**ABSTRACT**

This research paper aims to determine a realistic cost of production for Romaine lettuce using two different technological growing systems, the Grow box system and the Hydroponic growing system over the course of eight weeks. A realistic cost of production is one in which those expenses that the farmers deem not relevant to the production process are also included. Atypical outflows such as research costs, consultant fees and fuel and telephone expenses are not generally recorded as a relevant cost pertaining to cost of production but in reality they play an integral part. This helps to ensure a more concise and well rounded cost of production figure.

In order to determine these costs the two growing systems were constructed at the Ministry of Agriculture, Land and Marine Resources County St. Patrick East Office and maintained for eight (8) weeks. Daily costs incurred and activities were recorded in order to later formulate the realistic cost of production. At the point of maturation the lettuce plants were harvested and those that were not at the 100% bearing stage at the end of the eight (8) weeks were disposed of.

The computed cost of production revealed a net loss but this can be attributed to the fact that the growing systems were actually constructed and the cost of construction materials greatly contributed to the deficit. This cost of materials is known as a one-off cost since this expense would generally only be recorded at the time of construction and would be recouped with continued usage of the growing systems. The results also showed that the cost of production for a Grow Box was considerably lower than that of a Hydroponic system. This is again due to the high cost of construction materials for the Hydroponic system.

Including the atypical cash outflows in the computation of the production costs will allow farmers to get a better understanding of what their actual cost of production can be.