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CSR ACTIVITIES CONSISTENT WITH CLUSTER MANAGEMENT STANDARDS

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Purpose: The utilitarian purpose of this article is to identify the links between cluster management standards and CSR areas and verification of compliance with CSR standards and areas based on quantitative data. The cluster management standards developed by PARP[1] and the CSR areas identified in ISO 26000 were used to achieve this goal.
Design/methodology/approach: Taking into account the description of the fulfillment of cluster management standards and the essence of each area of social responsibility, the mapping method arbitrarily assigned the fulfillment of a given cluster management standard to CSR areas.
Findings: The study reveals a notably high level of compliance among surveyed clusters with social responsibility standards, averaging 90% across seven CSR areas. Labor practices and community involvement and development received the highest scores at 96%, followed by consumer issues at 92%. Human rights and the environment each achieved commendable scores of 89%. Organizational governance and fair organizational practices scored 88% and 83%, respectively. These findings indicate that the surveyed clusters are actively engaged in socially responsible activities, as scores exceeded 80% in each CSR area. Additionally, the verification of PARP cluster management standards demonstrated a positive assessment for standard 3.5.1 (Corporate Social Responsibility) in 89% of clusters, affirming a growing commitment to CSR-related initiatives.
Originality/value: The primary value of this text lies in addressing a significant research gap concerning the intersection of CSR and economic clusters. The authors emphasizes the limited attention given to the concept of CSR within the context of clusters in the existing literature. The originality of the text is evident in its focus on the emerging field of CSR within clusters, identifying critical aspects such as trust, cooperation, competitiveness, sustainability, eco-innovation, openness, knowledge, and new value creation. The text positions itself as a pioneering effort to bridge this gap by proposing a quantitative analysis of CSR activities aligned with cluster management standards. This approach not only contributes to the understanding of CSR in a unique context but also offers a practical framework for assessing compliance with CSR standards within clusters.

[1] The Polish Agency for Enterprise Development (pl. PARP - Polska Agencja Rozwoju Przedsiębiorczości).

Keywords: cluster management standards, Corporate Social Responsibility, CSR activities, industrial cluster.

Category of the paper: research paper.

1. Introduction

With the development of the market and globalization, the approach to the role of business in society has changed. Organizations have become more aware that taking care of high quality products or services is no longer enough (Oliński, 2019). It has become a necessity to take actions related to with concern for the environment, relations with the local community or employees themselves (Knop, 2013). The creation of a new quality that takes into account the expectations of not only individuals, but all stakeholders, is becoming a requirement. Over the past few decades, the idea of corporate social responsibility (CSR) has evolved a great deal, and interest in the subject is now growing. The understanding of CSR and how it is implemented varies from country to country and from time to time, as different business environments have determined the pace of development of the concept. In fact, CSR is represented as an umbrella term covering a diverse range of issues, the importance of which for business performance at the global level continues to grow. In line with the concept of CSR, companies are changing their traditional economic goals, also focusing on environmental, social and ethical issues and aligning their mission, vision and strategy.

Today, no economic entity functions in complete isolation from other entities (Olko, 2017). The specific nature of economic processes means that they must enter into continuous formal or less formal relationships with other entities, institutions or organizations in vertical or horizontal arrangements (Skawińska, Zalewski, 2009). On the basis of these relationships it is possible to diagnose the forms of cooperation between enterprises. The degree of intensity of these relationships is particularly important when operating in specialized sector concentrations or agglomerations (Knop, Olko, 2008). In this context, particularly important in the last twenty years has become the concept of clusters. They are a form of self-organization of economic activities of independent, but interrelated, forming more or less spatially concentrated economic systems (Zaleśna, Predygier, 2021). The essence of the existence of clusters is to stimulate cooperation between entities operating within the cluster and the development of innovation processes, which is a new way of thinking of creating competitiveness of enterprises.

