

Sustainability and Accountability in Agricultural Cooperatives: The Case of ZAGORIN through the GRI Lens

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Abstract This research explores the Agricultural Cooperative of Zagora (ZAGORIN), considered as one of the most sustainable and resilient agricultural cooperatives in Greece. It seeks to evaluate the perception and implementation of sustainability inside the cooperative, as perceived by its active members, under the framework of the Global Reporting Initiative (GRI) standards. The research employed a qualitative approach, through in-depth interviews with 15 cooperative members to investigate sustainable practices across the three equally weighted pillars of the GRI framework: Environmental, Social, and Governance (ESG). The aim is to assess the members' perceptions of the cooperative's actual sustainability initiatives and to identify strengths, weaknesses, opportunities, and threats using a systematic GRI-based SWOT analysis. The results demonstrate a strong relationship between the cooperative's activities and sustainability principles, especially in governance and social responsibility; yet, there remain opportunities for enhancement in environmental practices and formal sustainability reporting. The results provide significant insights into member-driven evaluations of sustainability and emphasize the necessity of implementing standardized reporting systems. This study enhances the dialogue on cooperative sustainability within the agrifood industry and offers a framework for other cooperatives seeking to better align with global sustainability standards.

Keywords: GRI Standards; ESG; Sustainability; SWOT Analysis; Agricultural Cooperatives

1. Introduction

The ability of agricultural cooperatives to consistently measure and communicate their impact is constrained. Typically they fall behind investor-owned enterprises in implementing formal reporting methods. Even exceptional examples such as ZAGORIN, an agricultural producers' cooperative (zagorin, n.d.), sometimes depend on informal or incomplete

sustainability strategies. This underscores the necessity for systematic, universally recognized instruments like those created by the Global Reporting Initiative (GRI), since sustainability reporting fosters trust, enhances access to ESG-aligned financing, directs policy involvement, and fortifies internal planning.

This research employs the GRI standards to evaluate the cooperative's sustainability initiatives within the ESG framework. A GRI-informed SWOT analysis delineates ZAGORIN's strategic positioning and identifies opportunities for enhancement. Furthermore, it extends the conversation on sustainability inside cooperative firms and outlines a framework for integrating worldwide standards such as GRI into locally rooted, member-driven models.

2. Methods

The research started with a literature review on sustainability reporting in cooperatives and the applicability of GRI standards to the agrifood sector. We performed structured face-to-face interviews with 15 active members from ZAGORIN to collect their perspectives on the cooperative's behaviors on ESG. A thematic analysis was then performed to assess the data. Themes were categorized according to the ESG pillars to ensure alignment with the GRI framework. Participants were selected using purposive sampling to provide in-depth, valuable insights from informed persons. The sample size of 15 is validated by data saturation (Guest et al., 2006). Finally, we conducted a GRI-ESG oriented SWOT analysis to identify leverage points, obstacles, and strategic orientations.

3. Results

Thematic analysis of the 15 structured interviews revealed significant insights pertaining to the ESG pillars of the GRI framework.

Environmental: Members recognized fundamental principles including integrated pest control and diminished chemical inputs. Nonetheless, environmental performance is not consistently monitored, and familiarity with formal measures (e.g., emissions, water consumption) is limited.

Social sustainability was recognized as the most robust domain. Participants highlighted the cooperative's function in guaranteeing equitable income, enhancing job opportunities, and cultivating communal solidarity. Still, systematic monitoring of social metrics was lacking.

Governance was characterized as participatory and transparent. Members indicated active participation in decision-making and confidence in the board. Sustainability has yet to be included into formal governance frameworks or strategic plans.

Table 1. Thematic Analysis Summary Table

Theme (GRI Pillar)	Sub-Theme	Key Quotes	Frequency (Percentage %)
Environmental	Pesticide and chemical use	'We try to use fewer pesticides now, only when necessary.'	40.0
Social	Community and employment impact	'The cooperative helps keep young people working in the village.'	60.0
Governance	Democratic participation	'Every member is encouraged to speak and vote in meetings—it's fair.'	66.7

Table 1. presents a key sub-theme from each ESG pillar, selected according to the highest frequency of references throughout the interviews, reflecting the most significant perceptions within each pillar.

