**Chapter II**

**REVIEW OF LITERATURE**

This chapter supplies necessary compiled information gathered from books, journals, magazines, handbooks, and internet sites credited by experts in order to provide support to this research study. This chapter will aid the readers to have a background about the designed machine and its importance in the field of specific industries.

**RELATED LITERATURE**

Rice Crop

As defined by Britannica, the rice crop or rice plant is an annual grass and grows around 1.2 meters (4 feet) in height. It has long and flattened leaves and is borne on hollow stems. Its panicle or flower cluster is composed of spikelets bearing flowers that produced the fruit or grain. The plant’s fibrous root system is often broad and spreading. Differences of a given plant vary from the length, shape, and weight of the panicle, along with its overall productivity.

In an article from Global Yield Cap Atlas, in Southeast Asian countries like Vietnam, Thailand, Myanmar, Philippines, and Cambodia the total annual production and harvested area are around 128.5 Mt and 32.0 M ha, which accounts for 17% global production and 20% harvested area (FAOSTAT, 2020). Among these numbers, the Philippines ranked eighth in world rice production with an annual average yield of 3.96 t which accounts for a total harvested area of ca. 4.7 M.

Paddy Rice

Steps ??

Nutritional Value of rice

Medicinal

Solar Panel

Shaft

Crankshaft

V-belt pulley

Spike and Spike line

Battery

Motor

Prototype

Welding

RELATED STUDIES