



Report on the Erection of the Domes for Les Centres Gheskio

June 14 — 21, 2010

The earthquake of 12 January simultaneously destroyed some of Gheskio's critical health infrastructure and created many new patients. The fact that many of their beneficiaries are infected with HIV/AIDS and/or suffer from infectious diseases, such as resistant tuberculosis, requires that they be kept separate from other recovering patients.

Gheskio requested that the Unibank Foundation assist them in finding good quality temporary



Fig. 2. Crew Training, Day -1.

shelters for these post-operative patients, for medical supplies storage, for training and for medical personnel resting stations.

Through the good offices of the Meridian Foundation (www.meridianfoundation.org), geodesic domes were selected and sourced from Pacific Domes (www.pacificdomes.com). These structures provide a lot of useable space, are relatively inexpensive, last for about ten years



Fig. 1. Site Preparation.

under normal circumstances, and are easy to erect.

Six domes were chosen for the site, two each of 20 foot, 30 foot, and 44 foot diameters, for a total of about 5,000 square feet (465 sq m). The



Fig. 3. Starting the Build, Day 1.

four largest domes were equipped with blackout vinyl covers, translucent panels, and solar-powered exhaust fans. All the domes have a vinyl floor. The four largest domes each have the logo of the participants prominently displayed around the principal door. The two 20-foot domes, which were donated by Pacific Domes, carry their logo only.

Four of the domes were erected together in a newly-prepared green-field site near the



Fig. 5. Lifting a 44-foot dome, Day 1.

administration building, one 20-foot dome was installed right next to the administration building, and one 44 foot dome was installed in the area of existing small tents housing infected patients. Due to the poor drainage characteristics of the Gheskio site, all domes (except the small one next



Fig. 7. First three domes erected, Day 3.



Fig. 4. Progressing with four domes, Day 1.

to the admin. building) were placed on raised bases of compacted sand, held in place by a ring of concrete blocks. The domes were secured with high quality arrowhead earth anchors at approximately three-foot intervals around the circumference, each rated at a resistance of over one ton. Because the domes were erected on



Fig. 6. Pulling on a skin, Day 2.

raised bases, a ring of reinforced concrete was placed around the base to ensure the stability of the anchors. No significant problems were encountered and the domes were all built in five days plus a two-hour training session at the beginning of the process.

The Unibank Foundation chose a recently-established NGO called GrassRoots United to lead the erection of the domes, as they had already

installed several since the earthquake. The Foundation chose a young civil engineer to lead the work crew and he picked 28 volunteers to do the manual labor. These latter were paid a stipend for their efforts and will be given a certificate of participation.

While Meridian Foundation and Pacific Domes generously donated the two 20-foot domes and offered a 50% reduction from list price for the



Fig. 9. The team, their job complete, Day 4.

four others, the cost of the domes, for the West coast of the US, still amounted to \$70,857. This expense was very generously paid by The Bank of Bermuda Foundation (\$34,000) and the Weill Cornell Medical School (\$36,857). Of note is that



Fig. 11. One of the 30-foot domes completed, Day 5.



Fig. 8. Wearing masks in contagious area, Day 3.

this donation was the first ever made off-island by the Bank of Bermuda Foundation. Pacific Domes underwrote the cost of transportation via UPS to Haiti (\$9,683.48). The Centers for Disease Control and Prevention (CDC) kindly acted as



Fig. 10. Installing solar-powered exhaust fans, Day 5.

recipient of the domes and, with USAID, had the shipment cleared through customs without taxes. The Unibank Foundation and Les Centres Gheskio paid the costs of building the domes equally (\$8,049 total—to be precisely confirmed).

The Unibank Foundation paid its share of the costs using its own funds and donations made to it by individuals subsequent to the earthquake.



Fig. 12. Finishing the bases and anchoring the domes. Day 5.



Fig. 13. The second 20-foot dome completed, Day 5.



Fig. 14. View of a completed 44-foot dome with four solar-powered exhaust fans, Day 5.

The Unibank Foundation wishes les Centres Gheskio “bonne besogne” and thanks the following organizations and individuals for their invaluable assistance:

- **Pacific Domes** for its in-kind donation, price reduction, and shipping donation
- **Meridian Foundation** for its facilitation
- **Bank of Bermuda Foundation** for its cash donation
- **Weill Cornell Medical School** for its cash donation
- **CDC/USAID** for their customs clearance assistance
- **The many individual donors** whose contributions were used to erect the domes.