**Proposal Description** *(2-3 sentences describing the design)*

We propose to implement a recycling scheme to not only tackle the plastic waste issue in Lobitos and Piedritas but also other problem areas. This would be done by converting plastics into a range of different designs which would each address a certain issue or issues the communities face. Machines, such as extrusion or injection moulders, would be used in order melt the plastic into a workable state and produce the designs.

**Summary** *(of idea and problem we are addressing- 100 words)*

Our design tackles the plastic waste issue Lobitos and Piedritas, using several machines to recycle the usable plastics into various items. These items are then to be used to tackle several other problem areas the communities are facing, from rainwater collection tanks for water to classroom supplies to help improve education. The machines will be powered by a solar array which will feed additional power it generates into the local grid, helping with the grid stability, which is currently unreliable. The size of the project is easily scalable, and the ideas easily changeable as problems facing the communities change.