Cluster policy in the EU has been developing for almost 20 years. It now focuses not only on creating clusters, but also on improving those that are globally competitive and impact national economies. In 2008. The European Commission proposed the World Class Cluster concept to strengthen global competitiveness through better cluster policies, greater transnational cooperation and the integration of innovative SMEs into clusters (European

Commission, 2008). Strong clusters can develop into world-class innovation and business centers, based on high-quality R&D and education systems (Europa InterCluster, 2010) with active market and technology leaders (Ahlqvist, 2014). These clusters focus on integrating with global business, fostering new technologies and creating new industries (Büscher, Schierenbeck, 2012), which contributes to the development of regions and increases the competitiveness of companies, also bringing higher returns to investors (Meier zu Köcker et al., 2010).

Excellence in cluster management is a key element of European cluster programs. The introduction of the European Cluster Excellence Initiative (ECEI) and the quality label system further underscores this. With EU funding, quality labeling according to ECEI standards can support cluster managers in developing better cluster services, improving branding strategies and facilitating the acquisition of financing. This also improves methods of benchmarking, monitoring and impact evaluation (Christensen et al., 2012). The development of world-class clusters encompasses management across multiple levels, from policy to the actual functioning of clusters (Bialic-Davendra, 2011). The European Cluster Analysis Secretariat (ESCA) introduced cluster benchmarking as an effective tool for assessing potential and providing strategic suggestions for their development (European Secretariat for Cluster Analysis, 21.12.2023). Management quality is determined through three quality labels: bronze, silver, and gold certificates, awarded after comparative analysis of structures, processes, products, and services. Benchmarking serves the purpose of learning from better-performing clusters or entities to enhance one's own structures, processes, products, and services. This certification system is recognized throughout Europe as a credible standard for cluster management (Młodzianowski, Rostek, 2017). The benchmarking process involves a conversation with the cluster coordinator, focusing on 28 indicators divided into four main groups: structure, management and strategy, services and activities, achievements and distinctions.

The Polish Agency for Enterprise Development (PARP), which focuses on cluster development in Poland, conducted research leading to the formulation and publication of cluster management standards in 2014. These standards delineate the desired characteristics for managing and operating cluster coordinators. The aim of publishing these standards is to elevate the quality of cluster management and provide interested parties with tools for diagnosing cluster management processes, identifying shortcomings, and enabling corrective actions. These developed standards also aim to professionalize the role of cluster coordinators, enhancing their prestige and credibility within the environment (Bembenek, 2016). The research resulted in identifying five main areas: organization, resources, processes, services for cluster members, and collaboration with the environment. Within these areas, there are sub-areas (a total of 19), each assigned specific standards (36 standards in total) (Piotrowski, 2014).

The relevance of addressing the topic of social responsibility in clusters firstly stems from the research gap that exists in the literature. In the literature, researchers have been dealing with the concept of CSR in relation to clusters for a relatively short time. As the bibliometric analysis of the two areas has shown, not many works related to social responsibility in clusters have been produced so far. No publication on socially responsible activities in the context of clusters has been reported in the Web of Science and Scopus databases. The concept of CSR takes into account society's expectations of businesses in economic, legal, ethical and philanthropic aspects. CSR is also responsible for the behavior of those who cooperate with an enterprise, so it can be analyzed in relation to clusters and cluster members. In analyzing these two areas, it is important to note several aspects that, according to the authors, link the issues of clusters and CSR. These include trust, cooperation, competitiveness, sustainability, eco-innovation, openness, knowledge and new value creation. Thus, it becomes important to study CSR activities in line with cluster management standards and verification of compliance with CSR standards and areas based on quantitative data, which is the main objective of this article.

