Eniac Se'avarador: Providing Safe Water for Agriculture Use

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Eniac Se’avarador, a new environmental-friendly technology is innovated mainly to monitor the quality of water for agriculture use. However, the focus of this innovation is on the alkalinity or pH of water suitability for the intended use. The conceptualising begins with experiments and collections of pH data of water from several sources around the school. The initial finding indicates that generally water condition especially the untreated water is acidic. We also believe that this issue of water acidity condition may not be just a local issue but also potentially a global issue. This has resulted in our concern on its potential consequence on the sustainability of agricultural activities as well as the global food production. The Eniac Se’avarador comprises two main components. First component is the technology powered by Arduino Uno robotics system with motor and pH sensor designed to detect acidity and neutralise it back to the required alkalinity. The second component is the motor system to dispense suitable elements/compounds, in this case charcoal and calcium hydroxide, when pH sensor detect the water pH is less than 7. These compounds are used because carbon has the ability to neutralise as well as to reduce the unpleasant smell of the water. We believe the main strengths of Eniac Se’avarador are user friendly, reasonably simple and cheap to produce and can function effectively especially in making agricultural activities less susceptible to human errors. In the long run sustainable agricultural practices maybe achieved. We also hope that this project will be the catalyst in the development of more advance products that will be able to monitor the total suitable nutrients for specific crops or animal productions

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