

A Wearable Device for Clove Pluckers to Protect Their Health While Ensuring Them To Make Their Job Easy and Quick in a Secure Manner.

Abstract – Sri Lanka is the fourth clove exporting country from the world. As a country which have the original clove specie exporting amount should be increased more than this. There are several issues effecting on the efficiency and this paper has been discussed about mainly effecting factors. From those factors, shortage of labor is playing a main role. There are more than one factors effecting to the shortage of labor from several aspects. Those components has been identified while empathizing their life styles, daily routines, social, political and economic backgrounds firmly. Physical health related issues are the things which can be solved from product design aspect. Suggesting wearable solution to harvesting clove with protecting the health of labors was the challenge of this project. The clove harvesting device is a wearable device to assist the clove pluckers to stay in high places while harvesting cloves. In addition to being a vital device for consumer protection, it helps clove pluckers ease the clove harvest activities. Currently, many pluckers are complaining about the comfortability of the prevailing clove harvest tool which they vernacularly create for themselves. This shows the shortcomings within the present tool layout. Some of those reported cases consist of issues to use, much less convenient form, less comfortability, and safety issues. These shortcomings have made users reluctant to do clove harvesting by climbing on a tall tree-like clove tree. The motive of this is to create a protection support by a wearable device for clove pluckers by using the User-Centered Design as a concept to determine the layout parameters of protection. This project outcome is to increase the protection and interest of clove plucking. Robust design, durability, flexibility, multifunctionality, and comfort are the components that this project considered.

Keywords: Clove Pluckers, Robust Design, Multifunctionality, Comfortability, Postural Health