

## Article

# The Sustainable Production and Well-Being of Employees as a Derivative of the Concept of Sustainable Production

Przemysław Niewiadomski <sup>1</sup> and Agnieszka Stachowiak <sup>2,\*</sup> 

<sup>1</sup> Faculty of Economics and Management, University of Zielona Góra, 50 Podgórna Str., 65-417 Zielona Góra, Poland; p.niewiadomski@wez.uz.zgora.pl

<sup>2</sup> Faculty of Engineering Management, Poznan University of Technology, 2 J. Rychlewskiego Str., 60-965 Poznan, Poland

\* Correspondence: agnieszka.stachowiak@put.poznan.pl

**Abstract:** The main purpose of this work is to indicate the effects of the implementation of the concept of sustainable production from the perspective of the employee's well-being. The subject of the research was manufacturers operating in the agricultural technical means of transport sector (production of parts and subassemblies). The research leads to the identification of benefits from the well-being of employees resulting from the implementation of the concept of sustainable production, described in the literature, that should be included in the evaluation model in the analysed sector (research question 1). Moreover, it enables the recognition of benefits resulting from the well-being of employees in the surveyed enterprises (level of fulfilment) and shortcomings highlighted by the companies surveyed in the category of benefits resulting from the well-being of employees (low level of fulfilment). The results of this work are the list of benefits structured into categories and assessed by the representatives of agricultural means of transport manufacturers. The list is useful from both academic and utilitarian perspectives.

**Keywords:** sustainable development; sustainable production; sustainable manufacturing; employee well-being; agricultural technical means of transport sector; method of competent judges



**Citation:** Niewiadomski, P.; Stachowiak, A. The Sustainable Production and Well-Being of Employees as a Derivative of the Concept of Sustainable Production. *Sustainability* **2024**, *16*, 465. <https://doi.org/10.3390/su16010465>

Academic Editors: Gianpiero Greco, Kittisak Jermstittiparsert, Petra Heidler, Roy Rillera Marzo and Ahmad Harakan

Received: 13 September 2023

Revised: 20 December 2023

Accepted: 28 December 2023

Published: 4 January 2024



**Copyright:** © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

The growing number of requirements for operating conditions [1] of production enterprises induces changes in management processes and inspires the desire for comprehensive concepts that mainly include quality criteria. Therefore, managers, supported by consultants and academics and using their experience, search for alternative management concepts and methods, the overriding goal of which is improvement. One of these concepts is sustainable development. Development-oriented contemporary production companies, responding to the needs of various customers, must shape and maintain a stable production system (sustainable from the continuity perspective) that combines the assumptions of mass and unit production and strive for the implementation of balanced goals searching for equilibria between economics, ecology, and social responsibility (sustainability from holistic and ecological perspectives). Therefore, it becomes justified to develop dedicated solutions that streamline and coordinate the design of variant products to shorten the manufacturing process time, limit the resources used and waste generated, and ensure the appropriate quality of the product. More so, production, as one of the more complex organisational systems, is characterised by specificity and, in particular, by the number of problems in management. According to the authors, such a point of view confirms that the topic of sustainable production is an area in which research should be carried out, especially since the list of factors affecting sustainable functioning is getting longer, more and more often including employee well-being [2,3].

Therefore, in recent years, the design of production systems has been dominated by the concept of sustainable manufacturing, in which innovation, flexibility, and the ability to

quickly adapt to new conditions are important. It is based on producing as many goods as possible that can be sold at the lowest possible cost (while adhering to the principles of inventory optimisation). Therefore, it consists of creating a flexible system that responds to the client's needs. This approach to organising activities is not only rational but also modern. Therefore, the issue of building sustainable development strategies is largely based on product innovations and their implementation systems and adjusting the new production organisation to these solutions.

Sustainable manufacturing can effectively influence every aspect of company operation. It is a strategy that consists in avoiding losses and maximising efficiency, as well as streamlining processes through the use of modern technologies. It aims to achieve lasting success, create value for the entire business environment, and ensure a fair distribution of profits between market participants. The advantages of using and implementing this method include saving time and money, broader perspectives for the organisation, greater flexibility and innovation, and better relations with the social and economic environment. Sustainable development can be achieved while respecting the interests of employees, the local environment, and the global environment [4,5]. However, it depends on the knowledge, experience, and creativity of the employees, as well as their access to information.

In connection with the above, research was carried out, the main purpose of which was to indicate the effects (benefits) of the implementation of the concept of sustainable production from the perspective of the well-being of employees. The research was conducted in the agricultural technical means of transport sector (production of parts and subassemblies).

This article consists of two parts, that is, methodological and empirical. Using the method of reconstructing and interpreting the literature on the subject—supported by practical experience, participating observation, and creative discussion among deliberately selected experts (method of competent judges)—in the first part of the article, an evaluation questionnaire was designed, referring to the key areas of postulated benefits. In the empirical dimension (part two of the publication), the authors' intention was to determine to what extent, thanks to the implementation of the postulates of sustainable production, the defined benefits are achieved by the surveyed enterprises.

The importance and complexity of the sustainable development concept justify the selection of sustainable production from the perspective of employee well-being as a subject of research. Moreover, according to the authors, the study, although to a minimal extent, should help managers make the optimal choice of human-orientated management concepts.

During numerous meetings with representatives of business practice, the authors asked numerous questions about the effects (benefits) that significantly determine the willingness to implement the concept of sustainable production. This is dictated by the fact that the concept of sustainable production has undoubtedly practical meaning. Enterprises are increasingly faced with the dilemma of whether to focus on mass production or reorient their key resources towards highly customised production.

The complexity of the description and quantification of existing conditions in the field of sustainable production makes this issue an important problem, both theoretical and practical, affecting management and business owners, especially those who see the need for sustainable functioning. That is why work aimed at filling the existing knowledge gap is so important. In the context of the above, the authors decided to conduct a series of studies, the subject of which was an attempt to define the factors determining the desire of companies to implement a concept based on human well-being, and significant goals must be subordinated to human well-being.

Assuming that the employee's well-being has a significant impact on the level and pace of development of the enterprise, the concept of sustainable organisation is referred to as material production, where the manufacturing process is carried out using modern techniques and production technology and a developed division of labour. The study refers to production companies related to the agricultural machinery sector (technical means of agricultural transport) because, primarily, such institutions have been the objects of the authors' research so far (sectoral specialisation). Their results were presented in separate

publications and reports on their own research. While articulating the issues of sustainable production, it should be emphasised that they are fragmentary and do not yet constitute a full verification of the concept presented in the project entitled “Assessment of the readiness of production enterprises for the implementation of the postulates of sustainable production of technical parts and subassemblies of agricultural means of transport”.

The assessment of readiness to implement the postulates of sustainable production, an attempt to base the improvement direction on this concept, requires the development of a set of boundary conditions and assumptions and their appropriate management. However, such a concept needs to be adapted to the specifics of a particular sector. However, so far, no research work has been carried out to organise and develop in a comprehensive way the issues related to the assessment of sustainable production postulates, especially in the context of production companies operating in the agricultural machinery sector.

