symptoms (fever, taquicardia etc) that are potentially associated with Chagas disease. Also relevant as an outcome of the project is the perception and understanding of Chagas transmission with the vector bite, with awareness of vector surveillance. **Thus, a major outcome of these participatory activities has been dissemination of knowledge about Chagas disease transmission among Lenca community members.** More than that, the engagement of community committees on peri-domiciliary settings with policy support, is key for the outcome sustainability.

Knowledge and understanding of the Lenca framework of “El Comun” had previously been considered to be combined with Chagas disease control actions and research. A major contribution of this knowledge has been the inclusion of traditional elderly people in the proposed round table (previous mesa ecosistémica) composed by municipality staff and community members.

Environmental research results had indicated risk factors associated with Chagas vector ecology, with special attention to human settings. Temperature, altitude and rain pattern, combined with biodiversity in the degraded nearby forests, in the agriculture fields, livestock settings, peri-domiciliary and domiciliary, have been considered. The report observed how closely the Lenca community can co-habit with the local biodiversity, including domesticated, domiciliated and wild life biota. Awareness regarding health risks of this local biota might help to control Chagas transmission.

Major attention must be given to the fact that *Triatoma dimidiata* has been found in these communities. Vector ecology of this species indicates its high potential to reach ecological niches very common in poor rural settings. **Control of *T. dimidiata* requires major peri-domiciliary management, given its high occurrence of re-infestation after fumigation, as has been indicated by the Ecohealth Chagas project in Guatemala (see annex 9).**

The project has indicated that households piretroide application to eliminate *Rhodnius prolixus* (major vector in the study area) has been successful, but *T. dimidiata* (a secondary vector, more resistance to disappear with piretroide) has been found by the entomological surveillance. Major attention is required for the occurrence of *T. dimidiata* in the area.

Research outputs indicated that most of sero positive identified children were those living in agriculture settings. Major crops are corn, beans and coffee, mostly for subsistence purpose, and less for local commercial. Livestock production, also associated with the vector ecology, includes more often chickens and pork and less often, cattle and sheep.

d. Other project accomplishments and challenges

Project design and outputs have been developed in the context of the PRO-MESAS Program, in

close collaboration with the National Chagas Program. This institutional context has been considered an opportunity to move the Chagas agenda forward, with research outputs in place for desired Chagas control outcomes.

Knowledge about Chagas disease vector transmission, and participatory activities on vector control and prevention, have been the major project outputs and outcomes. Local municipality support for the peri-domiciliary management may provide sustainability for the vector control in the project area.

A project evaluation activity was conducted by WV recently (Jan 31st-Feb 3th), with the purpose of sharing reflections about the project implementation. Invitation was received, not in time for attendance, and evaluation outputs have been requested to WV.

The Ecohealth approach methodological pillars have been under attention by project members. Yet the integration of multi disciplinarity within the research component and with the operational component (i.e., transdisciplinarity) has been a major challenge at different levels.

The multi stakeholder participatory activities were under major attention by the operational project component. As previously mentioned, knowledge and actions have been put in place for Chagas vector control.

Equity issues, especially gender analysis for agriculture and domestic activities has only been partially targeted. Although not many women have been participating in the CLIAs, at least a few women attended the Esquipulas workshop in Feb 2005.

e. Project educational material and results dissemination

Educational material

The following items has been requested to WV to be included in our files: training material (→tafolios"); community fumigation manual; video on Chagas control and prevention;

We have in our files: folders on vector control used in training and workshops with school children and community members; Worldvision Autumn 2005 magazine, with an article about this project.

Results dissemination

National Chagas Program, July 2005 at San Pedro Sula, to share the experiences of community participation for the vector surveillance;

American Trypanosomiasis Update, August 2005 at Tegucigalpa, to share the experiences of clinical evaluation and treatment application for sero-positive children.

Regional funds workshop, February 2006 at Antigua, Guatemala, to share the experiences related to the accomplishments and challenges of the ecohealth approach to vector borne diseases transmission control and prevention. See the following section.

4. Antigua workshop in February+ 2006: The ecohealth approach to control and prevent vector borne diseases transmission in Central America and Caribbean.

A final workshop among all teams supported under the Regional funds activities has been held for the CAC teams on vector borne diseases. The objectives of this workshop were to share ecohealth methodological experiences, research outputs and outcomes, and dissemination. Identification of priorities, opportunities for inter sector interventions, evaluation of gender analysis advances, and several other issues. Workshop participants were researchers and decision makers from the following

project teams: Chagas in Honduras; Chagas in Guatemala; Dengue in Cotorro, Cuba; Dengue in Centro Habana, Cuba; Dengue and diarrhoea in Guatemala; Dengue in Mexico. In the context of the Regional funds call, several other donor agencies were represented: PAHO (Jose Luis San Martin and Zaida Yadon); UNDP (Kakuko Nagatani); National Institute of Health, US (Ana Chepelinky). Two consultants have been participating in these events since early activities: Jorge Arias and Carmen Nora Hernandez.

