Journal of Advanced Research in HR and Organizational Management
Volume 7, Issue 1&2 - 2020, Pg. No. 28-33
Peer Reviewed Journal

Review Article

Sustainability and Ideology: An Organisational and Employee-Level Perspective

Taif Khan

MBA, Department of Management, Janhit Institute of Management and Education.

I N F O

E-mail Id:
taifk4@gmail.com
Orcid Id:
https://orcid.org/0000-0003-1494-3037
How to cite this article:
Khan T. Sustainability and Ideology: An Organisational and Employee-Level Perspective. *J Adv Res HR Organ Mqmt* 2020; 7(1&2): 28-33.

Date of Submission: 2020-07-28
Date of Acceptance: 2020-08-05

A B S T R A C T

In this paper we explore sustainability-based ideology from both organizational and individual-level perspectives. Organizations may show they care, through sustainable HRM strategies, and encourage ideological currency exchange in order to recruit and retain quality employees, increase organizational commitment, increase citizenship behaviors, strengthen identity, increase job satisfaction, and maintain a positive public perception and reputation.

Keywords: Sustainability, Public Perception, Sustainable HRM, Environmental Issues, Transparent Human Resource Practices

Introduction

As suggested by Boulding (1993), the well-known fact that today's production activities are imposing a heavy burden on the earth's capacity has led to an increasing interest in environmental issues.[1]

It has been emphasized that rapid production growth depletes the current stock of natural resources and damages the environment, and there are clearly limits to this process. Daly (2008) affirms that "The limits to growth, in today's usage, refer to the limits of the ecosystem to absorb wastes and replenish raw material in order to sustain the economy" (p. 9). Despite the classical 'protechnology' optimistic arguments, which assert, according to Barro (1997), that technical progress is what is needed to eliminate all constraints on production growth, the approaching exhaustion of earth's carrying capacity is an unquestionable reality.[2]

Goodland's (1992) assertions pointing out that current high levels of degradation of the earth's biomass and biodiversity and substantial increases in earth's average temperature are a cruel reality, are clear evidence of it.[3]

Furthermore, as Panayotou (1993) affirms, the amount of damage production activities have imposed on the environment (e.g. pollution) in the course of rapid growth is unquestionable. As suggested by Daly (2002), immediate actions are being called for and policy proposals have been formulated to deal with these issues, both in the political and academic areas.[4]

Characteristics of Sustainable HRM

This section focuses on characteristics of sustainable HRM revealing their contents. One of the questions when presenting a new approach is how to distinguish it from other similar ones.[5]

The same concern applies for sustainable HRM not leaving out of consideration that "many of HR Colleagues seem to remain critical of the concept" and that there is a danger of "old wine in new bottles. Generally, despite progress towards the features of sustainable HRM The issue of the characteristics still remains underdeveloped. The characteristics of sustainable HRM explain how sustainability can be used for HRM.[6]

The characteristics describe what HRM should look like in order to deserve the attribute 'sustainable'. Literature review allows stating that researchers choose different ways and forms to present the Characteristics of the construct. Some of them appear to provide characteristics by describing the construct per se. For instance, Zaugg et al.[7]

Argue that employees' self-responsibility and participation

in decisions, while HRM operates as a "guardian" of human resources with the objective to support the employees, are the underlying aspects of construct. Thus, these aspects serve as characteristics of sustainable HRM. Further, Cohen, argue that in designing sustainable HRM, three dimensions, namely, equity, well-being, and employee development should be included.[8]

Again, the mentioned dimensions can play the role of characteristics. Other writers focus on the features that differentiate sustainable HRM from mainstream HRM, including strategic HRM, and in that vein, disclose the characteristics.[9]

Therefore, treating organizational outcomes in a broader sense rather than just financial outcomes and acknowledging the negative effects of HRM on different stakeholders are the characteristics of sustainable HRM.[10]

Finally, besides the implicitly expressed characteristics of the construct, some researchers do it explicitly. Zaugg even incorporates the following characteristics in his sustainable HRM: Flexibility, employee participation, value orientation, strategy orientation, competency and knowledge orientation, stakeholder orientation, and building mutually trustful employee-employer relationships. Ehnert introduced some other characteristics: Exploring short-term as well as long-term effects as well as side and feedback effects; extending the notion of success by considering economic, social, and ecological objectives; considering moral, ethical positions, as well as economic arguments; fostering the ability of HRM to develop and sustain the HR base and environments from within; and balancing paradoxes,dualities, dilemmas, and tensions. Several years later, Ehnert compiled a short list of characteristics in terms of their titles including: Long-term oriented; impact-control oriented; substance and self-sustaining oriented; partnership-oriented; multiple-bottom lines-oriented; and paradox-oriented. More recently, based on qualitative study Järlström et al. Introduced four dimensions as sustainable HRM characteristics, namely justice and equality, transparent human resource practices, profitability, and employee well-being.[11]

In summary, characteristics of sustainable HRM have been proposed for addressing the scarcity of knowledge about how to make the construct more explicit and distinguish it from others. Drawing on the previous literature, the paper proposes separating two things: underlying approaches and characteristics of sustainable HRM. In that vein, underlying approaches serve as keynotes, as a "roof" for characteristics arguing that the characteristics should be aligned with approaches.[12]