The authors’ conviction that there is an economic demand for application results was the key inspiration to undertake research. In particular, cognitive processes create, process, and use knowledge to solve specific problems, they are the basic resource for solving all problems of acting individuals and teams of people. They are the basis and a key resource for solving management problems in enterprises.

The main purpose of this work is to define the benefits resulting from the implementation of the concept of sustainable production in the context of the well-being of employees from the perspective of Polish production companies operating in the agricultural machinery sector (specialisation: production of parts and technical subassemblies for means of agricultural transport). The key aspect of the concepts presented in the work is their consideration at the individual and enterprise levels. When writing about the effects, the authors mean the level of a specific parameter (employee well-being) which is the key to explaining the phenomena at the level of the entire implementation process of the concept of sustainable production.

Accomplishment of the main goal requires the formulation and implementation of theoretical (cognitive), methodical, and practical partial goals.

The cognitive goals included producing a catalogue of benefits and definitions reflecting them, significantly articulated in the literature on the subject. The methodological purposes included specifying the procedure for forming the key parameters from the research point of view and the mechanism for determining their hierarchy. The practical goal is to provide opinions on the individual categories of benefits to compile suggestions for companies that want to improve. In the context of the conducted analyses, research questions were formulated, such as the following:

- What benefits resulting from the well-being of employees, resulting from the implementation of the concept of sustainable production, described in the literature, should be included in the evaluation model in the analysed sector?
- What benefits resulting from the well-being of employees are articulated by the surveyed enterprises (level of fulfilment)?
- What shortcomings are highlighted by the companies surveyed in the category of benefits resulting from the well-being of employees (low level of fulfilment)?

The research questions presented above indicate that the subject of the argument is the benefits resulting from the well-being of employees, and the object to which they will be related is the concept of sustainable production. Although the concept refers to a production company operating in the agricultural machinery sector, the evaluation model presented (especially in the design layer) can be applied to different industries, companies of various sizes, and operating models, so it can be considered universal.

## 2. Research Methodology

### 2.1. Research Thesis

The decision made by the authors requires consideration of what constitutes a reliably established and correctly interpreted factual basis. This means that the two levels require a clear separation, namely (1) the reality reconstructed as part of the research process, which

consists of a properly selected fragment of its assessment, and (2) the assessment of this reality made according to the criteria developed at the theoretical and cognitive levels.

The subjects of evaluation of the research procedure are factors defined in the category of benefits, while their evaluation requires the separation (selection) of a fragment of reality, as well as reference to its external and internal sides. The authors are therefore responsible for what has been defined (its ontic basis) and at the same time have been subjected to normative evaluation decisions resulting from the adopted axiology.

The factual layer concerns the already existing reality, independent of the authors, which should not be created but should be reconstructed as precisely as possible. It should be remembered that the fact that objectively occurred in the context of the procuring of a research model, which became the subject of discussion by competent judges, is one thing, and its subjective verification, carried out in the mind of the respondent, is another.

The subject of the authors' presumption is therefore an element of the ex post reconstructed image of reality. Although it is possible for the authors to make assumptions and evaluate this element on this basis, they deliberately do not formulate hypotheses. However, the alleged fact, on the basis of reasoning carried out with the indicated methodological rigour, is considered sufficiently probable to be treated as an element of the reconstructed reality (of which the authors are convinced) and will not become the subject of any more or less probable suppositions (presumptions) but will be a natural consequence of the application of normative criteria; it may take the form of a research thesis. Therefore, it was assumed that the existence of an unstated fact exists on the basis of other established facts in connection with it, as follows:

- The research model developed as a result of the expert discussion reflects the values that are also significantly indicated by the surveyed enterprises.
- An expert assessment sheet reflects selected values articulated in the literature on the subject.
- It is possible to diagnose the benefits that imply the legitimacy of implementing the concept of sustainable production.

The goal and scope of the investigation imposed a specific logic of the argument, expressed in the structure of the submitted study. The main part of the work consists of chapters, the arrangement of which corresponds to the adopted goals of the conducted research.

## 2.2. Research Procedure

In the work layer submitted, a three-stage research procedure was used, the diagram of which is shown in Figure 1.

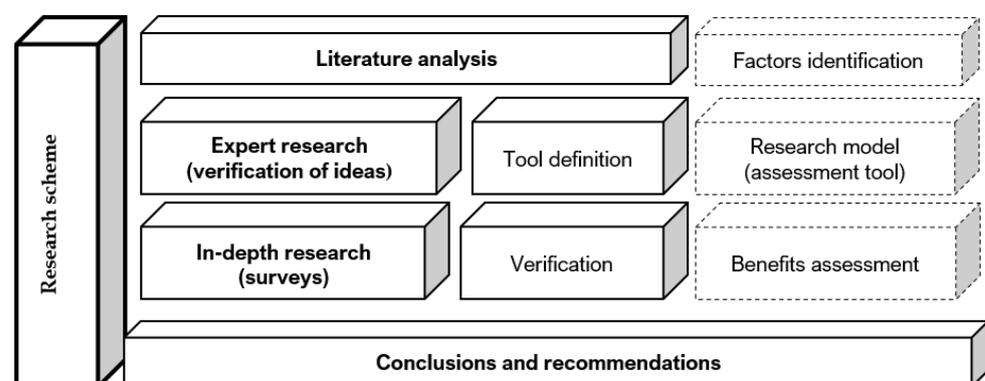


Figure 1. Research scheme (own work).

Figure 1 presents the three-stage approach that starts with literature analysis. The analysis included 81 papers on sustainability and well-being. The question that was to be answered with the literature review was "What well-being factors are recognised and

appreciated in the companies that follow the sustainability principles in manufacturing processes and implement the sustainable development concept in management?”

The second stage was the verification of the factors identified in the literature. The method implemented was expert research (competent judges' method). The experts were asked to group and cluster factors extracted from the literature to enable the development of a research tool, a questionnaire to be answered by representatives of the analysed sector. The experts were representing the Polish agricultural machinery sector.

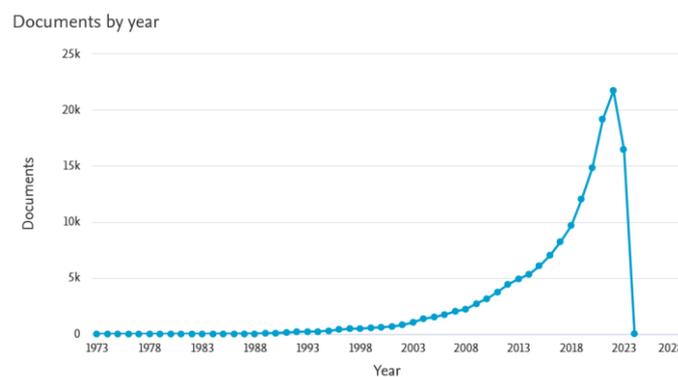
The third stage was in-depth research conducted among the representatives of the analysed sector (agricultural machinery sector in Poland) to recognise the benefits of sustainable development implementation from the employees' well-being perspective. The conclusion and recommendations formulated are useful from the academic perspective, filling the research gap (no recognised research in the sector), and from the utilitarian perspective, proving the benefits of sustainability in the social context.