The workshop themes were: integration of environmental, health and social factors on disease transmission; planned and/or implemented intervention; and the ecohealth approach to control and prevention of vector borne diseases transmission. The format of the workshop included firstly presentation of different themes by each group. The whole plenary was then divided in three groups to discuss specific questions, while resource persons would discuss the team presentations. Questions under discussion throughout the workshop were: 1. how the ecohealth approach had facilitated the understanding of disease transmission; 2. relative relevance of different risk factors; 3. achievements and challenges of transdisciplinarity; 4. how further had inter sector interventions advanced; 5. links between research results and intervention implementation. A plenary session after each group work discussion, had allowed each group to communicate their major points under discussion, and the resource persons to provide comments of their presentations, and further inputs on the questions under discussion. The venue of the workshop was very appropriate for this format. The workshop organization was very successful. Workshop proceedings including this current Chagas Honduras project contributions are presented in annex 9.

5. Project monitoring activities

a. Background

The project has been implemented under two major components, referred to as operations and research. This sub team composition had resulted in a widening division between WV & UNAH, and less contributions of research to the implementation of a vector control program. This composition of research and operation was accentuated when the original principal investigator (PI) for the project (Manuel Sierra) moved from WV to UNAH and left the position to be filled by a UNAH team collaborator (Manuel Chavez).

A major concern was the poor communication between WV, UNAH and IDRC, with WV and UNAH on repeated occasions replying to CIDA instead of the Centre; the slow pace in the progress of work by UNAH; a request from both WV & UNAH for a time extension to allow the completion of the UNAH research work, albeit their lack of a work-plan; and confusion as to the composition of the UNAH team. On this latter issue, the Centre received an e-mail from Manuel Sierra advising us that he had resigned from the project, but communications with the team leader (Manuel Chavez) indicated that this was not the case. Research team instability difficulties have been brought into our attention, and advises were given through correspondence and phone calls.

These various issues were discussed in the context of an OCC Honduras and project site visit by Andres Sanchez (IDRC Ecohealth acting team leader) and Ana Boischio (IDRC Program officer responsible for this project), during Aug 30th-Sept 2nd 05. The OCC office and Raúl Zelaya (Senior Project Officer for the IDRC Honduras Project) did an excellent job in coordinating the visit and meetings, and Raúl made important contributions in meetings to help discussion on feasible solutions.

As an example of existing tensions between WV and UNAH, each blamed the other for the shortcomings in collaboration during unilateral discussions with us (AS & AB), with UNAH claiming that WV did not want to communicate with Manuel Chavez, and that when the UNAH researchers sought transportation arrangements to go to the field, WV either had forgotten to make the

transportation available or provided UNAH with cars that were mechanically un-sound. For their part, WV insisted that the work of UNAH was lagging far behind schedule mainly due to a lack responsibility, and that they failed to prepare proper progress reports and these were always late.

Team composition has persisted as a problem, even after this monitoring visit of Aug 05. On Dec 6th, 05 a letter regarding the principal investigator's contract cancellation was sent by WV. In a phone call, the increased damage of this decision was considered, and the research team was kept as they were. WV had acknowledged that the researchers' contribution would be limited. This was again perceived as an issue by WV and UNAH, but some recommendations were provided, and the team became again stable for the project implementation.

b. Outcomes of monitoring visit (August 30th-September 2nd)

- Met with the new CIDA responsible officers for this project and agreed on lines of communication and process for monitoring progress and processing technical and financial reports;
- Reached with CIDA a common understanding of the problems facing the project;
- Agreed with UNAH and WV on the scope of the research work to the end of the project and NOT to have a time extension;
- Agreed with the IDRC-CIDA Honduras project (Raúl Z) and WV to proceed with funding the learning systematization activities planned earlier, and to focus them on the community-based monitoring systems and the treatment program for under 15 year-olds;
- Agreed with UNAH and WV on the content and schedule for submission of their respective work-plans to the end of the project;
- Agreed with CIDA, WV, UNAH and the head of the National Chagas Control Program (Dr. Ponce) as to his role in facilitating and monitoring the collaboration between WV & UNAH.

c. Summary of meetings and decisions:

Oficina Cooperación Canadiense (OCC) - Participants: World Vision - Milagro de Castro (WV National Director), José Figueroa (Resource Manager, WV), Rosibel Ramirez (Project Coordinator WV), Lombardo Ardón (Project leader and manager for WV); Plan Nacional de Chagas - Carlos Ponce (Head); CIDA - José Ruben Gomez (technical advisor), Patricia Rivera (CIDA officer); IDRC - Raúl Zelaya, Andrés Sánchez, Ana Boischio; UNAH : Manuel Chavez and Gerardo Borjas were invited to join the meeting at 11 am. Items discussed:

Team composition - Carlos Ponce would be in charge of project integration (especially trying to link _operations' with _research'), he is replacing the position of Manuel Sierra, who stepped down as principal investigator (moving from WV to UNAH) and is currently a project researcher; Manuel Chavez is now the principal investigator of the research team. As a side note, WV wanted to meet with us before UNAH so the latter were invited only after 11 AM. Manuel Sierra (said to arrive at noon, did not). Tension among UNAH researchers and WV staff, especially between WV and its former employee Manuel Sierra, were observed. Early December 05, contract cancellation matters were brought into IDRC attention. Research team instability has been an issue.

Progress reports -

In discussing the review of the annual report, IDRC requested to include a description on the status of children's treatment, which would be included in the next semester report due in August 05. In this respect, the release of the payment due was authorized only for half of the amount, pending receipt of the report. WV informed us that this report was to be submitted to the Centre the following week. Once this semester report was approved, full payment authorization would be issued. It was unfortunate that due to miscommunication problems, the August 05 report was received only early November 05, when pending payments were then released.

Children's treatment: initially a total of 396 children (between 6 months and 15-years old) diagnosed with Chagas by the project were targeted for treatment. There were two cases of sero positive diagnosis left without treatment: one child died and another girl was pregnant, which is an exclusion condition. This is a level of massive treatment that is a first for the country according to Carlos Ponce, and the national program is keen to learn from it. All meeting participants around the table agreed that the experience deserves to be well documented and learning systematized with scientific methods. For that, a new sub component to the project has been appropriated with funds and time to implement the systematization activity.

Research team - Manuel Chavez and Gerardo Borjas meeting. Manuel Chavez, principal investigator of the research component, presented a conceptual note proposing a combined model regarding the ecohealth approach and « el común », which is a Lenca tradition of sharing common resources, agricultural labour and distribution of outputs. The document is not very different from previous reports presented to the Centre, and is rather sketchy with respect to a description of a research agenda and major themes (treatment, house improvements, watershed protection, agricultural work). The set up of a round table, referred to as an *ecosystemic table*, with the purpose of engaging local policy makers, community members and other institutions was presented as an option for sustaining activities beyond the project that seek to incorporate local policy related to the prevention and control of the disease.

The need for better integration between research and the operational aspects of the project was discussed. In addition to the national program's interest on children's treatment and community-based monitoring systems, Carlos Ponce remarked on identifying the potentials of combining research work with the operational aspects of Chagas transmission. Comments and highlights regarding the opportunities to apply (or not) major conclusions of each research component have been compiled and presented by Carlos Ponce.

Researchers' contract with World Vision: the terms of reference, quality of deliverables, meeting of deadlines and other pitfalls were mentioned by World Vision, as current major problems. These were referred to as *management* issues. Lombardo Ardon (project coordinator) presented other current challenges: integration of operations with research; the entomological surveillance plan, house improvements and management, and information flow.

Sustainability - The sustainability and effectiveness of Lenca community action-research teams (CLIAs), school children vector-surveillance groups, engagement of mothers and fathers of children under treatment, in the context of the ending WV development unit (PDA) in Monte Verde (project area) were discussed. During the August monitoring visit, the research teams' response was the ecosystemic table, which was only in the early stages of being set up. The final report does include only conceptually the ideas of a multi stakeholder round table, involving municipal staff, traditional elders, researchers and CLIAs. Given the long-term demand for such policy integration, and short term project duration, it is possible that many of the accomplishments may not be sustained in spite of the important buy-in from the municipal government and communities thus far. The role of Carlos Ponce may have a positive influence on the policy environment, especially as part of the current PRO-MESAS Program, the CIDA initiative which includes this project.

Learning systematization – the IDRC-CIDA Honduras project and WV would proceed with funding the learning systematization activities which will focus on the community-based monitoring systems and the treatment program for children between 6 months and 15 year-olds. As mentioned above, an IDRC sub component project has been created with funds and time available to implement this activity.