2. Methods

To achieve the main objective of this article, the cluster management standards developed by PARP and the CSR areas indicated in the ISO 26000 standard were used. The last verification of the cluster management standards was carried out in 2016 on a sample of 64 clusters (Buczyńska, Frączek, Kryjom, 2016). The sample for the study was selected based on criteria such as regional diversity of clusters, number of cluster entities, year of cluster formation, participation in projects, sectoral diversity of the cluster (Frączek, Kryjom, 2016). Evaluation of the degree of fulfillment of individual standards was carried out during a meeting at the cluster's headquarters, with the participation of an external expert and at least two cluster representatives, i.e. the cluster coordinator and cluster members. The assessment was conducted on the basis of the coordinator's self-evaluation tool and had a zero-one character ("meets" or "does not meet" a given standard). Depending on the stage of development of a given cluster (embryonic, development, maturity), the standards were either mandatory or optional. A positive assessment of the fulfillment of cluster management standards depended on the final assessment of all mandatory standards for a given phase of cluster development. After each completed meeting, the verification expert filled out a meeting information sheet, which served as a carrier of information about the course and results of the meeting. This card also formed the basis for the analysis on the basis of which the cluster management standards verification report was prepared. It is worth noting, that clusters that obtained the status of a KKK[2] did not

[2] National Key Cluster – KKK (pl. KKK – Krajowy Klaster Kluczowy).

participate in the verification of compliance with the standards, as they were subject to the competitive evaluation of the KKK in a separate procedure (Kępka, Kacperek, 2017).

3. Results

Taking into account the description of the fulfillment of cluster management standards and the essence of each area of social responsibility, the mapping method arbitrarily assigned the fulfillment of a given cluster management standard to CSR areas. The results of the study are presented in Table 1.

Table 1.
Identify links between cluster management standards and CSR areas

CSR areas / **Cluster management standards**			**Organizational governance**	**Human rights**	**Labour practices**	**The Environment**	**Fair operating practices**	**Consumer issues**	**Community involvement and development**	**SUM**
1. Organiza-tion	1.1. Organiza-tional basis of operation	1.1.1. Defined scope of responsibilities and powers of the coordinator	X							1
		1.1.2. Organizational structure of the cluster	X							1
		1.1.3. The coordinator has an up-to-date database of cluster members	X							1
		1.1.4. Preventing conflicts of interest in the cluster					X			1
	1.2. Action strategy	1.2.1. Current cluster development strategy	X							1
		1.2.2. The coordinator's activity is consistent with the provisions of the documents establishing the cluster and with the current strategy	X							1

Cont. table 1.

2. Resources	2.1. Financial resources	2.1.1. Financial plan								
		2.1.2. A sustainable source of financing for the cluster								
		2.1.3. Transparency of financial operations and compliance with the financial plan					X			1
	2.2. Infrastructure	2.2.1. Permanent access to a separate office space			X					1
		2.2.2. Availability of laboratory/ research infrastructure for cluster members								
	2.3. Human resources and information	2.3.1. Human resources at the coordinator's disposal								
		2.3.2. The coordinator has an up-to-date database of identified resources and competences in the cluster	X							1
		2.3.3. The coordinator actively improves his skills and related competencies with cluster management			X					1
3. Processes	3.1. Marketing and PR	3.1.1. Common visual identification system						X		1
		3.1.2. The coordinator initiates and supports fair and exhibition activities								
	3.2. Internal communi-cation	3.2.1. Use of various tools and forms of communication								
		3.2.2. Taking actions to integrate members			X				X	2
		3.2.3. Established thematic and/or working groups								

Cont. table 1.

	3.3. Cluster development	3.3.1. Conducting monitoring and evaluation of activities in the implementation of the strategy	X							1
		3.3.2. Conducting activities aimed at acquiring new cluster members							X	1
		3.3.3. The coordinator has an implemented quality management system	X							1
	3.4. R&D activities and innovative, technology transfer	3.4.1. Supporting innovative processes in the cluster								
	3.5. The principle of sustainable development	3.5.1. Corporate Social Responsibility (CSR)	X	X	X	X	X	X	X	7
4. Services for cluster members	4.1. External financing	4.1.1. Obtaining external sources of financing								
	4.2. Market activity	4.2.1. Supporting cluster members in terms of existing value chains							X	1
		4.2.2. Supporting cluster members in terms of existing value chains								
	4.3. Exchange of experiences and networking/ matchmaking	4.3.1. The coordinator conducts the activities in the area of networking and matchmaking			X				X	2
	4.4. Human resources development	4.4.1. The coordinator conducts activities to develop the skills and knowledge of its members			X					1
	4.5. Inter-nationali-zation	4.5.1. Coordinator services in the field of inter-nationalization support								
		4.5.2. Multilingual information about the cluster								

Cont. table 1.