Data sources used in the research were reliable and cross-checked for consistency with the research area. The data were collected in the last 6 months, which makes them valuable and reflects the current economic situation, together with the opportunities and challenges businesses are facing these days. Hence, the data set obtained is useful due to its consistency and accuracy. The well-thought-out research realisation scheme and expert proving tools enabled high-quality conclusions and recommendation definitions.

### 3. Results

#### 3.1. Literature Review

The literature explores the topic of sustainability in many contexts, and sustainable production is one of them. To recognise the knowledge on the topic, the Scopus base was used. The authors decided to use a multidisciplinary database, as they support the objectivity of the review through the indexing of academic journals from numerous disciplines. Discipline-specific databases and publishers' databases were not used directly; however, they are crucial for retrieving the full texts of articles. In the Scopus base, there are more than 150 thousand documents on sustainable production (in titles, abstracts, and keywords), and the number is growing, which shows a growing interest in the topic (as presented in Figure 2).

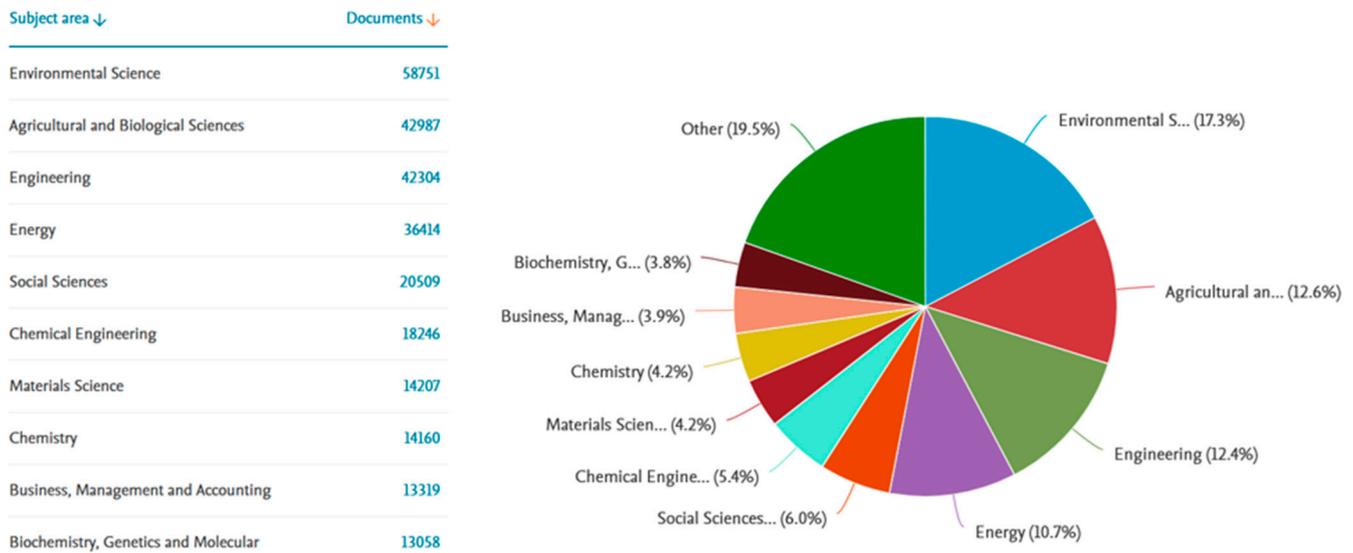


**Figure 2.** Number of documents on sustainable production per year (Scopus database).

The publications are set in various areas, including environmental science, agricultural and biology science, and business and management sciences (as presented with some approximation in Figure 3).

However, the number of publications focused on the well-being aspect is less than 10% of the total number of publications (over 1400), and only 81 of them tackle production companies as an environment in which the well-being of employees is assessed and improved, and none of them refer to companies that manufacture parts and subassemblies for agricultural transport means. That makes the research problem important (due to the growing number of publications on sustainable production) and original, because of the

limited research focused on the specific sector. Hence, as the manufacturing parts and components for agricultural transport means have not been analysed so far, we decided to explore this sector.



**Figure 3.** Number of documents on sustainable production per subject area (Scopus database).

The sector is specific as it, on the one hand, addresses its products to individual customers (farmers) and, on the other, offers very expensive and complex products. In Poland, problems resulting from natural causes (drought, animal diseases), unfavourable relations between the purchase prices of agricultural produce and slaughter animals and the costs of purchasing means of production for agriculture, and the free flow of EU support under the Rural Development Program (RDP) led to the deterioration of the financial condition of many farmers, resulting in modest investments in machinery. This fits into the broader context of deteriorating prospects for the Polish economy against the background of the upcoming slowdown in growth. Farmers' interest in purchasing new machines is related to two issues: their wealth and the costs of purchasing agricultural production means (machines and tools, construction materials, energy carriers, fertilisers, etc.), and the latter seems unfavourable as well, which is caused, among others, by the rising prices of steel. Moreover, agricultural machinery has a comparatively long life cycle (over 20 years) which results in rare purchases. The slower inflow of EU support combined with the lower financial possibilities of farms means that some farmers prefer to refrain from large purchases of machinery for now. Hence, manufacturers of agricultural transport means, parts, and components are focused on financial stability and economic aspects, including the limitation of resources used and waste generated. That naturally results in the implementation of sustainable development principles and a sustainable approach to management.

To explore the benefits of sustainability and their relations with the well-being of employees, a literature review was conducted.

The first research technique chosen to collect primary data focused on its development was the reconstruction and interpretation of the literature on the subject. Such actions in the design dimension made it possible to compile a general catalogue of parameters constituting the basis for the design of the research tool in the form of an assessment questionnaire. Therefore, it was decided to extend the process of creating the literature database with the so-called grey literature. It was considered important to include recent scientific publications as well as publications of a less scientific nature. The literature review was carried out in three stages, starting from (1) creating a literature database, (2) selecting the works included in the next analysis, and ending with (3) critical content analysis [6]. Taking into account the perceptual and time capabilities of the authors, as well as the

existing limitations in practice, it was decided that the publications that most significantly reflect the definition problem in question would be included in the final database.

In-depth analysis of the literature allowed not only a formalised and objective synthesis of scientific achievements achieved so far or the evaluation of research conducted so far and presented, among others, in [6–13], but above all, it enabled the identification of areas both explored and unexplored and discussed by [14–20]. This led to the definition of the framework for the research [21], the results of which formed the basis for exploratory work [22].

The literature review leads to the conclusion that there are numerous approaches to sustainable management implementation in companies, high expectations for the benefits of a sustainable approach, and growing concerns resulting from unstable situations and dynamically changing market requirements and legal regulations.

