

INTISARI

Pemanfaatan limbah industri kelapa sawit sebagai sumber pakan alternatif merupakan salah satu strategi potensial dalam mendukung ketahanan pangan protein hewani, khususnya di wilayah sentra perkebunan seperti Kabupaten Sintang. Penelitian ini bertujuan menganalisis potensi solid decanter sawit (SDS) sebagai pakan ternak ruminansia, mengidentifikasi hambatan pemanfaatannya, mengevaluasi distribusi spasial rantai pasok, serta mengestimasi kontribusinya terhadap produksi dan ketersediaan protein hewani lokal. Penelitian menggunakan pendekatan *mixed methods* melalui observasi lapangan, wawancara mendalam, analisis laboratorium, analisis spasial, dan simulasi kuantitatif. Data dianalisis secara deskriptif, spasial, serta menggunakan pendekatan SWOT–TOWS untuk merumuskan strategi pengembangan. Berdasarkan hasil penelitian, diketahui bahwa SDS memiliki potensi besar sebagai sumber pakan lokal karena tersedia dalam jumlah melimpah dan memiliki kandungan nutrisi yang cukup baik bagi sapi. Simulasi menunjukkan bahwa produksi SDS di Kabupaten Sintang berpotensi menopang daya tampung hingga 20.801 ekor sapi per periode atau surplus sebesar 310,36% dibanding populasi eksisting. Optimalisasi pemanfaatan SDS diperkirakan mampu menghasilkan 4.516.491 kg daging sapi dan memenuhi sekitar 37,69% kebutuhan protein hewani masyarakat Kabupaten Sintang. Namun demikian, pemanfaatan SDS masih menghadapi berbagai hambatan, meliputi karakteristik fisik yang mudah rusak, keterbatasan infrastruktur distribusi, ketimpangan spasial akses terhadap PKS, belum adanya regulasi spesifik, serta lemahnya kelembagaan peternak. Oleh karena itu, diperlukan strategi pengembangan melalui pengembangan kawasan integrasi sapi dan kelapa sawit, penerapan teknologi pengolahan dan pengeringan SDS, penguatan *Intermediate feed hub* berbasis wilayah, harmonisasi regulasi, serta penguatan kelembagaan peternak guna mendukung sistem pangan daerah yang lebih mandiri, efisien, dan berkelanjutan.

Kata kunci: solid decanter sawit, pakan ternak, ketahanan pangan, protein hewani, integrasi sawit–sapi

ABSTRACT

The utilization of palm oil industrial by-products as alternative feed resources represents a strategic approach to strengthening animal protein food security, particularly in plantation-based regions such as Sintang Regency. This study aimed to analyze the potential of palm oil decanter solid (PODS) as ruminant feed, identify barriers to its utilization, evaluate the spatial distribution of its supply chain, and estimate its contribution to local meat production and animal protein availability. The research employed a mixed-methods approach through field observations, in-depth interviews, laboratory analyses, spatial analysis, and quantitative simulations. Data were analyzed descriptively and spatially, while SWOT-TOWS analysis was applied to formulate optimization strategies. The results indicated that PODS has substantial potential as a local feed resource due to its abundant availability and adequate nutritional value for ruminants. Simulation results showed that PODS production in Sintang Regency could support a carrying capacity of up to 20,801 cattle per production cycle, representing a surplus of 310.36% compared to the existing cattle population. Optimized utilization of PODS was estimated to produce 4,516,491 kg of beef and fulfill approximately 37.69% of the local community's animal protein requirements. However, its utilization remains constrained by several factors, including its perishable physical characteristics, limited distribution infrastructure, spatial disparities in access to palm oil mills, the absence of specific regulations, and weak farmer institutions. Therefore, optimization strategies are required through the development of palm oil-cattle integration areas, the implementation of processing and drying technologies, the establishment of regional Intermediate feed hub, regulatory harmonization, and the strengthening of farmer institutions to support a more independent, efficient, and sustainable regional food system.

Keywords: palm oil decanter solid, animal feed, food security, animal protein, palm oil-cattle integration