5. Cooperation with the surroundings	5.1. Cooperation with local government units	5.1.1. Coordinator cooperates in a lasting way with local government units							X	1
	5.2. Cooperation with scientific units and business environment institutions	5.2.1. Coordinator cooperates in a lasting way with scientific units							X	1
	5.3. Cooperation with other cluster coordinators	5.3.1. Coordinator cooperates in a lasting way with coordinators their clusters							X	1
	5.4. Cluster recognition and achievements	5.4.1. Presence in media								
		5.4.2. Recognition of the cluster by organizations creating cluster policy								
		SUM	9	1	6	1	3	2	8	

Source: Own study.

According to Table 1, 22 of the 36 cluster management standards were identified, which, according to the authors, are related to the areas of social responsibility. Taking into account the 5 main areas of the analyzed standards, from the area of organization, all 6 standards were selected as related to CSR. In sub-area 1.1. organizational basis of operation, four standards were selected. Three of them, i.e. the defined responsibilities and improvements of the coordinator, the organizational structure of the cluster, and the coordinator has an up-to-date database of cluster members were assigned to the CSR organizational governance area. The fourth standard, prevention of conflicts of interest in the cluster, was assigned to organizational integrity practices. On the other hand, from the sub-area of operating strategy, two standards were indicated, i.e. the current cluster development strategy and the coordinator's activities are in line with the provisions of the cluster's founding documents and the current strategy, which were combined with the organizational governance area.

In the area of resources there are three sub-areas. The first is financial resources, of which only one standard - transparency of financial operations and compliance with the plan, which was linked to fair organizational practices. The second sub-area is infrastructure, where also only one standard - permanent access to office space - was found to be socially responsible (labor practices area). The last sub-area is human and information resources, from which two standards corresponding to CSR areas were identified. Item 2.3.2. the coordinator has an up-to-date database of identified resources and competencies in the cluster, which was linked to the area of organizational governance, and standard 2.3.3. the coordinator actively improves his skills and competencies - the area of labor practices of the field of work.

The third area is processes, which consists of five sub-areas. The first is marketing and PR, which identifies standard 3.1.1. common corporate identity system as meeting CSR area six. The second sub-area is internal communications, which also identified only one standard - taking action to integrate members. This standard was the first to qualify for two CSR areas, i.e. labor practices and community involvement and development. In sub-area three (cluster development), all standards were counted as those that correspond to the selected areas of social responsibility. Standard 3.3.1. conducting monitoring and evaluation of activities in the implementation of the strategy and 3.3.3. the coordinator has a quality management system in place were counted as an area of organizational governance, while the standard conducting activities to attract new cluster members is the seventh CSR area. No standard was identified in sub-area 3.4 R&D activities. Sub-area 3.5. principle of sustainable development, in which there is only one standard, Corporate Social Responsibility, became key in the analysis. Due to the convergence of the objectives of this standard and the analysis carried out, standard 3.5.1 was the only one assigned to all CSR areas.

In the fourth area of services to cluster members, there are 7 standards, 3 of them are assigned to two areas of social responsibility. The first 4.2.1. supporting cluster members in existing value chains (sub-area market activity) is the last CSR area, as is the standard. Standard 4.4.1. the coordinator conducts activities to develop the skills and knowledge of its members is an area of labor practices. The last standard is 4.3.1. the coordinator conducts activities in the area of networking and matchmaking, which was linked to both of the above CSR areas.

The last area assigned by PARP is cooperation with the environment, in which 3 standards were selected. All of them were assigned to the last CSR area - social engagement and community development. These standards include: 5.1.1. the coordinator Permanently cooperates with local government units, 5.2.1. coordinator sustainably cooperates with scientific units, 5.3.1. the coordinator sustainably cooperates with coordinators of other clusters.