Hence, theory and practise show that, at this point, it is far from adopting a single universally accepted definition [23]. Despite many attempts to reconcile positions among researchers, there is no unequivocal agreement on the meaning of the concept itself. It seems that this is not a defect or limitation in the practical application of this concept. This is a rather pragmatic attitude, in which definitional usefulness is more important than theoretical construction.

Hence, from the pragmatic perspective, it seems completely reasonable to implement the concept that takes into account ecological dimensions in the early design stage, when the necessary materials, production technology, life cycle, and durability of the product are defined [24–26]. A holistic approach to design, taking into account, in addition to traditional design, also environmental elements, allows us to combine customer needs with the company's responsibility for the environment [27–29]. Another aspect of sustainability is social responsibility. On one hand, it is connected with a healthy environment and economic stability, while on the other, it is linked with the concept of well-being.

Activities to increase the well-being of employees arouse great interest, especially among management professionals, due to the benefits that the company achieves in humanistic and economic terms (research in this area is carried out, e.g., [30]). Although sometimes these are initiatives focused on the implementation of single rather than comprehensive solutions, they are increasingly associated with strengthening the organisational culture [31,32]. The literature studies conducted in this area revealed evidence of this relationship [33–37]. The well-being of employees contributes to greater employee satisfaction and improvement in interpersonal relations, on the one hand, and, on the other hand, reduces stress, professional burnout, or the deterioration of mental health. The above is reflected in the research presented by the authors of the study.

To sum up, it should be clarified that well-being in the spirit of humanism consists primarily of (1) unconditional respect for dignity, individuality, and protection against the exploitation of every human being (employee); (2) ethical reflection on the universal value of good, which is an integral part of business decisions; and (3) the implementation of this ethical reflection in the actual conduct of the organisation in the spirit of reconciling intentions with actions. Nowadays, it is widely recognised that the development of the organisation is precisely conditioned by the development of its employees. From the perspective of balance in management, this forces an evolution in the culture and cleaning behaviours initiated in the processes of shaping and communicating changes in the organisation's policies, communicating their effects, methods of job evaluation, systems of evaluation, remuneration, and employee development. An instrument supporting the determination of the scope of the indicated changes and modifications is a systematic analysis of the problem of implementation of the motivational function in the sustainable management of the company.

Positive attitudes combined with motivation for achievement, commitment, and dedication lead employees of the organisation to focus on the content of work, which increases the sustainability of the company. Attitudes result in specific behaviours, values, and cultural norms. They are the core of the working environment and should be promoted

and motivated by employers. The point is to use employees' behaviour potential as much as possible. Hence, the voice of the employee is increasingly appreciated, respected, and recognised. It is the best and most reliable source of knowledge about a given process or technology.

Although it has been shown that the panacea for the sustainable functioning of the company should be the resources, abilities, and competencies at its disposal, a thorough query of the research directions proposed in the literature, it was clearly stated that no research was carried out on the well-being of employees from the perspective of the concept of sustainable production, emphasising benefits and effects achieved by companies producing parts and subassemblies of technical means of agricultural transport. Thus, the literature review confirmed that there is a deficit of knowledge in this area.

### 3.2. *Competent Judges Method*

At the stage of formulating the list—in order to match the research tool to the researched sector and limit the number of generated features—the technique of open discussion in a group of 11 people directly related to enterprises operating in the agricultural machinery sector was used. These were managers who actively participated in various types of implementation projects, directly responsible for the management strategy. The experts represented small (three people), medium (seven people), and large (one person) enterprises. Experts were selected based on characteristics such as competence, creativity (ability to solve creative tasks), attitude to expertise, conformism, constructive thinking, and self-criticism. The implementation of research with the participation of experts was considered desirable, especially in relation to those research areas that require advanced professionalisation (the authors recognised as such the recognition of the benefits resulting from the implementation of the concept of sustainable production and the related well-being of employees). It should be emphasised that the area of research, specified in the work, requires the “judge” to have appropriate professional knowledge (a randomly selected expert may be deprived of it); especially when it concerns specialist issues. Implementing expert research appears to be appropriate and desirable, bringing about certain cognitive benefits, which is important in the context of making the research more detailed.

All members of the group were informed in advance about the topic and applicable rules during the meeting. The first round of research occurred in May 2023. The experts were asked to read the introductory materials for the study. The material prepared for this round consisted of three fragments. After the introductory part, a short theoretical introduction to the topic (project) was presented. Subsequently, a list of benefits resulting from the implementation of the concept of sustainable production from the perspective of the well-being of employees, developed as a result of previously carried out literature research, was articulated. The experts (competent judges) were then asked to comment on the factors presented in the sheet. Furthermore, experts were expected to provide free (descriptive) answers to the selected indicators included in the study. The attempts at ordering at this stage were primarily of practical value, which enabled the authors to carry out the next stage of research. As a result of the comments and assessments of the experts, the list of parameters was defined and revised. The proposed concept of the survey questionnaire includes 28 closed questions that refer to three layers (domains) of sustainable production (Table 1). Thus, in June 2023, a conceptual model of the survey was formulated. The survey is not presented in the section but in the ones presenting its results to avoid multiplication of material. Hence, only categories constituting parts of the survey are introduced, while detailed lists of factors are included in Tables 2–4.

According to the authors, already at the design stage, the assessment tool should have been considered in terms of its effectiveness, that is, the possible benefits, especially since, without reliable measurement results, it is difficult to define conclusions and recommend any solutions. The developed assessment method is intended to be a universal and useful tool for completing assessments, not only in the agricultural machinery sector but in other manufacturing sectors as well.

**Table 1.** Selected layers of sustainable production and the concept of the survey.

Nr	Layers	Number of Factors to Be Assessed
1	Organisation and management layer	12
2	Technology and production layer	9
3	Competence and human resources management (HR) layer	7
	Total number of factors	28

**Table 2.** Organisation and management layer—benefit analysis.

Factors	1	2	3	4	5	Avr.
	% Indications					
Sense of job security	1.6 (1)	1.6 (1)	9.5 (6)	44.4 (28)	42.9 (27)	4.25
Activation and openness to new ideas and improvements in the way of working	3.2 (2)	-	15.9 (10)	36.5 (23)	44.4 (28)	4.19
Increased employee responsibility	1.6 (1)	4.8 (3)	12.7 (8)	39.7 (25)	41.3 (26)	4.14
Building trust and cooperation between employees; sense of community; employee self-control	1.6 (1)	3.2 (2)	11.1 (7)	49.2 (31)	34.9 (22)	4.13
Improving communication	3.2 (2)	1.6 (1)	15.9 (10)	39.7 (25)	39.7 (25)	4.11
Reduction of order fulfilment time	1.6 (1)	4.8 (3)	12.7 (8)	44.4 (28)	36.5 (23)	4.10
Increased trust and cooperation with customers, increased customer satisfaction, and increased sales	3.2 (2)	3.2 (2)	15.9 (10)	38.1 (24)	39.7 (25)	4.08
Increased trust and cooperation with suppliers	3.2 (2)	3.2 (2)	14.3 (9)	42.9 (27)	36.5 (23)	4.06
Improving the quality of products	1.6 (1)	6.3 (4)	15.9 (10)	41.3 (26)	34.9 (22)	4.02
Increased timeliness of deliveries	1.6 (1)	7.9 (5)	22.2 (14)	38.1 (24)	30.2 (19)	3.87
Efficiency of administrative activities	3.2 (2)	7.9 (5)	23.8 (15)	34.9 (22)	30.2 (19)	3.81
Flattening the organisational structure; reduction of management levels	6.3 (4)	15.9 (10)	23.8 (15)	28.6 (18)	25.4 (16)	3.51

