

PENILAIAN KERENTANAN DAN PRIORITASI RISIKO RANTAI PASOK GULA SEMUT DI KULON PROGO, D.I. YOGYAKARTA

Elsa Yulian Sari¹, Adi Djoko Guritno², Anggoro Cahyo Sukartiko³

INTISARI

Supply chain memiliki peran yang penting dalam perusahaan, namun kegiatan yang ada pada *supply chain* tidak akan terhindar dari risiko yang berdampak negatif pada kesuksesan keseluruhan rantai pasok. Risiko tersebut dapat terjadi pada rantai pasok produk hasil pertanian, termasuk gula semut. Berdasarkan hasil observasi, risiko dapat berasal dari faktor internal maupun eksternal. Oleh karena itu, penelitian ini dilaksanakan dengan tujuan untuk mengidentifikasi dan melakukan penilaian kerentanan risiko rantai pasok gula semut Kulon Progo, menentukan risiko prioritas risiko, serta memberikan usulan mitigasi berdasarkan nilai kerentanan dan prioritas tertinggi. Metode yang digunakan dalam penilaian kerentanan risiko adalah *Rapid Agricultural Supply Chain Risk Assessment* (RapAgRisk), sedangkan penentuan prioritas risiko menggunakan *Interpretive Structural Modeling* (ISM). Data penelitian didapatkan dengan wawancara mendalam terhadap 54 responden dengan teknik *purposive* dan *snowball sampling*. Hasil penelitian menunjukkan terdapat 35 kejadian risiko dengan kerentanan yang berbeda, yaitu 3 kejadian risiko tergolong *extremely vulnerability*; 6 kejadian risiko tergolong *highly vulnerability*; 6 kejadian risiko tergolong *moderate vulnerability*; 8 kejadian risiko tergolong *low vulnerability*; dan 12 kejadian risiko tergolong *limited vulnerability*. Risiko yang menjadi prioritas utama adalah pohon kelapa dipenuhi abu vulkanik terjadi di *tier* petani. Saran mitigasi untuk *tier* petani adalah menutup bumbung dengan plastik, irigasi, makan dan/atau minum serta memahami kondisi badan dan alam sebelum menderes, menggunakan alat pengaman untuk penderesan. Saran mitigasi untuk *tier* pengepul adalah penambahan jumlah anggota petani yang berada dalam kawasan Kulon Progo. Saran mitigasi untuk *tier* sub unit pengolahan dan kontrol, unit pengolahan dan kontrol, serta Industri Kecil Menengah (IKM) adalah menerapkan sistem *make to stock*.

Kata kunci : Gula semut, *supply chain*, risiko, *Rapid Agricultural Supply Chain Risk Assessment* (RapAgRisk), *Interpretive Structural Modeling* (ISM)

¹Mahasiswa Teknologi Industri Pertanian, Universitas Gadjah Mada

²Dosen Teknologi Industri Pertanian, Universitas Gadjah Mada

³Dosen Teknologi Industri Pertanian, Universitas Gadjah Mada

**RISK VULNERABILITY ASSESSMENT AND RISK PRIORITATION OF THE
SUPPLY CHAIN OF GRANULATED COCONUT SUGAR, IN KULON PROGO
DISTRICT, SPECIAL REGION OF YOGYAKARTA**

Elsa Yulian Sari¹, Adi Djoko Guritno², Anggoro Cahyo Sukartiko³

ABSTRACT

Supply chain has important role in a company. However, risk cannot be avoided and has negative impact to activities and success of entire supply chain. The risk can occur in the supply chain of agricultural products including granulated coconut sugar. Based on observation, risks may occur in granulated coconut sugar supply chain come from internal and external factors. Therefore this research has aim to identify risk that can arise in the granulated coconut sugar supply chain and analyze existing risk so that vulnerability of the risk can be known, determine the risk priority, and provide risk mitigation based on risk vulnerability and risk priority. Method that is used to risk vulnerability assessment is Rapid Agricultural Supply Chain Risk Assessment (RapAgRisk), whereas to determine risk priority is Interpretive Structural Modeling (ISM). Data has been collected through indepth interview to 54 respondents using purposive and snowball sampling. Result of this research shows that granulated coconut sugar supply chain in Kulon Progo has 35 risk events divided into all levels of vulnerability, i.e., 3 risk events classified as extremely vulnerability, 6 risk events classified as highly vulnerability, 6 risk events classified as moderate vulnerability, 8 risk events classified as low vulnerability, and 12 risk events classified as limited vulnerability. Coconut trees covered with volcanic ash is main priority risk event that occuring in farmers. The mitigation proposals for farmers are the tubs can be covered by food grade plastic, irrigation, eating/drinking before tapping the sap, ensuring the body and weather before tapping, aslo using safety tolls for tapping the sap. The mitigation proposal for collectors is multiple *suppliers* or increasing the number of farmers. While the mitigation proposal for sub-Control Processing Units (sub-CPUs), Control Processing Units (CPUs), and Small and Medium Enterprises (SMEs) is applying the make to stock system.

Keywords : granulated coconut sugar, supply chain, risk, Rapid Agricultural Supply Chain Risk Assessment (RapAgRisk), Interpretive Structural Modeling (ISM)

¹Student of Agro-industrial Technology, Universitas Gadjah Mada

²Lecturer of Agro-industrial Technology Universitas Gadjah Mada

³Lecturer of Agro-industrial Technology Universitas Gadjah Mada