Introduksi Model FONi Mina-hortikultura di Dinas Ketahanan Pangan, Pertanian dan Perikanan, Kota Tasikmalaya

(Introduction of the FONi Mina-hortikultura Model at the Office of Food Security, Agriculture, and Fisheries, Tasikmalaya City)

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ABSTRAK

Fertigator Otomatis Nirdaya (FONi) merupakan teknologi tepat guna yang dapat menjaga kelembaban tanah pada kisaran optimum serta memenuhi kebutuhan air tanaman sesuai laju evapotranspirasinya tanpa menggunakan daya listrik. Pada berbagai budidaya tanaman, FONi dapat meningkatkan produktivitas lahan dan air serta tenaga kerja. Kegiatan ini bertujuan memperkenalkan FONi untuk budidaya mina-hortikultura di Dinas Ketahanan Pangan Pertanian dan Perikanan (DKP3), Kota Tasikmalaya. Di sini, FONi dipadukan dengan budidaya ikan lele dalam tangki yang berada sebelah hulu budidaya sayuran. Media tanam sayuran mendapatkan air drainase dari tangki melalui bagian bawahnya. Tinggi air di dalam tangki dan media tanam dijaga konstan menggunakan klep air. CCTV digunakan untuk memantau pertumbuhan tanaman dan kejadian lainnya setiap saat. Sejak Mei 2025, berbagai tanaman berhasil dipanen di antaranya kangkung, tomat, cabai, selada, terong dan lain sebagainya. Demikian juga, ikan lele tumbuh baik seukuran jari tangan sampai mencapai 4 ekor per kilogram. Sampai saat ini, hasil panennya dinikmati oleh pegawai dinas. Khususnya setiap Jumat pagi, pemetikan sayuran menjadi bagian dari acara krida mingguan. Diseminasi kegiatan dilakukan melalui sarasehan dan publikasi di beberapa media massa. Terekam juga kunjungan Walikota beserta wakil dan jajarannya termasuk masyarakat umum. Sebagai kelanjutannya, telah disusun rencana instalasi FONi Polikultur di kantor pusat kegiatan PKK dan membangun Kebun Pangan Rakyat (KPR) di beberapa kantor kelurahan terutama yang terindikasi mempunyai masalah kemiskinan. Teknologi tepat guna ini diharapkan berkontribusi dalam penyediaan pangan sehat dan murah terutama untuk mengurangi angka kurang gizi yang sekarang ini tercatat sekitar 5.5% dari penduduk Kota Tasikmalaya.

Kata kunci: budidaya mina-hortikultura, fertigator otomatis nirdaya, kebun pangan rakyat

ABSTRACT

The Powerless Automatic Fertigator (FONi) is an appropriate technology designed to maintain soil moisture at an optimum range and meet plant water requirements based on evapotranspiration rates without using electricity. In various types of crop cultivation, FONi has been shown to increase land, water, and labor productivity. This initiative aims to introduce FONi for mina-horticulture (integrated fish and vegetable farming) at the Department of Food Security, Agriculture, and Fisheries (DKP3) in Tasikmalaya City. In this setup, FONi is integrated with catfish farming in tanks located upstream of the vegetable cultivation area. The vegetable growing media receives drainage water from the fish tanks through the bottom. Water levels in both the tanks and the growing media are kept constant using float valves. Additionally, CCTV is used to monitor plant growth and other activities at all times. Since May 2025, various crops have been successfully harvested, including water spinach, tomatoes, chili peppers, lettuce, eggplant, and more. Similarly, the catfish have thrived, growing from fingerling size to a harvest weight of 4 fish per kilogram. To date, the harvests have been enjoyed by department employees; specifically, every Friday morning, harvesting vegetables has become a part of the weekly "krida" (communal activity) event. Information about the project has been disseminated through workshops and publications in several mass media outlets. The site has also hosted visits from the Mayor, the Deputy Mayor, and their staff, as well as the general public. As a follow-up, plans have been developed to install FONi Polycultures at the PKK central activity office and to establish People's Food Gardens (KPR) in several village offices, particularly those identified as having poverty issues. This appropriate technology is expected to contribute to the provision of healthy and affordable food, specifically to help reduce the malnutrition rate, which currently stands at approximately 5.5% of the population in Tasikmalaya City.

Keywords: integrated fish-horticulture cultivation, people's food gardens, powerless automatic fertigator