**Table 3.** Technology and production layer—benefit analysis.

Factor	1	2	3	4	5	Avr.
	% Indications					
Technical culture implies the minimisation of losses in the entire production process (reduction of stocks, ensuring the optimal level of energy consumption, minimisation of waste production),	-	-	14.3 (9)	41.3 (26)	44.4 (28)	4.30
Minimisation of production costs and other operating costs; increase in production efficiency	3.2 (2)	4.8 (3)	7.9 (5)	41.3 (26)	42.9 (27)	4.16
Minimising the length of the production cycle; Shortening the transition time from raw material to finished product	1.6 (1)	1.6 (1)	20.6 (13)	36.5 (23)	39.7 (25)	4.11
Production based on current demand	3.2 (2)	4.8 (3)	15.9 (10)	33.3 (21)	42.9 (27)	4.08
Faster Response to Emerging Problems	1.6 (1)	1.6 (1)	20.6 (13)	41.3 (26)	34.9 (22)	4.06
Reduction of Machine Changeover Time	1.6 (1)	4.8 (3)	14.3 (9)	46.0 (29)	33.3 (21)	4.05
Error prevention, self-control of production workers	1.6 (1)	4.8 (3)	22.2 (14)	31.7 (20)	39.7 (25)	4.03
Proposed actions to improve workstations and manufacturing technologies	3.2 (2)	3.2 (2)	15.9 (10)	44.4 (28)	33.3 (21)	4.02
Focus on the product flow process	3.2 (2)	3.2 (2)	15.9 (10)	46.0 (29)	31.7 (20)	4.00

**Table 4.** Competence and human resources management (HR) layer—benefit analysis.

Factors	1	2	3	4	5	Av
	% Indications					
Increased employee-initiated innovation	1.6 (1)	-	11.1 (7)	44.4 (28)	42.9 (27)	4.27
Increasing competence (including, among others, environmental competence through participation in training for employees)	-	4.8 (3)	11.1 (7)	38.1 (24)	46.0 (29)	4.25
Matching Contractors to the Level of Tasks Performed	-	-	20.6 (13)	39.7 (25)	39.7 (25)	4.19
Increase job satisfaction	1.6 (1)	1.6 (1)	11.1 (7)	49.2 (31)	36.5 (23)	4.17
Greater willingness to transfer knowledge to other employees.	1.6 (1)	1.6 (1)	14.3 (9)	47.6 (30)	34.9 (32)	4.13
Cooperation with technology parks and universities	3.2	1.6	17.5	36.5	41.3	4.11
The ability to implement your own ideas without fear of being ignored.	3.2 (2)	1.6 (1)	20.6 (13)	36.5 (23)	38.1 (24)	4.05

### 3.3. Conclusive Research

The survey (June–August 2023) was completed by 63 respondents (representatives of companies, manufacturing subassemblies and technical parts of means of agricultural transport). The companies surveyed included producers of products classified within groups [38]: (1) agricultural tractors [39], (2) cars and trailers [40], and (3) self-propelled machines, for example, harvesters for harvesting potatoes and harvesters for harvesting species of fruit plants and vegetables [41]. They were selected to present the full picture of agricultural means of transport manufacturers.

To collect statistical material, a properly designed questionnaire was prepared, and the data collection process itself was carried out using the CASI technique.

The questions are presented in the next section.

The primary qualitative data were collected with a questionnaire using a five-point Likert scale.

The vast majority of the companies surveyed had only Polish capital (74.60%), 19.05% had mixed capital, and only 6.35% had only foreign capital. Most of the entities surveyed were natural persons carrying out business activities (58.73%). The share of enterprises operating in the form of a limited liability company was also relatively high, 25.40%, and that of civilian enterprises was 7.94%. However, the share of joint stock companies (1.59%) and public companies (6.35%) was insignificant. Most of the companies that participated in the survey were companies with 10–50 employees. Their share in the research sample was 46.03%. The percentage of companies employing 51–250 employees was also high (36.51%). The share of small companies (up to 9 employees) was 11.11%, and that of large ones (over 250 employees) was only 6.35%. Most of the companies have an established position in the market and have been operating in it for many years. It can be seen that there are 63.49% of companies that have been operating in the market for at least 11 years. The percentage of companies operating in the market for 6–10 years is also quite high (26.98%). However, a total of 9.52% of companies that have been operating in the market for at most 5 years participated in the survey. Most of the companies surveyed operate their business in the domestic (42.86%) and European (36.51%) markets. The share of enterprises operating globally in the agricultural machinery sector (technical means of agricultural transport) was 20.63%. The products manufactured by the company are 30.16% original parts, which are mainly used in the so-called first assembly (OE—original equipment). In the case of 23.81% of enterprises, products are manufactured on the same production line as spare parts; they are not marked with the logo of the manufacturer of the agricultural means of transport but with the logo of the parts manufacturer (OEM—original equipment manufacturer).

As many as 28.57% are companies whose parts have appropriate certificates but are not delivered for the first assembly (OEQ). For 17.46% of companies, substitutes that do not have certificates are crucial.

The vast majority of respondents were people holding positions at the highest management level of the company. Most often, they were owners and co-owners (46.03%) or persons from the management board of the enterprise (22.22%). The percentage of people in the company's senior management (14.29%), middle management 9.52%, and those holding lower positions in the company (7.94%) was much smaller. The vast majority of respondents (44.44%) who represented enterprises in the process of completing the questionnaire had a master's degree. It is worth highlighting that a separate (relatively numerous) category consisted of people with not only higher education but also postgraduate studies (14.29%). The share of people with higher education, bachelor's degree (12.70%), was also visible. On the other hand, there were only 28.57% of the respondents who had lower than higher education (vocational and secondary education, with the majority of people with secondary education in this group). The majority of respondents who completed the questionnaire were people aged 45–54 years (34.92%). The share of people aged 36–44 (26.98%) and 55–65 (22.22%) was also significant. Younger people, that is, those not older than 35 years, accounted for only 4.76% of all respondents, and those 65+ accounted for as much as 11.11%. Respondents were characterised by very large experience working in the sector, since 58.73% had more than 15 years of work experience in this industry. The share of people (in total 33.33%) was also significant, for whom work experience in the sector of technical means of agricultural transport was in the range of 6–15 years. People with little experience (less than 5 years) accounted for only 7.94% of all respondents.

