

How can agrifood companies proactively manage supply risks?

Development of a Proactive Supply Risk Management Model: A multiple case study in the Swedish agrifood industry

The covid-19 pandemic has not only affected how individuals interact with each other but also amplified the risk exposure for more or less every company with a global supply chain. In these times of uncertainties, it is more important than ever to have a proactive approach towards supply-related risks. In our thesis, we have developed a supply risk management (SRM) model for this purpose.

The model was specifically developed for a medium-sized company in the Swedish agrifood industry. It was based on a theoretical framework from multiple academic articles and books relating to the topic, as well as a practical perspective from interviews with other similar companies. Our proposed model is centered around the elements (1) risk identification, (2) risk assessment, (3) risk mitigation, (4) risk monitoring, and (5) risk organization.

In the first step, *risk identification*, all relevant risks should be identified. On an annual basis, we recommend that structured workshops are held to identify risks relating to the (1) macro-environment, (2) supply chain network, and (3) specific suppliers. In addition, we propose that risks should be identified continuously throughout the year from supplier contact and internal meetings.

In the second step, *risk assessment*, all identified risks should be evaluated. We recommend that this is done in terms of their probability of occurrence and potential business impact, using a one-to-five grading scale. To prioritize the risks, we recommend that a risk score is calculated by multiplying the variables.

In the third step, *risk mitigation*, feasible actions to reduce the probability and/or potential impact of each risk should be determined. In our thesis, we present a

framework with 47 unique actions that can be considered. We propose that the company identifies appropriate actions by evaluating the following four aspects: (1) the action's alignment with the overall company strategy, (2) the action's alignment with the product strategy, (3) the costs and/or issues associated with the action, (4) and the potential benefits of the action.

In the fourth step, *risk monitoring*, actions are taken to make the model more dynamic towards the environment. A risk owner should be assigned to each risk, with the responsibility of monitoring the risk at a predefined monitor date. To allow for an element of continuous improvement, we also recommend that the participants annually evaluate the process.

Lastly, *risk organization* naturally relates to the organizational aspect of SRM. In our model, we address this from the perspectives of (1) process governance and (2) risk culture. In terms of governance, we recommend that the management team act as a governing body and regularly discuss the risk topic during their meetings on at least a quarterly basis. To ensure a strong risk culture, we have identified six levers that should be given attention: (1) top management commitment, (2) cross-functional participation, (3) formalized risk training, (4) proactive mindset, (5) continuous improvement, and (6) documentation.

While our SRM model was specifically developed to fit the company, we believe that it could also be relevant for other similar agrifood companies. Especially when considering that the study indicates a general gap of structure for proactive SRM. The complete study can be found in the published report "Development of a Proactive Supply Risk Management Model" by Albin Melin and Jesper Ehlers at The Faculty of Engineering – LTH, Lund University.