IPRO 327: Sustainable Water Distribution System in Pignon, Haiti

Objectives

Our main objective for this year was to create a preliminary design for a water distribution system for Pignon, Haiti. Included in this were the assembly of topographical maps, research into user needs, research of the current system, and fundraising.

Organization:

We were divided into subgroups for all of these tasks. We had four different subgroups. Because of the large size of our team (over 20 members), we only met as a whole team once a week for progress reports. The subgroups met once a week during the regular allotted class time.

Accomplishments:

Maps have been constructed. We have topographical maps with elevations, as well as a map of the houses and other buildings in the town. The preliminary design of the system has been accomplished. Also, a major accomplishment was surveying the town and having that converted into a GIS map.

Obstacles:

One of our biggest barriers was funding. This was solved by soliciting large donations from several key supporters of the beginning of this project. Another obstacle has been data transfer. Since our project is in a very remote region of an impoverished nation, getting the information has been difficult. This has mostly been solved by sending team members down there and developing relations with people in Haiti who can now send us information in a timelier manner.

Conclusion:

We gathered a lot of information. Also, a lot of preliminary work was done in making the maps and the preliminary design. This team did accomplish the goals we set out, to map the area and produce a preliminary design.

Next steps:

The next team needs to finalize the system design. Also, water purification will need to be looked at extensively and decided upon. After a final design is completed, tests should be run on simulations. And, it should be reviewed by Haitian professionals in the Chicago area to determine its feasibility in Haiti.

Sponsors/Collaborators:

IIT IPRO Office, David Baker, Rotary International, Haiti Outreach,

Team Members:

Faculty: Arthur Kurzydlo. Team: Ballog, Matthew; Chung, Chun; Durra, David; Forkan, Garret; George, Alayna; Hollister, Nathaniel; Kircher, Alexander; Miot, Alex;

Mohammed, Ashfaq; Radloff, Eric; Rajic, Ivan; Ratnani, Shoaib; Rokita, Mark; Sawulski, Piotr; Shoulders, Shawn; Sissala, Amy; Skrebo, Ermin; Sullivan, Joshua; Susek, Ben; Tailor, Kinjal; Tam, Chi Hang; Taylor, Mark; Williams, David