The GRI-ESG aligned SWOT analysis indicates that ZAGORIN has robust social and governance

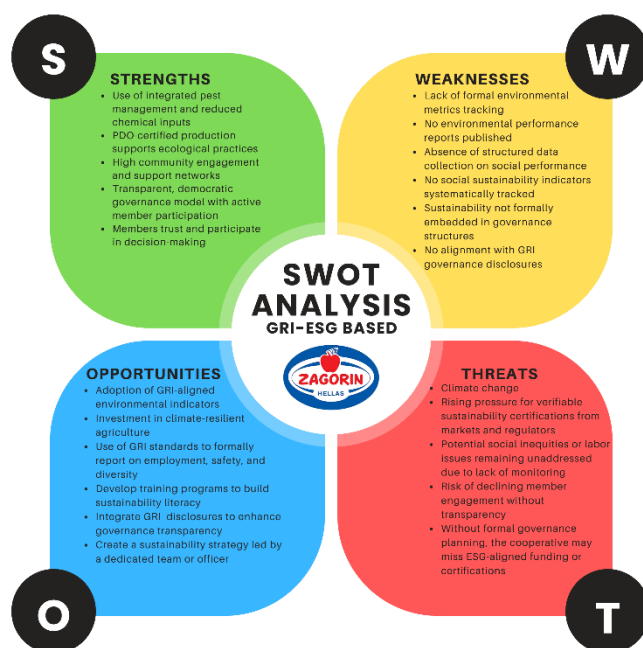


Figure 1. GRI-ESG Based SWOT Analysis of ZAGORIN

performance, especially in democratic engagement, community influence, and member confidence. The cooperative lacks established mechanisms for monitoring environmental and social indicators, hence restricting compliance with GRI requirements. There are opportunities to embrace systematic ESG reporting, establish sustainable governance, and improve climate resilience. Principal challenges include climate change, regulatory restrictions, and increasing market demand for authenticated sustainability credentials

4. Discussion and Conclusions

The results indicate that although ZAGORIN excels in social cohesiveness and participatory governance, it lacks structured environmental monitoring and ESG reporting mechanisms. This reflects an overall pattern observed in agricultural cooperatives, where social capital frequently surpasses formal sustainability efforts (Valentinov & Iliopoulos, 2021). Adopting GRI standards could bridge this gap by facilitating systematic data collection and enhancing stakeholder openness, particularly on emissions, water use, and social equality (Du Toit, E., 2024). Furthermore, formal ESG integration is becoming essential as global markets and legislative frameworks require traceable and verifiable sustainable performance (Ilori et al., 2023). Establishing ESG reporting will enhance its community-focused principles and establish ZAGORIN as a premier model of contemporary, sustainable agricultural cooperative in Greece and beyond.

The main message derived from the present case study is that cooperatives must evolve from informal, practice-oriented sustainability to transparent, data-driven strategies that are comparable.

References

- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82. <https://doi.org/10.1177/1525822X05279903>
- Ilori, O., Lawal, C. I., Friday, S. C., Isibor, N. J., & Chukwuma-Eke, E. C. (2023). A framework for environmental, social, and governance (ESG) auditing: Bridging gaps in global reporting standards. *International Journal of Social Science Exceptional Research*, 2(1), 231–248. <https://doi.org/10.54660/IJSSER.2023.2.1.231-248>
- Du Toit, E. (2024). Thirty Years of Sustainability Reporting: Insights, Gaps and an Agenda for Future Research Through a Systematic Literature Review. *Sustainability*, 16(23), 10750. <https://doi.org/10.3390/su162310750>
- Valentinov, V., & Iliopoulos, C. (2021). Social capital in cooperatives: An evolutionary Luhmannian perspective. *Journal of Evolutionary Economics*, 31(4), 1063–1087. <https://doi.org/10.1007/s00191-021-00744-5>
- Zagorin. (n.d.). *About the cooperative*. <https://zagorin.gr/synetairismos/>