Summarizing the data in Table 1, only 3 standards were included in more than one area of CSR. Standard 3.5.1. covers all areas of social responsibility, standard 3.2.2. taking action to integrate members - the area of labor practices and social engagement, standard 4.3.1. the coordinator conducts activities in the area of networking and matchmaking, the same two areas of CSR. On the other hand, analyzing the CSR areas, the highest number of standards concerned organizational governance (9 standards) and the area of social involvement and community development (8 standards). A minimum of one standard was assigned to each of the seven CSR areas. The areas with the least number of standards included human rights and the environment. Two standards were assigned to the area of consumer issues, and three standards to fair organizational practices. The last area is labor practices, with the number of six standards. The above analysis showed that it is possible to match cluster management standards with areas of social responsibility.

Based on the results of the survey of the fulfillment of cluster management standards developed by PARP and the links indicated in Table 1, the fulfillment of the extracted standards was compared with the CSR areas. Table 2 presents the percentage score for each standard, a score of 100% means the fulfillment of a given cluster management standard in all 64 clusters. Figure 1 presents the percentage summary results of the level of fulfillment of cluster management standards assigned to CSR area.

Table 2.
Verification of fulfillment of CSR areas resulting from cluster management standards

Cluster management standards \ **CSR areas**			**Organizational governance**	**Human rights**	**Labour practices**	**The Environment**	**Fair operating practices**	**Consumer issues**	**Community involvement and development**
1. Organization	1.1. Organizational basis of operation	1.1.1. Defined scope of responsibilities and powers of the coordinator	98%						
		1.1.2. Organizational structure of the cluster	98%						
		1.1.3. The coordinator has an up-to-date database of cluster members	95%						
		1.1.4. Preventing conflicts of interest in the cluster					92%		
	1.2. Action strategy	1.2.1. Current cluster development strategy	83%						
		1.2.2. The coordinator's activity is consistent with the provisions of the documents establishing the cluster and with the current strategy	94%						
2. Resources	2.1. Financial resources	2.1.3. Transparency of financial operations and compliance with the financial plan					69%		
	2.2. Infrastructure	2.2.1. Permanent access to a separate office space			98%				
	2.3. Human resources and information	2.3.2. The coordinator has an up-to-date database of identified resources and competences in the cluster	89%						
		2.3.3. The coordinator actively improves his skills and related competencies with cluster management			95%				

Cont. table 2.

3. Processes	3.1. Marketing and PR	3.1.1. Common visual identification system						94%	
	3.2. Internal communi-cation	3.2.2. Taking actions to integrate members			100%				100%
	3.3. Cluster develop-ment	3.3.1. Conducting monitoring and evaluation of activities in the implementation of the strategy	75%						
		3.3.2. Conducting activities aimed at acquiring new cluster members							97%
		3.3.3. The coordinator has an implemented quality management system	73%						
	3.5. The principle of sustainable develop-ment	3.5.1. Corporate Social Responsibility (CSR)	89%	89%	89%	89%	89%	89%	89%
4. Services for cluster members	4.2. Market activity	4.2.1. Supporting cluster members in terms of existing value chains							97%
	4.3. Exchange of experiences and networking /matchmaki ng	4.3.1. The coordinator conducts the activities in the area of networking and matchmaking			94%				94%
	4.4. Human resources develop-ment	4.4.1. The coordinator conducts activities to develop the skills and knowledge of its members			98%				
5. Coopera-tion with the surround-ings	5.1. Coopera-tion with local govern-ment units	5.1.1. Coordinator cooperates in a lasting way with local government units							95%
	5.2. Coopera-tion with scientific units and business environ-ment institutions	5.2.1. Coordinator cooperates in a lasting way with scientific units							97%
	5.3. Coopera-tion with other cluster coordina-tors	5.3.1. Coordinator cooperates in a lasting way with coordinators other clusters							95%
		AVERAGE	**88%**	**89%**	**96%**	**89%**	**83%**	**92%**	**96%**

