

**ANALISIS IMPLEMENTASI *MATERIAL FLOW COST ACCOUNTING*
DALAM PENINGKATAN EFISIENSI PEMANFAATAN SUMBER DAYA
PADA KOMODITAS BAWANG MERAH DI KELOMPOK TANI PASIR
MAKMUR, SRIGADING, SANDEN, BANTUL**

INTISARI

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Bawang merah (*Allium cepa L.*) merupakan komoditas hortikultura strategis nasional yang dibudidayakan di Daerah Istimewa Yogyakarta. Budidaya bawang merah menghadapi tantangan kompleks, seperti fluktuasi produksi, efisiensi input sumber daya pertanian, serta potensi pencemaran lingkungan akibat aktivitas pertanian. *Material Flow Cost Accounting* (MFCA) merupakan alat dalam manajerial yang efektif dalam mengukur dan menilai penggunaan material pada setiap tahapan produksi, serta menganalisis dampak finansial dan lingkungan dari input yang digunakan. Penelitian ini mengkaji penerapan MFCA sebagai pendekatan inovatif untuk meningkatkan efisiensi sumber daya dan mengurangi limbah dalam budidaya bawang merah dengan studi kasus pada Kelompok Tani Pasir Makmur, Srigading, Sanden, Bantul. Implementasi MFCA bertujuan untuk mengidentifikasi aliran material dalam budidaya bawang merah serta menentukan area inefisien dan potensi penghematan. Hasil menunjukkan adanya inefisiensi pada tahapan pemupukan serta penyiraman yang menghasilkan kerugian material. budidaya bawang merah di subjek penelitian. Petani 1 mengalami kelebihan pupuk nitrogen sebesar 42,57 kg, pupuk fosfor 51,00 kg, pupuk kalium 58,16 kg dan air 555.176,00 liter; Petani 2 terdapat kelebihan volume pada pupuk nitrogen sebesar 30,21 kg, pupuk fosfor 61,34 kg, pupuk kalium 40,34 kg dan air 1.893.296,00 liter; Petani 3 menghasilkan kelebihan volume pupuk nitrogen sebesar 36,22 kg, pupuk fosfor 38,72 kg, pupuk kalium 36,86 kg serta air 357.896,00 liter. Identifikasi kerugian material memberikan informasi mengenai dampak finansial dan lingkungan serta menjadi dasar rekomendasi strategis guna meningkatkan efisiensi sumber daya dan mengurangi potensi dampak yang ditimbulkan.

Kata Kunci: Bawang merah, Efisiensi sumber daya, Input pertanian, *Material flow cost accounting* (MFCA), Pertanian berkelanjutan.

ANALYSIS OF THE IMPLEMENTATION OF MATERIAL FLOW COST ACCOUNTING TO IMPROVE RESOURCE USE EFFICIENCY IN SHALLOT CULTIVATION IN THE PASIR MAKMUR FARMER GROUP, SRIGADING, SANDEN, BANTUL

ABSTRACT

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Shallots (*Allium cepa* L.) are a nationally strategic horticultural commodity cultivated in the Special Region of Yogyakarta. Shallot cultivation faces complex challenges, including production fluctuations, efficiency of agricultural resources, and potential environmental pollution caused by agricultural activities. Material Flow Cost Accounting (MFCA) is an effective managerial tool for measuring and evaluating material use at each stage of production, as well as analyzing the financial and environmental impacts of the inputs used. This study examines the application of MFCA as an innovative approach to improve resource efficiency and reduce waste in shallot cultivation, using a case study of the Pasir Makmur Farmer Group in Srigading, Sanden, Bantul. The implementation of MFCA aims to identify material flows in shallot farming and determine areas of inefficiency and potential savings. The results indicate inefficiencies in the fertilization and irrigation stages, leading to material losses. Farmer 1 experienced excess use of nitrogen fertilizer by 42.57 kg, phosphorus fertilizer by 51.00 kg, potassium fertilizer by 58.16 kg and water by 555.176,00 liters; Farmer 2 had excess nitrogen fertilizer of 30.21 kg, phosphorus fertilizer of 61.34 kg, potassium fertilizer 40.34 kg, and water of 1.893.296,00 liters; while Farmer 3 recorded excess nitrogen fertilizer of 36.22 kg, phosphorus fertilizer of 38.72 kg, potassium fertilizer 36,86 kg, and water of 357.896,00 liters. The identification of material losses provides insights into financial and environmental impacts and serves as a basis for strategic recommendations to enhance resource efficiency and reduce potential adverse effects.

Keywords: Agricultural inputs, Material Flow Cost Accounting (MFCA), Resource efficiency, Shallot, Sustainable agriculture.