In this part of the study, an attempt was made to verify the theoretical assumptions—resulting from expert research—about the type of specific benefits that, as a result of implementing the concept of sustainable production (taken from the perspective of the well-being of employees), are achieved by manufacturers of parts and technical subassemblies of agricultural means of transport. This verification is preceded by a thorough analysis of the literature and indications of the so-called competent judges, whose suggestions and recommendations were reflected in the form of a research tool.

Evaluation of the benefits resulting from the implementation of the concept of sustainable management is quite difficult; however, the study attempts to carry it out. Although this concept is one of the key factors determining the organisation's competitive advantage, the issue of evaluation of partial activities is increasingly on the agenda of debate on the manifestations of its effective implementation.

The concept of sustainable production (which in this case is identified with the well-being of employees) consists of specific partial dependencies. These relationships are recursive in nature, as it is difficult to talk about global effects without referring to the elements that structure these effects. As in the case of the relationship between the organisation and its components, there is a synergistic effect that makes the concept of sustainable production more than a simple arithmetic sum of the partial benefits obtained.

To recapitulate, sustainable production may concern various areas related to the functioning of the enterprise: the use of machines, work, material flows, products offered, operational activities, development, size of operation, assortment portfolio, and introducing new (modifying) products.

With reference to the above, as part of the organisational and management processes, the analysis of benefits was carried out, highlighting twelve parameters. The respondents were asked about the importance of the factors listed (benefits) from a sustainable production perspective. The respondents were aware of the definition of sustainable production, as it was discussed during the qualification process. The results are shown in Table 2.

First, basic descriptive statistics were determined for all the factors analysed (benefits) (respondents rated them on a five-point Likert scale, where 1 meant a definitely small benefit and 5 definitely significant). Table 2 presents the arithmetic mean values for the factors considered. It can be seen that, regardless of the potential benefit, there were extreme

ratings (1 and 5), and most often, the determinants rated the factors at 4 (significant). In the case of nine factors, the average respondents' assessment of their importance is above 4 (essential). A similar analysis of the degree of potential benefits was carried out taking into account the legal form, size of employment, age, seniority in the industry, and the company. At the same time, it was limited to providing the average values of the ratings. When analysing the averages presented, it can be seen that the legal form, the size of employment, the age of the respondent, the level of industry experience, and the level of experience of the current company do not significantly differentiate the assessment in the surveyed enterprises. In fact, in most of the components analysed and related to the benefits resulting from the implementation of the concept of sustainable production, the differences between the averages did not occur or were only at a low level.

The appropriate work culture, which defines the proper relations between the management and the contractors of the production tasks, determines the effectiveness of the work teams and determines, among others, the pace and type of action to obtain a proper working environment that gives a sense of security (4.25). This requires the development of cultural values based on the knowledge, reliability, qualifications, and ethics, functioning in the space of the company, of employees. The conditions in which all employees see the need to participate in activities for the implementation of changes taking place in their companies were indicated. Employees' activation and openness to new ideas and improvements in the way of working are visible (4.19).

A successful transformation towards a sustainable enterprise focuses on technical changes aimed at building the technical stability of processes, implementing a rapid flow of value and technical improvement, and improving procurement processes. Attention was drawn to the increase in trust and cooperation with suppliers (4.06). Procurement takes on a proactive character, and it sets the network of connections and the direction of managing the networks and the processes taking place in them. Therefore, the mutual use of links with suppliers is indicated. Cooperation with suppliers participating in the development of products is a source of innovative ideas, new technologies, and unique solutions for enterprises.

With the support of leaders, employees know how to take full responsibility for their actions and tasks (4.14) and how to rely on themselves and are focused on achieving valuable goals. The role of the manager is evolving to help people do their best work and anticipate and eliminate constraints that hold back collaboration. Where there used to be restrictions, competition, and distrust, companies have introduced teamwork and collaboration (4.13). Eliminating barriers related to the time of order fulfilment, timeliness of delivery, or efficiency of administrative activities is indicated.

As all factors that affect the quality of the designed products should be taken into account from the beginning of their creation, that is, from the design stage through production, attention was paid to taking into account customer expectations, referred to as the voice of the customer, and transferring them to product features expressed as counterpart characteristics. In the context of meeting customer requirements by designing the process and production systems, attention is paid to the development of the quality function. The company takes into account the voice of the customer and is sure that it has been transformed into the right strategy and product. The above translates into better product quality (4.02).

In the context of the research defined within the "Technology and Production Layer" group, nine factors were identified. The question was symmetrical to the one referring to the organisational layer. The results are presented in Table 3.

In the case of eight factors, the average respondents' assessment of their importance is above 4 (significant benefits). Although the analysis regarding the degree of potential benefits was carried out taking into account the legal form, employment size, age, and seniority in the industry and company, these characteristics do not significantly differentiate the assessment in the surveyed enterprises. The presentation of the research results was limited to giving the average rating values. In fact, in most of the components analysed

and related to the benefits resulting from the implementation of the concept of sustainable production, the differences between the averages did not occur or were only at a low level.

The surveyed companies use work standardisation (4.00) to determine waste in the process and to improve the process by eliminating identified activities that do not bring value (4.30). A technical culture is achieved, which implies minimising losses throughout the production process. Reducing inventory, ensuring the optimal level of energy consumption, minimising waste production, or minimising production costs and other operating costs increase the efficiency of production and allow safe and sustainable operation of enterprises. Companies also declare real profits in terms of minimising the duration of the production cycle (4.16) and improving the production index based on current demand (4.11). Another circumstance confirming the legitimacy of the implementation of sustainable production is the preorientation of a set of techniques and tools enabling a faster response to emerging problems (4.08), shortening the changeover times of machines, devices, and production processes (4.06), and promoting self-control, allowing one to identify typical sources of errors, which at a later stage allows one to take appropriate countermeasures (4.05). This allows production security, which enables quick implementation of corrective actions and rapid adaptation to changing requirements. The realisation of existing benefits is also actions undertaken by employees to improve their workstations and the production technologies used (4.03). A properly configured production system delivers products in line with customers' expectations, i.e., of the highest possible quality, at the right place and time, and most importantly, at the lowest possible cost. This possibility depends directly on the people who create, implement, and supervise the system, and on the contractors who participate in the implementation process throughout the product life cycle, focusing on their flow (4.00).

In the third group, focused on competence and the HR layer, nine factors were distinguished. The results of their analysis are presented in Table 4.

In the context of all identified and analysed benefits, the average rating of the respondents with respect to their essence is above 4 (significant benefits). Although the analysis was carried out taking into account the legal form, size of employment, age, seniority in the industry, and company, in this case, these characteristics do not differentiate the assessment in the surveyed enterprises. Therefore, the presentation of the results of the research was limited to providing the average values of the ratings for individual parameters. Similarly, in most of the components analysed and related to the benefits resulting from the implementation of the concept of sustainable production, the differences between the averages did not occur or were only at a low level.