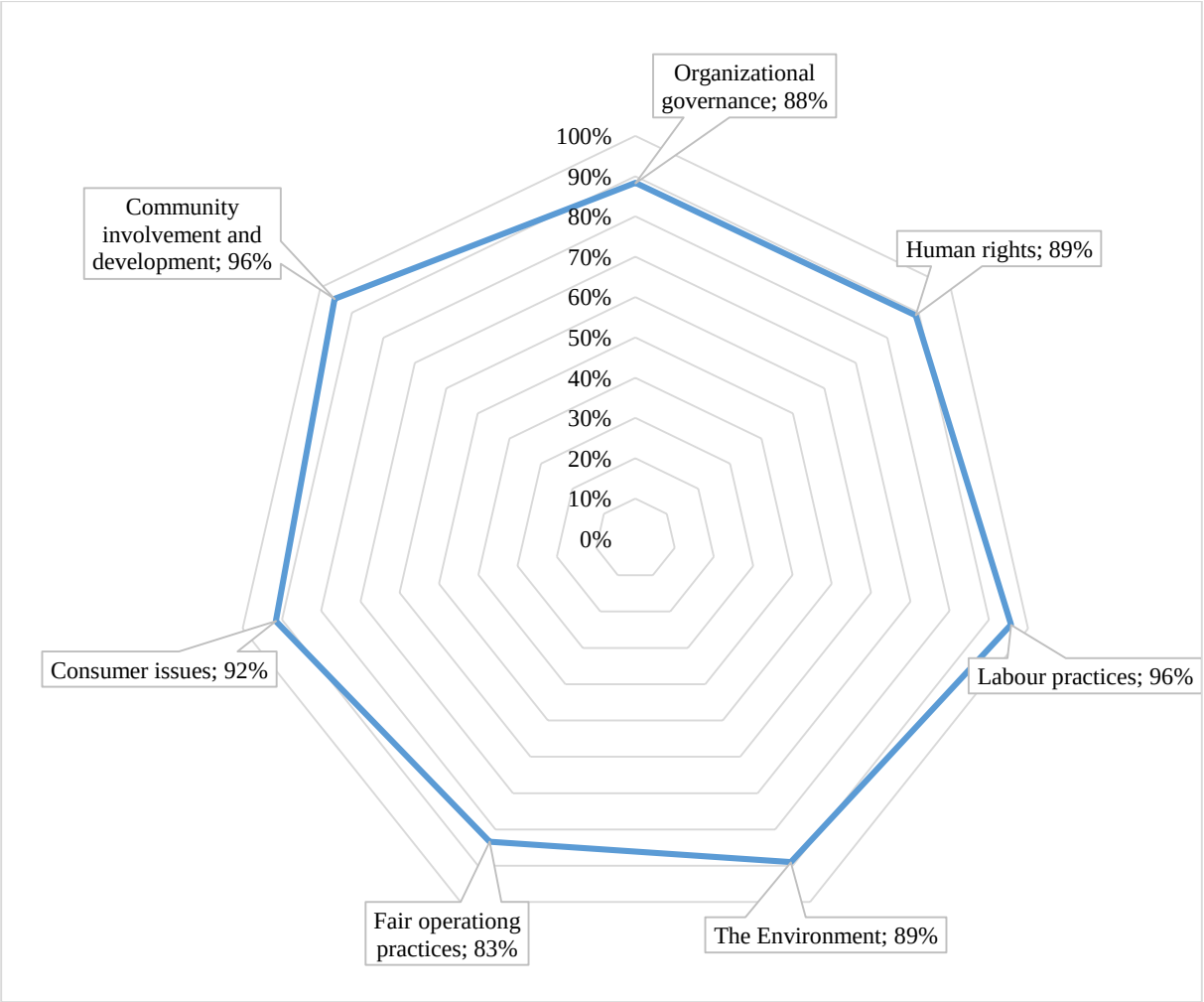

Figure 1. Level of fulfillment of cluster management standards assigned to CSR areas

Source: Own study.

