

Abstract Submitted
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The Development of an Automatic Rainwater Harvesting and Water Supply System Using Solar Panels JI WON KIM, Korea International School — Automatic rainwater harvesting and water supply system, using photovoltaic cell modules, can be used as an effective auxiliary device for farming water supply. This study aims to identify ways to utilize photovoltaic power generation facility as a means to collect rainwater during the rainy season so as to use it during the dry season. This new method can contribute to the development of automatic farming and gardening system by increasing the efficiency of the photovoltaic power generation mechanism. Arduino was used to make a solar tracker, maximize the efficiency of photovoltaic power generation, detect rainwater, and make the automatic transition to horizontal form. For the efficient management of collected water, a sensor was used to check soil water conditions based on soil water content (50 80

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