Team Bug Bag
Biogas For Nicaragua
Project Recap

The task for Team Bug Bag was to create an anaerobic digester for the area of Tisma, Nicaragua that can be manufactured down in Nicaragua, be produced for under $100 (USD), and be able to produce biogas that could boil water for a thirty minute time period three times a day. In order to achieve this task, Team Bug Bag researched multiple different types of anaerobic digesters and took aspects of the different digesters that we thought would be applicable to our problem.

Another aspect of solving the problem was aesthetically pleasing our customers which were the people of Nicaragua. We were able to speak with students from the Catholic University of Nicaragua to figure out what they would like in terms of manufacturing of the digester. One other vital set of information was a customer survey done by a team that has previously worked on this problem.

After analyzing customer needs and analyzing the external research, Team Bug Bag created a batch anaerobic digester that emphasized the concept of a flexible dome lid. This, however, was the Achilles heel of our design and did produce a leak. We were able to construct the digester $108.83 (USD) which is a little more than our target construction.