## ABSTRACT

This research aims to identify the contributing factors to the prevalence of stunting among toddlers in the Bojongsoang District, Bandung, as well as to evaluate the effectiveness of a stunting detection application in supporting prevention and intervention efforts. Stunting poses a serious public health issue in Indonesia, particularly in areas like the Bojongsoang District, which face various challenges including limited access to nutritious food, inadequate sanitation, and insufficient awareness of the importance of nutrition and child health. The stunting detection application has the capability to check whether a toddler is affected by stunting or not by inputting the child's height, arm circumference, and head circumference into the app. Measurements are taken using a smartphone camera and processed through Image Processing algorithms, allowing for direct calculation of the child's measurements on the camera. This is followed by inputting the child's weight into the application, where all the data is then processed using decision-making algorithms to determine whether the child is stunted or not.

**Keywords:** *Stunting, Detection application, Image Processing algorithm, Decision-making algorithm*