

ISSN: 2455-7838(Online)

EPRA International Journal of Research and Development (IJRD)

SJIF Impact Factor: 7.001 ISI I.F.Value:1.241 Journal DOI: 10.36713/epra2016

Volume: 5 | Issue: 9 | September 2020

- Peer Reviewed Journal

CLASSIFICATION RISKS OF THE AGRICULTURAL PRODUCTION CHAIN

Berdieva Z.M., MukhamadievaZ.B. Bukhara Engineering technological Institute, Bukhara, Uzbekistan

ABSTRACT

The agro production chain is often faced with various risks arising at specific links in the chain. For a detailed study of these risks, they should be classified based on certain indicators, which is discussed in this article. Abilities u ubiquity of the consequences of risk and the reversibility of the consequences of risk, i.e. normal risk is simple and well explained by science and legislation. Intermediate zone and non-tolerant zones cause more problems due to the fact that the risks occupy an area that goes beyond the normal damage. Within these zones, the confidence of the estimates is low, the statistical uncertainty is high, and the potential for destruction can reach dangerous limits.

KEY WORDS: risk, classification, probability, hazard, agribusiness, management. Wordof Damocles, Cyclops, Pitya, Pandora's Box, Cassandra.

INTRODUCTION

From a scientific point of view, risks are traditionally characterized by the degree of damage and the likelihood of occurrence. Both product characteristics can be measured for risk classification. It is also helpful to include other evaluation criteria.

1. Uncertainty (refers to statistics).

2. Appropriate definitions of the geographic distribution of potential damage.

3. Permissive definitions of a moderate amount of potential damage.

4. Repeatability of descriptions of the possibility of restoring the situation to the state before the damage was committed (restoration skills are possible - reforestation and water purification).

5. The delay of the effect characterizes the large latency period between the initial state and the actual event of damage. Latent time can be of physical, chemical or biological nature.

6. Mobilization potential is understood as a person's violation, social or cultural interests, and meanings that generate social conflicts and psychological reactions of a person or group who suffer from the consequences of risks. In particular, this relates to the perceived iniquities determination of risks and rewards [1,2,3].

RESULT AND DISCUSSION

Traditionally, there are 3 types of risks. Normal, average and tolerant.

Normal is characterized by little statistical uncertainty, low destructive potential, low damage count, where product capabilities and damage are considered, low scores on criteria. Abilities u ubiquity of the consequences of risk and the reversibility of the consequences of risk, i.e. normal risk is simple and well explained by science and legislation.Intermediate zone and non-tolerant zones cause more problems due to the fact that the risks occupy an area that goes beyond the normal damage. Within these zones, the confidence of the estimates is low, the statistical uncertainty is high, and the potential for destruction can reach dangerous limits. These risks can also generate global, irreversible damage that can accumulate for a very long time, or mobilize or frighten a population. In this case, attituoue risks of aversion are absolutely acceptable due to the fact that the boundaries of human knowledge are reached [4,5,6].

In theory, a huge number of risk classes can arise from the criteria. Such a multitude of cases would not be useful for the purpose of developing an appropriate risk classification. Therefore, a classification was developed, where the same risk candidates are classified within a risk class in which they reach or exceed one or more possible limit



SJIF Impact Factor: 7.001| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online) EPRA International Journal of Research and Development (IJRD) Volume: 5 | Issue: 9 | September 2020 - Peer Reviewed Journal

amounts in accordance with 8 criteria (table). This classification leads to 6 classes of risks, which are given names from Greek mythology [1]. Risks of the Domoklov Sword class.

Many sources of technological risk have a very high destructive potential, although the likelihood that this potential manifests itself in damage is very low. Typical examples are gas stations, chemical plants, dams, and a meteorite attack. The initial characteristic of this class of risks is their combination of low probability with high damaging ability. In theory, damage can occur at any time, but thanks to the protective measures in place, it is hardly expected.

Cyclops-class risks.

For risks of the "Cyclops" class, the probability of manifestation is extremely uncertain, then how the maximum damage can be calculated. It often happens that these risks cannot be assessed. A number of natural phenomena such as volcanic eruptions, earthquakes, floods belong to this category. Often there is little knowledge of the parameters of the event or a short observation time during which cyclical regularity is identified.

In another case, human behavior affects the likelihood of occurrence in such a way that these criteria become vague. Therefore, the emergence of AIDS, COVID-19 and other infectious diseases, as well as early warning systems for nuclear attacks, also belong to this class of risks.

