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ORGANIC AGRICULTURE POLICIES VIA BIOLOGICAL WASTE VALORIZATION: TAIWAN'S SDG ALIGNMENT

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Abstract

According to the report of the Food and Agriculture Organization of the United Nations, the food systems accounted for over a third of global anthropogenic greenhouse gas (GHG) emissions, which are closely linked with the food-derived waste sector. Consequently, biological waste valorization has been recognized as a critical pathway for advancing organic agriculture and the sustainable development goals (SDGs). In this case study, the updated official databases related to organic agriculture, biological waste valorization strategies, and the corresponding regulatory frameworks in Taiwan were analyzed. A major milestone was the passage of the 'Organic Agriculture Promotion Act' on 30 May 2018, which was brought into force on 29 May 2019. Under the regulatory policies implemented by the central competent authorities for organic farming and organic fertilizers, the total area of organic farming including certified organic agriculture and eco-friendly farming was observed to increase markedly, from 6,783 hectares in 2016 to 27,012 hectares in 2024, representing an approximate 300% growth. In 2024, the areas attributed to organic agriculture certification and eco-friendly farming reached 20,304 and 6,708 hectares, respectively, together accounting for 3.47% of the arable land in Taiwan. In addition, the Taiwan government has promulgated a series of promotion measures aimed at food loss & waste reduction, recycling and zero-waste policy and environment-friendly farming, thereby advancing national efforts towards a sustainable society by 2030.

Key words: eco-friendly farming, food waste, organic farming, regulatory promotion, sustainable society

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