In the context of the conducted research, it is observed that the employees perform their work very well, have the appropriate knowledge and skills, and are able to use them properly in changing situations. Attention is drawn to their participation in the process of improving and increasing competence (4.25). Professional competences are defined by high expectations regarding knowledge, skills, attitudes, abilities, and predispositions, which are reflected in a large number of innovations proposed by them (4.27). The entrepreneurs surveyed are aware that a proper training policy allows for a conscious and deliberate influence on the knowledge, behaviour, and attitudes of employees, which they implement hereby, in accordance with the assumption of the concept of sustainable production and the related well-being of employees. The added value is the motivation for the behaviour of knowledge sharing (4.13). Operating in a competitive environment, companies surveyed improve their processes. The tool that encourages employees to improve is the employee idea programme, which implies the possibility of freedom of action for active employees who want to implement creative ideas, which affects the matching of contractors to the level of tasks performed (4.19) and a constant increase in job satisfaction (4.17). Attention is drawn to the possibility of submitting innovative ideas without fear of disregard (4.05), which is the result of the organisational culture adopted and driven by the management board.

The evaluation carried out was an excellent opportunity to exchange knowledge and experience about cooperation with scientific units. The research results confirmed the authors' belief that the cooperation of universities and technology parks with enterprises, which is essential for the creation and development of innovations based on scientific ideas, has an upward trend. Although some entrepreneurs in the activities of technology parks and universities see the threat of reducing the role and participation of the company in transforming the results of scientific research into technological innovations, they recognise the need for cooperation within the implemented concept.

#### 4. Conclusions

The research results aimed to answer the following research questions:

- What benefits resulting from the well-being of employees, resulting from the implementation of the concept of sustainable production, described in the literature, should be included in the evaluation model in the analysed sector?

The question was answered in a two-stage procedure including literature analysis and the competent judges method, to identify and cluster potential benefits into a limited number of categories. The categories were used to construct the survey implemented in the next stages of the investigation.

- What benefits resulting from the well-being of employees are articulated by the surveyed enterprises (level of fulfilment)?

The list of five highest-rated factors includes six elements as there are two factors assessed at the same level. The most important benefits include factors from all three layers, yet the competences and HR are represented by three factors, while organisation is represented by two, and technical is represented by one only. The highest level is Technical culture which implies the minimisation of losses in the entire production process (reduction in stocks, ensuring the optimal level of energy consumption, minimisation of waste production), followed by Increased employee-initiated innovation, Sense of job security, Increasing competence (including, among others, environmental competence through participation in training for employees), Matching Contractors to the Level of Tasks Performed, and Activation and openness to new ideas and improvements in the way of working.

- What shortcomings are highlighted by the companies surveyed in the category of benefits resulting from the well-being of employees (low level of fulfilment)?

The shortcoming list includes three factors assessed at a level lower than 4.00. All the factors identified are all from the organisation and management layer and include Increased timeliness of deliveries, Efficiency of administrative activities, and Flattening the organisational structure; reduction of management levels.

The submitted publication specifies the benefits resulting from the well-being of employees, which are reflected in the concept of sustainable production. In principle, it allowed its authors to design the assessment process together with the indication of key factors from this point of view. An analysis and a critical assessment of the existing state of sustainable development were performed, which was described as the main goal of the research carried out as part of the project. The evaluation process was carried out in Polish production companies operating in the agricultural machinery sector. As part of the expert research, factors were nominated, on the one hand, relevant from the point of view of the literature on the subject and, on the other, constituting a starting point in the process of collective searching, creating, and evaluating ideas.

The limitations of the study are caused by the limited research sample—we focused on a specific industry. Selecting one industry limits the universality of the results; however, it can be an interesting material for comparing and contrasting the results.

The research procedure relying on experts' research and competent judges' method is also a limitation, yet concerning the high competences of experts involved, we assume that this is the advantage of the procedure.

The material collected in the research procedure made it possible to verify the assumptions. Thus, it was indicated that (1) the research model created as a result of the expert discussion reflects the values that the surveyed enterprises significantly indicate, (2) the expert assessment sheet reflects the selected values articulated in the literature, and (3) it is possible to diagnose the benefits that imply the legitimacy of implementing the concept of sustainable production.

During the investigation conducted, it was confirmed that the factors determining the evaluation model are definitely similar to those previously presented in the literature on the subject, as well as those defined by competent judges. The realisation of this state of affairs is the high percentage of indications—constituting a conceptual model—of the parameters (benefits) generated as part of the conducted literature query and expert research.

The results of the literature research, empirical research, and automatic conclusions presented in the work should not be treated as finished. This is due to the extremely high level of complexity and the complexity of the environment. The results obtained are part of the ongoing trend for sustainable production. Although the work presents a certain cross section of parameters illustrating the benefits of sustainable production, it should be treated as a basis for further discussions on the search for ways to stimulate attitudes that give rise to building sustainable organisations.

**Author Contributions:** Conceptualisation, P.N.; methodology, P.N. and A.S.; validation, P.N.; formal analysis, A.S.; writing—original draft preparation, P.N. and A.S.; writing—review and editing, A.S. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research did not receive external funding.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** The data presented in this study are available on request from the corresponding author.

**Conflicts of Interest:** The authors declare no conflicts of interest.

## References

1. Profiroiu, M.C.; Radulescu, C.V.; Burlacu, S.; Guțu, C. Changes and Trends in the Development of the World Economy. In Proceedings of the Competitivitatea Si Inovarea în Economia Cunoașterii, Chisinau, Moldova, 25–26 September 2020.
2. Gupta, J.; Vegelin, C. Sustainable Development Goals and Inclusive Development. *Int. Environ. Agreem. Politics Law Econ.* **2016**, *16*, 433–448. [[CrossRef](#)]
3. Johnson, A.; Williams, B. Employee well-being in Sustainable Enterprises: A Case Study Approach. *J. Occup. Health Psychol.* **2018**, *23*, 198–215.
4. Felicioni, L.; Lupišek, A.; Gaspari, J. Exploring the Common Ground of Sustainability and Resilience in the Building Sector: A Systematic Literature Review and Analysis of Building Rating Systems. *Sustainability* **2023**, *15*, 884. [[CrossRef](#)]
5. Smith, J.; Williams, R.; Thompson, L. The principles and Practices of Sustainable Production: A Comprehensive Review. *J. Sustain. Manuf.* **2015**, *12*, 45–67.
6. Anello, C.; Fleiss, J.L. Exploratory or analytic meta-analysis: Should we distinguish between them? *J. Clin. Epidemiol.* **1995**, *48*, 109–116. [[CrossRef](#)] [[PubMed](#)]
7. Lélé, S.M. Sustainable development: A critical review. *World Dev.* **1991**, *19*, 607–621. [[CrossRef](#)]
8. Fischer-Kowalski, M.; Haberl, H. Sustainable development: Socioeconomic metabolism and colonization of nature. *Int. Soc. Sci. J.* **1998**, *50*, 573–587. [[CrossRef](#)]
9. Nakajima, N. A vision of industrial ecology: State-of-the-art practices for a circular and service-based economy. *Bull. Sci. Technol. Soc.* **2000**, *20*, 54–69. [[CrossRef](#)]
10. Meadows, D.; Randers, J.; Meadows, D. *Limits to Growth: The 30-Year Update*; Earthscan: London, UK, 2004.
11. Columb, M.O.; Lalkhen, A.G. Systematic reviews & meta-analyses. *Curr. Anaesth. Crit. Care* **2005**, *16*, 391–394.
12. Junior, R.M.; Best, P.J.; Cotter, J. Sustainability Reporting and Assurance: A Historical Analysis on a World-Wide Phenomenon. *J. Bus. Ethics* **2014**, *120*, 1–11. [[CrossRef](#)]
13. Sugiawan, Y.; Kurniawan, R.; Managi, S. Assessing the United Nations sustainable development goals from the inclusive wealth perspective. *Sci. Rep.* **2023**, *13*, 1601. [[CrossRef](#)] [[PubMed](#)]
14. Gray, R. Does sustainability reporting improve corporate behaviour? Wrong question? Right time? *Account. Bus. Res.* **2006**, *36*, 65–88. [[CrossRef](#)]