Pitva class risks.

This class of risks refers to potential risks for which the degree of damage is unknown, and therefore, the likelihood of occurrence also cannot be estimated with a certain accuracy. In this respect, we must assume for the potential of risks of this class that there is a huge uncertainty about the possible damaging effects, and thus also about the uncertainty of damage.

This class includes risks associated with the likelihood of sudden, non-linear climatic changes, such as the risk of global warming, or the instability of the East Antarctic ice sheet, with greater devastating consequences than these land climatic changes. It further includes deep technological innovation in some of the causes of genetic engineering for which neither the maximum amount of damage nor the likelihood of occurrence of certain damage cases can be estimated from the point of view of modernity. Finally, the class "drinking" includes chemical and biological substances for which some effects are expected, but neither their

magnitude nor their likelihood can be estimated with any precision. BSE risks are a good example of this. Risks of the class "Pandora's Box".

Risks of this class are characterized by both uncertainty in terms of the probability of occurrence and the degree of damage (only presumptions), as a consequence of high ubiquity, ability and non-repeatability. In addition to permitted organic fertilizers and changes in the biosystem, endocrine disorders can serve as an example.

Risks of the class "Cassandra". These risks refer to risks characterized by a relatively long delay between the triggering event and the occurrence of damage. This case is usually interesting if both the probability and the magnitude of the damage are relatively high. If the time interval was short, then the regulatory authorities should intervene, because the risks are precisely in the non-tolerant zone. However, the time interval between the trigger and the consequence is determined by the fallacious manifestation of security. First of all, the assumption that the cause will be found before the actual damage can be accepted by us as an excuse for and activation. Anthropogenetic climate change and biodiversity loss are typical examples of this effect.

Meduza-class risks.

Risks belonging to this class refer to the potential for public mobilization. These risks are interesting in the event that there is a great gift between the perception of risk and the result of the analysis of risk experts. The probability of thread occurrence as well as damage is limited. Irradiated food is a typical example of this [3].

CONCLUSION

The main purpose of risk classification is to place risks in one of three zones in order to be able to select an effective and appropriate strategy, regulations and measures for risk policy at different political levels. Characteristics provide a basis of knowledge so that policymakers' decisions have better prescriptions on how to select measures for each risk class. The strategic pursue goal is to transform inaccessible risks into accessible ones, i.e. risks should not be reduced to zero, but move into a normal zone in which overall risk management and cost-effective analyzes will be sufficient to guarantee safety and integrity. Table 1 Various management strategies for different classes of risks are presented.



SJIF Impact Factor: 7.001 ISI I.F.Value:1.241 Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)

EPRA International Journal of Research and Development (IJRD)

Volume: 5 | Issue: 9 | September 2020

- Peer Reviewed Journal

Table 1. Overview of management strategies				
Management	Risk class	Damagedegree	Probability of	Action strategy
			occurrence	
				1.reduction of
scientificfaltification	swordofDam ocles	high	1	destructive potential
			low	2.undefined
				probability
				3. increasing resilience
				4. presenting
	Cyclops	high	undefined	surprises 5.hazard
				management
				6.implementing Pre-
Precautionary	pitya			emptive Principles
		undefined		7. development of
				substitutes 8.improve
				knowledge
				Ŭ
				9. predictional
	Pandora's			containment
	Box			10. hazard
				management
				11.consciousness
				building
discursive	cassandra		high	12.consiance building
		high		13.public
				participation in risk
				communications
				14. contingency
	fellifish			manegment

REFERENCES

- 1. P.A.Louning etal. "Safety in the agri-food chain", Wageningen Academic Publisher, 2006, 259
- 2. Mukhammadieva Z.B, M.Z Sharipov "Communication in Aqri-Food Suplay Chain", 2020, 5 II, p. 1270, IJARSET.
- 3. A.Marcelius "Steps in the risk management processes", Wag.Acad.Publ., 2006. 355
- 4. Mukhammadieva Z.B. Universum: Moscow, 2020, Issue: No. 3 p. 35
- 5. Mukhammadieva Z.B., Mukhammadieva K.B. "Economic and social aspects of traceability of the agricultural production chain" Forum, Belgorod, IV, 2020
- 6. Mukhamadiev B.T., Mukhammadieva Z.B. "Implementation of the HACCP system in the agricultural production chain", Monograph, Bukhara, 2020