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**Mapua *Sikat* Project *Bathala*: Rocketstove**

**GRANTEE:** Mapua Institute of Technology (MIT)

**PRINCIPAL INVESTIGATOR:** Dr. Febus Reidj G. Cruz

**INDUSTRY PARTNER:** Sikat Solar Challenge Foundation, Inc. (Science Foundation)

**GRANT PERIOD:** September 1, 2016 to August 31, 2017

**CONTRACT AMOUNT:** Php 999,730 (approximately USD21,300)

**Asuperstove for indigenous communities**



*Bathala Version 2 prototype, a rocketstove that simultaneously cooks food using less fuel, generates electricity, and distills or boils water for drinking*

*Bathala* refers to the creator or God among the Tagalog-speaking Filipinos. He is believed to be an all-powerful being who provides answers to their problems on livelihood, healthcare, and electricity for the *Dumagat* tribe in Norzagaray, Bulacan.

As a response to tribe's concerns, Team Carding, a group from Mapua Institute of Technology that promotes green and renewable technology innovations, collaborated with *Sikat* Solar Challenge Foundation and the *Dumagats* for the *Sikat* Project *Bathala*, a multi-functional rocket stove that has three features: smokeless cooking, a water purifier, and electricity (radio, power bank, and light). With support from USAID STRIDE, Team Carding is developing a prototype *Bathala*.

## Potential application and benefits

Providing the *Dumagats* their own rocketstoves addresses:

- Livelihood: The project will provide opportunities for employment with the production of *Bathala* units and the selling of other clay products;
- Health: The stoves will purify water and cook without smoke; and
- Electricity: The stoves can create power from the biomass materials used for cooking.

A significant element of the *Bathala* project is the strategy of instilling a sense of ownership and better understanding of the various aspects of the project to the *Dumagats*.

Project *Bathala* will serve as a catalyst in developing innovative and practical solutions for the *Dumagat* tribe. It is expected to inculcate a new culture in their community. The project will provide opportunities for them to be more productive, self-sufficient, and responsible, which are important elements of social change and national development.

A sustainable business plan for the *Dumagats* is one of the main features of the project. Thus, innovations will go beyond the production of rocket stoves to various interventions that support the use of green and renewable technology in local rural communities, including the vulnerable and indigenous sectors of the society.



*The traditional way of cooking that aggravates respiratory health issues still practiced by Dumagats*