The overall level of compliance of the cluster's management standards with the areas of social responsibility is very high. The average for all seven CSR areas is 90%. The highest score of 96% was given to two areas, namely labor practices and community involvement and development. Another area with a very high score was consumer issues, with 92%. This was followed by the areas of human rights and the environment, each receiving 89%. The lowest scores were recorded for the areas of organizational governance - 88% and fair organizational practices - 83%. Thus, it can be concluded that the surveyed clusters are socially responsible. In each of the seven CSR areas, the score was above 80%, indicating that clusters are highly engaged in socially responsible activities. Moreover, verification of the fulfillment of PARP cluster management standards showed, that standard 3.5.1 Corporate Social Responsibility was positively assessed for 57 clusters, which is 89% of the surveyed clusters. This result also confirms that clusters are increasingly and willingly undertaking activities related to CSR areas. The above analysis allowed us to achieve the main objective of this article which was to identify the links between cluster management standards and CSR areas, and to verify the fulfillment of CSR standards and areas based on quantitative data.

4. Conclusion and discussion

Clusters, in order to reap the benefits of cooperation, must trust their partners. This approach allows for synergies and the creation of new value. One of the benefits of clusters is the promotion of regional development and the building of a competitive advantage for businesses. Buoyant development of the business sector means increasing employment, decreasing unemployment and, consequently, higher wages for residents, which realizes the goal of regional development. On the other hand, cluster development can support the implementation of the principle of sustainable development at the regional level. Clusters also contribute to the development of local labor markets, they take care of the development of the local community which, according to the authors, coincides with the areas of CSR. Factors conducive to the implementation of CSR concepts in the cluster include building the cluster brand, gaining the trust of investors and the local community, as well as increasing the negotiating power of the cluster in the international arena. However, such activity may have negative consequences, such as skepticism of cluster coordinators, reluctance to cooperate in joint activities and invest in CSR, or prioritization of economic factors.

In conclusion, the analysis of cluster management standards in relation to Corporate Social Responsibility (CSR) areas reveals a substantial alignment between the two domains. A total of 22 out of the 36 identified cluster management standards are associated with CSR, distributed across seven key areas. Organizational governance emerges as the most prominent category, encompassing nine standards, followed closely by social involvement and community development with eight standards. Examining the distribution of standards within CSR areas, it is evident that labor practices and community involvement and development exhibit the highest fulfillment levels, both achieving an impressive 96%. Consumer issues closely follow with 92%, while human rights and the environment both score 89%. Organizational governance and fair organizational practices, though slightly lower, still maintain strong scores of 88% and 83%, respectively. The overall compliance of cluster management standards with CSR areas is remarkably high, averaging 90% across all seven categories. This suggests a pervasive commitment among the surveyed clusters to socially responsible practices. Notably, the analysis underscores the positive reception of standard 3.5.1 (Corporate Social Responsibility) across 89% of the surveyed clusters, indicating a growing inclination toward CSR-related activities.

In the presented cluster management standards in the paper, CSR is present as a basis outlined in strategic documents and as an applied operational practice. Also, the assessment criteria for KKK partly refer to the cluster's social actions, cooperation, and relations with the environment. It is assumed that engaging in CSR activities not only increases the cluster's recognition but also indicates its significant commitment to the issues of the local community,

that is, the environment in which the cluster operates. The conducted research allowed for determining the level of compliance with cluster management standards assigned to CSR areas.

In essence, the study successfully achieves its primary objective of establishing links between cluster management standards and CSR areas. The robust quantitative data presented in Tables 1 and 2 and Figure 1 not only highlight the convergence between these two domains but also validate the clusters' proactive engagement in socially responsible initiatives. This result confirms that Polish clusters that have met cluster management standards are increasingly and more willing to undertake activities related to CSR areas. This insight contributes to a broader understanding of the integration of CSR principles within cluster management practices, emphasizing the increasingly vital role that clusters play in fostering sustainable and socially responsible development.

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