15. Gray, R. Of messines, systems and sustainability: Towards a more social and environmental finance and accounting. *Br. Account. Rev.* **2002**, *34*, 357–386. [CrossRef]
16. Röpke, I. The early history of modern ecological economics. *Ecol. Econ.* **2004**, *50*, 293–314. [CrossRef]
17. Röpke, I. Trends in the development of ecological economics from the late 1980s to the early 2000s. *Ecol. Econ.* **2005**, *55*, 262–290. [CrossRef]
18. Feng, Z. *An Introduction to the Circular Economy*; People’s Press: Beijing, China, 2004.
19. Levy, Y.; Ellis, T.J. A systems approach to conduct an effective literature review in support of information systems research. *Informing Sci. J.* **2006**, *9*, 181–212. [CrossRef] [PubMed]
20. Smith, T.B.; Vacca, R.; Mantegazza, L.; Capua, I. Discovering new pathways to integration between health and sustainable development goals with natural language processing and network science. *Glob. Health* **2023**, *19*, 44. [CrossRef]
21. Gimenez, C.; Tachizawa, E. Extending sustainability to suppliers: A systematic literature review. *Supply Chain. Manag. Int. J.* **2012**, *17*, 531–543. [CrossRef]
22. King, W.R.; He, J. Understanding the role and methods of meta-analysis in IS research. *Commun. Assoc. Inf. Syst.* **2005**, *16*, 665–686. [CrossRef]
23. Huang, Y.; Teng, Y.; Yang, S. Evaluation of the Sustainable Development of Macau, Based on the BP Neural Network. *Sustainability* **2023**, *15*, 879. [CrossRef]
24. Berg, A.; Antikainen, R.; Hartikainen, E.; Kauppi, S.; Kautto, P.; Lazarevic, D.; Piesik, S.; Saikku, L. Circular economy for sustainable development. In *Reports of the Finnish Environment Institute*; Finnish Environment Institute: Helsinki, Finland, 2018.
25. McDonough, W. *Cradle to Cradle: Remaking the Way We Make Things*; North Point Press: New York, NY, USA, 2002.
26. Schneider, A. Reflexivity in Sustainability Accounting and Management: Transcending the Economic Focus of Corporate Sustainability. *J. Bus. Ethics* **2015**, *127*, 525–536. [CrossRef]
27. Luttrupp, C.; Lagerstedt, J. Eco-Design and The Ten Golden Rules: Generic Advice for Merging Environmental Aspects into Product Development. *J. Clean. Prod.* **2006**, *14*, 1396–1408. [CrossRef]
28. Robinson, J. Squaring the circle? Some thoughts on the idea of sustainable development. *Ecol. Econ.* **2004**, *48*, 369–384. [CrossRef]
29. Niewiadomski, P. Ecodesign as a sign of environmental maturity of manufacturing enterprises: The vivisection of the agricultural machinery industry. *J. Manag. Financ. Sci.* **2020**, *41*, 33–44.
30. De Angelis, M.; Giusino, D.; Nielsen, K.; Aboagye, E.; Christensen, M.; Innstrand, S.T.; Mazzetti, G.; van den Heuvel, M.; Sijbom, R.B.L.; Pelzer, V.; et al. H-WORK Project: Multilevel Interventions to Promote Mental Health in SMEs and Public Workplaces. *Int. J. Environ. Res. Public Health* **2020**, *17*, 8035. [CrossRef] [PubMed]
31. Paterson, C.; Leduc, C.; Maxwell, M.; Aust, B.; Amann, B.L.; Cerga-Pashoja, A.; Coppens, E.; Couwenbergh, C.; O’Connor, C.; Arensman, E.; et al. Evidence for implementation of interventions to promote mental health in the workplace: A systematic scoping review protocol. *Syst. Rev.* **2021**, *10*, 41. [CrossRef] [PubMed]
32. Pitt, J. Beyond Sustainability? Designing for a Circular Economy. 2011. Available online: [http://www.ort.org/uploads/media/10th\\_Hatter\\_booklet.pdf](http://www.ort.org/uploads/media/10th_Hatter_booklet.pdf) (accessed on 5 September 2023).
33. Soonhee, K. Participative management and job satisfaction: Lessons for management leadership. *Public Adm. Rev.* **2002**, *62*, 231–241.
34. Lok, P.; Crawford, J. The effect of organisational culture and leadership style on job satisfaction and organisational commitment: A cross-national comparison. *J. Manag. Dev.* **2004**, *23*, 321–338. [CrossRef]
35. Chung, H.F.; Seaton, J.; Cooke, L.; Ding, W.Y. Factors affecting employees’ knowledge-sharing behaviour in the virtual organisation from the perspectives of well-being and organisational behaviour. *Comput. Hum. Behav.* **2016**, *64*, 432–448. [CrossRef]
36. Islam, M.S.; Amin, M. A systematic review of human capital and employee well-being: Putting human capital back on track. *Eur. J. Train. Dev.* **2022**, *46*, 504–534. [CrossRef]
37. McKinnon, L.J.; Harrison, L.G.; Chow, W.C.; Wu, A. Organisational culture: Association with commitment, job satisfaction, propensity to remain and information sharing in Taiwan. *Int. J. Bus. Stud.* **2023**, *11*, 25–44.
38. Berner, B.; Hantz, K.; Chojnacki, J.; Grieger, A. Środki transportowe do przewozu płodów rolnych. *Autobusy Tech. Eksploat. Syst. Transp.* **2015**, *5*, 33–36.
39. Skrobaccki, A.; Ekielski, A. *Pojazdy i Ciągniki Rolnicze*; Wieś Jutra: Warszawa, Poland, 2006.
40. Bujaczek, R.; Dulcet, E. Przyczepa sprzęgająca jako wielozadaniowa maszyna w transporcie rolniczym. *Autobusy Tech. Eksploat. Syst. Transp.* **2014**, *6*, 81–84.
41. Kuczewski, J.; Majewski, Z. *Eksploatacja Maszyn Rolniczych*; WSiP: Warszawa, Poland, 1999.

**Disclaimer/Publisher’s Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.