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Evidentiary Substantiation of an Expert's Conclusion on Lost Profits of Agro-Industrial Enterprises in a Combat Zone

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Abstract: This paper substantiates an evidentiary model for an expert's conclusion on the lost profits of agro-industrial enterprises in a combat zone. The aim of the study is to determine the minimum set of evidence required to distinguish actual income losses from unsubstantiated forecast assumptions. It is proposed to combine financial statements, production documentation, agronomic data, market prices, logistical evidence, and spatial verification of war-related impact. The result is an evidentiary matrix that an expert can use to verify causation, the loss period, avoided costs, and the reliability of the counterfactual scenario. The methodology is oriented toward practical application in forensic economic examination, increases the transparency of net financial result assessment, and accounts for the seasonality of agricultural production, logistical constraints, market volatility, and the duty to mitigate damages in a dispute.

Keywords: counterfactual scenario, causation, avoided costs, agricultural production cycle, spatial evidence, financial and economic examination.



Introduction

In cases involving compensation for war-related damage, an expert's conclusion on lost profits must not only contain an arithmetic calculation but must also explain why the claimed income was probable, economically attainable, and lost specifically due to military actions. The compensatory logic of war damages requires building an evidentiary basis in which the event, the damage, the causal link, and the amount of the claim are mutually consistent (Izarova et al., 2023, p. 4). For agro-industrial enterprises, this is particularly important, since profit is not generated at a single point in time but over the course of the production cycle: soil preparation, procurement of resources, sowing, crop care, harvesting, storage, and sale of produce.

Lost profits cannot be equated with gross revenue. A methodologically sound approach requires comparing the counterfactual state, that is, the outcome the enterprise could reasonably have achieved absent the harmful event, with the actual state following its occurrence. The calculation should account not only for the revenue not received but also for the variable costs avoided by the enterprise, additional expenses, compensations, alternative sales, and other circumstances affecting the net result (Nohýnková, 2022, p. 31).

Research Aim and Research Questions

The aim of the study is to develop an evidentiary model for an expert's substantiation of lost profits of agro-industrial enterprises whose operations were restricted or suspended as a result of military actions.

Research questions: 1) which categories of evidence are necessary to confirm lost profits; 2) how to account for the seasonality, production cycle, and market volatility of the agricultural sector; 3) how to prevent overstatement of the calculation due to unproven forecast indicators or double counting of losses.

Scientific approaches to assessing war-related business losses emphasize that the agricultural sector is among the most difficult in which to calculate lost profits, owing to the large number of influencing factors: access to land, labor, machinery, seed material, fertilizers, storage, and logistics (Horoshkova et al., 2022, p. 1).

Research Results

The evidentiary substantiation of an expert's conclusion should be structured according to the principle of sequential verification, proceeding from the fact of the impact of military actions to the final amount of lost profits. The basic formula can be presented as the difference between the expected net financial result under the normal scenario and the actual result for the period of impact, adjusted for avoided costs, compensations received, and income from loss mitigation measures. In generalized form, this can be expressed as follows:



$$LP = NFRc - NFRa - AC - Comp - MitInc$$

where LP is lost profits, NFRc is the expected net financial result under the counterfactual scenario, NFRa is the actual net financial result, AC is avoided costs, Comp is compensations, and MitInc is income from loss mitigation measures. For an agricultural enterprise, the counterfactual scenario should be based not only on average financial indicators from previous years but also on the specific crop, acreage, yield, condition of plantings, availability of elevator capacity, supply contracts, and market price at a date close to the expected sale. A summary of the corresponding categories of evidence is presented in Table 1.

Table 1

Matrix of Evidentiary Substantiation of Lost Profits of an Agro-Industrial Enterprise

Element of Proof	Data Sources	Expert's Analytical Action	Risk Control Against Overstatement
Fact of the impact of military actions	inspection reports, photographs, video, statements from government authorities, geolocation, satellite data	establishing the date, location, and nature of the impediment to operations	separating the wartime impact from the enterprise's pre-war problems
Pre-war profitability	financial, tax, and management reporting for 2 to 3 years, contracts, bank statements	determining the normal level of revenue, margin, and costs	excluding atypical transactions and one-time income
Production capacity	acreage, crop structure, yield, machinery, storage capacity, resource reserves	verifying the enterprise's actual ability to obtain the projected harvest	cross-checking against agronomic data and the actual condition of assets
Market and logistics	sale prices, exchange and regional quotations, transport tariffs, export conditions	adjusting expected income to the available sales channel	applying comparable delivery terms, quality, and sale period
Loss mitigation	alternative sales, insurance payouts, government support, crop substitution, deferred sale	deducting actually received benefits and avoided costs	preventing double counting of the same losses

Source: author's own development

The proposed matrix does not replace the calculation but defines the evidentiary framework within which the calculation acquires expert persuasiveness. In the initial phase of the full-scale war, the key factors behind losses in the agricultural sector were restricted access to land, destruction of



infrastructure, resource shortages, and disruption of logistics; therefore, each of these factors must be reflected in the expert's underlying assumptions (Food and Agriculture Organization of the United Nations, 2022). If an enterprise claims lost profit from an unharvested crop, it is necessary to demonstrate not only the average yield of previous years but also that the planted area, cultivation technology, and resources actually allowed for obtaining the corresponding volume of output.

For land located in a combat zone, spatial verification takes on particular significance. Studies of the war's impact on Ukrainian farmland show that the destruction of infrastructure, the reduction of cultivated areas, and the deterioration of soil and water resources directly affect the production outcomes of agricultural producers (Nasibov et al., 2024, p. 159). Therefore, an expert's conclusion must include not only accounting calculations but also a description of the physical feasibility of production: whether the land was accessible, whether workers and machinery were able to operate, and whether storage facilities, elevators, and distribution channels were preserved.

An additional verification tool may be remote sensing. A study based on satellite data shows that losses can arise both from unplanted areas and from reduced productivity of planted crops; therefore, direct and indirect losses should be distinguished rather than summed mechanically (Chen et al., 2024). For an expert, this means that lost profit can be substantiated not only by destruction reports but also by data on declining vegetation indices, the inability to tend to crops, loss of access to irrigation, or blocked logistics.

Thus, the evidentiary strength of the conclusion depends on three conditions. First, the counterfactual scenario must be realistic and linked to the enterprise's proven prior activity. Second, the actual scenario must reflect all loss mitigation measures, including alternative sales, cost reductions, and partial resumption of operations. Third, the calculation period must correspond to the agricultural cycle rather than to an arbitrarily chosen calendar interval.

Conclusions

An expert's substantiation of lost profits for an agro-industrial enterprise in a combat zone must combine the legal logic of compensation, financial calculation, and production-agronomic verification. The most well-founded approach is one in which the amount of losses is determined by comparing the counterfactual and actual scenarios, with each assumption confirmed by documents, market data, or spatial evidence. The proposed matrix makes it possible to structure the evidentiary process and reduces the risk of overstating the claim. A direction for further research is to test this model on actual expert cases across various types of agricultural activity: crop production, livestock farming, storage, processing, and export logistics.

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