

THE JECH GALLERY

Fighting against Chagas' disease in the Guarani communities in Bolivia

(A) A Guarani house. The deteriorated Guarani housing conditions can be observed. These houses are built with materials obtained from the region, such as logs, mud, straw, or palm leaves. These materials are an appropriate habitat for *vinchucas*. They infest with *Tripanosoma cruzi*—which live on human blood or blood of warm blooded animals—and cause Chagas' disease.

(B) In the picture an expert engineer is searching for *vinchucas*. If you are looking for *vinchucas* in the house, you only need to watch the walls to find their excrement. The *vinchuca* bite during the night; during the day they live hidden in the straw or in the palm leaves of the roof or in the cracks of the walls. They can survive for two or three months without food.

(C) Sun drying adobes. They will be used to build the new houses to avoid Chagas' disease; this is the main aim of The House's Improvement Project, which is one strategy of The Chagas Control Integral Program in Bolivia. This type of building is less common in the Guarani communities.

(D) A van carrying calamines for the building of new *vinchuca* resistant houses for the indigenous Guarani communities at Kapiacuandi and Kaipipendi. The roads are very rugged and special vehicles must be used. The mountainous landscape is breathtaking because of its varied flora and wild life. Villages are isolated months at a time during the rainy season (October to January) because the access roads gets damaged with the first rains.

(E) A finished new house. In the building of these houses a roof of calamine slats substitutes for the straw or palm leaves roof. Traditional materials have been used except for straw or palm leaves. The walls and ceiling have been painted with a paint toxic for arthropods, which are responsible for the transmission of a substantial number of the diseases in developing countries, like Chagas.

This project, carried out by PAHO technicians together with the Chagas Control Integral Program in Bolivia—from the Valencian Government in Spain and Caritas Camiri in Bolivia—has raised many expectations. Its success would open the possibility of implementing it in other endemic areas.

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