Parallel funding on housing improvements - World Vision Canada has invested US\$ 170,000 in housing improvement support to the project's targeted communities. The national housing fund

(FUNDEVI) also provided support (unknown amount – not reported to WV) through in-kind sharing of labour costs and house construction materials. There were some challenges with this aspect of the program, such as house construction and improvements that have led in some instances to resistance by families in leaving the old house (which continues to be used as a kitchen), or the storage of items in the houses (eg. agricultural products, building materials, etc.) that favour vector hiding places and thus re-infestation. The need to pay attention to these cultural aspects beyond pesticide spraying and housing programs is clear if chances for re-infestation are to be minimized.

d. Field site visit (August 31st and Sept 1st) Monte Verde, Honduras

In the project communities informal talks were held with CLIAs representations, school children, and with the alcade (mayor), vice alcade (deputy mayor) and the mayor's adviser who were in a public meeting discussing land demarcation matters. The discussions indicated that the project has succeeded in engaging the municipal authorities, schools and community members. The municipal officials conveyed (very politely) their concern with the delay in treatment of under 15 year-olds that occurred once diagnosis had been made. This was said to be about a 9-month delay. WV and UNAH acknowledge the unfortunate delay but did not explain why it happened. IDRC expected to learn about this in the August 05 progress report, which did not happen either. As mentioned elsewhere in this report, the treatment report has no indication of this type of challenge and solutions. The local officials also expressed their concern about the non-treatment of the older youths and people. Current expectations are for adult treatment, however Carlos Ponce explained that this is a very challenging matter for the national program due to the limited resources available, the complexity of the treatment and its efficacy with older age groups. He indicated nonetheless that the next priority group that is being explored is the treatment of pregnant women in order to protect the un-born child. Community mobilization for entomological surveillance was referred to as something the local officials were ready to support.

e. Visit to UNAH

A planned meeting (by AB & AS) with the Dean of the faculty of biomedical sciences was cancelled last minute due to the Dean's over-charged agenda. Instead, a brief meeting was held with the following members of the UNAH research team: Manuel Sierra (epidemiology), Manuel Chávez Borjas (health anthropology) and Brenda Meléndez (socio-demographics). This was the first meeting with Manuel Sierra in this trip (the former project PI who led the development of the proposal and project design when working with WV). The researchers complained about the WV project administration: making difficult the arrangement of transportation for field work, manipulations during meetings, difficult dialogue (especially between Manuel Sierra and WV), etc. For these researchers WV did not provide proper administration of the research.

f. World Vision meeting - Participants: World Vision - Milagro de Castro (WV National Director), José Figueroa (Resource Manager, WV), Rosibel Ramirez (Project Coordinator WV); IDRC - Raúl Zelaya, Andrés Sánchez, Ana Boischio;

Debriefs about the field visit and meetings were provided by AS and AB to WV. WV was informed about a joint decision taken during the field trip in discussion with Carlos Ponce, Manuel Chavez and Lombardo A, of not going ahead with a possible time extension. WV staff was surprised. It was clarified that the non extension was based on the problematic relationship between institutions and the very luke-warm commitment we felt from the UNAH researchers in their efforts to bring closer together the research and operative activities. Major problems were identified, and a decision therefore made to limit the scope of the UNAH research activities to what was feasible till the end of the project. To this effect, UNAH was requested, during the morning meeting, to submit their work-plan to WV who would integrate it into the August progress report along with their own work-plan. One workplan

for each project component has been received.

We also noted to WV that the release of the second half of the payment was subject to two things: (i) a satisfactory 6-month progress report that was due in August; and (ii) re-submission of projected expenses for the second year. Pending payment was released in November, after these accomplishments.

The WV liaison person, Rosibel Ramirez, indicated that the decision not to grant the time extension would cause problems to WV because it just had re-negotiated contracts with the UNAH researchers. Our reply was that the extension had never been authorized by either IDRC or CIDA, and thus those contracts could not stand and would have to be re-worked. WV acknowledged their mistake and committed themselves to fixing it.

WV re-stated their complaints about the UNAH team, and asked IDRC to assist on helping them to ensure that the UNAH researchers met their obligations. IDRC reply was that it was WV's responsibility to handle UNAH's performance (or lack of). WV decision was to re-schedule their contracts against specified deliverables and dates, for respective payments. Milestones were also discussed (minutes of OCC meeting - Annex 1).

g. OCC meeting (Sept 2nd) - Participants: CIDA - José Ruben Gomez (technical advisor); IDRC - Raúl Zelaya, Andrés Sánchez, Ana Boischio; Regrets: UNDP - Claudia Martinez (did not attend). Debriefs were provided. A formal acknowledgement and/or approval of the first annual report presented by IDRC on July 27th was also requested to CIDA by IDRC, since no communication to this effect had been received. JRB noted that in terms of approval by CIDA and UNDP, CIDA was responsible for reviewing and accepting the technical aspects, while UNDP limited its review and acceptance to the financial aspects.