The paper takes the three approaches that are already well established in the literature and applied for sustainable HRM:

Paradox theory of negative externality and stakeholder harm and stakeholder theory. Drawing on literature from a range of works linking sustainability and HRM and following the essence of corporate sustainability, the paper proposes 11 characteristics of sustainable HRM, namely: Long-term orientation, care of employees, care of environmental, profitability, employee participation and social dialogue, employee development, external partnership, flexibility, compliance beyond labour regulations, employee cooperation, fairness, and equality. As the description of the approaches was provided previously, here, only the necessity to interconnect the approaches with characteristics is highlighted, treating the approaches as a "red line" for characteristics. Further, a review of these characteristics and how they contribute to the understanding of sustainable HRM are addressed.[13]

The Emergence and Scope of Sustainable HRM

The Development and Scope of Economical HRM This area centres on feasible HRM as the rising inquire about range tending to the beginning of construct, diverse streams beneath the name of maintainable HRM, and what distinctive researchers cruel by sustainable HRM. The term 'sustainable HRM' is generally unused. Whereas as of late the field has rapidly evolved,[39,53–59] it is in any case recognized that there's no "consistent" writing on sustainable HRM [(18)] and maintainable HRM can be caught on in terms of a number of complimentary frameworks.[19] In spite of the majority of approaches, Ehnert and Harry.[20] overseen to assign all publications within the field of economical HRM to the primary, moment or third "waves" of inquire about.[21] The main criteria are the included esteem to economical HRM. More as of late, Kramar categorized the literature on feasible HRM based on the writings' results into three bunches: Capacity reproduction, promoting social and natural wellbeing, and associations. As the comprehensive analysis of all publications in the field of sustainable HRM is beyond the scope this paper, only aspects that are relevant for the main purpose of the paper, namely the disclosure of the characteristics of sustainable HRM, are further underlined.

Methodological Procedure: From a Qualitative-Analytical Apparatus to a new Conceptual Perspective On Sustainability

In show disdain toward of this prove, the issues related to common asset employments and contamination era and their associations with supportability have not however been actually aced to base choices on this matter in hone. In this manner, this paper purposes to offer a clear definition of characteristic capital, relate it to a subjective concept of supportability, and show two spearheading explanatory models of ecologically adjusted yield development, unequivocally considering, on the one hand, compelled depletion of a non-renewable characteristic asset and, on

the other, contamination control over an yield generation handle.[14]

It'll be seen that abating down the pace of output production growth may be a attainable way to be in 'finetune' with supportability, for one way to realize usually through inconvenience of controls over the utilize of non-renewable assets and emanations of contamination.

Moment, an explanatory approach was utilized in arrange to conceive two distinctive models with respect to ideal yield generation development - one considering yield generation compelled by the utilize of a nonrenewable common asset input, and the other mulling over contamination control over a generation prepare that harms discuss quality (contamination) as yield paces its way.[15]

To that conclusion, two spearheading models of ideal yield development were intentioned chosen due to their imaginative approach on ideal ecologically based generation development absent back within the seventies. To supply overhauled bolster for the two spearheading models utilized, a set of vital later commitments was utilized, counting Geldrop and Withagen (2000); Palmada (2003); Islan (2005); Charles (2005); Comolli (2006); Auty (2007); Bretschger and Smulders (2006); and Voinov and Farley (2007); all utilizing expository outlines mutually treating yield generation and natural factors beneath a single approach - ideal naturally based output.[16]

The most objective of applying this technique was to setup a way driving to a unused conceptual subjective point of view permitting for supportability being assessed indeed with obliged natural harm, e. g., by means of recharging renewable normal assets, as a compensating gadget counterbalancing the consumption of non-renewable common assets.[17]

In this way, the examination to be undertaken in what takes after has got to be caught on, beneath the methodological strategy here depicted, within the setting of a subjective outline (indeed utilizing two expository hypothetical models) in arrange to reach a modern conceptual develop to superior get it and analyze supportability.

The political and academic areas.

In spite of this evidence, the issues related to natural resource uses and pollution generation and their connections with sustainability have not yet been technically mastered to base decisions on this matter in practice. Therefore, this essay purposes to offer a clear definition of natural capital, relate it to a qualitative concept of sustainability, and present two pioneering analytical models of environmentally balanced output growth, explicitly considering, on the one hand, constrained exhaustion of a non-renewable natural resource and, on the other, pollution control over an output production process. It will be seen that slowing down the pace of output production growth is a feasible way to be in 'fine-tune' with sustainability, for one manner to achieve this is via imposition of controls over the use of non-renewable resources and emissions of pollution.

Thus, the main contribution of the essay is to present a new conceptual perspective, based on the qualitative-analytical apparatus used, in order to show that even allowing for the depletion of non-renewable natural resources, it is possible to manage their uses in a way that compensation, such as augmenting the stocks of renewable natural resources, can be conceived and total natural capital remain unchanged or even increased. An important result of this is that sustainability could be attained with no need for reducing production.

The next section presents the methodological procedures to be used, starting with a qualitative approach to the environmental literature, seeking to find a workable definition of natural capital, in order for sustainability to be appraised. An analytical apparatus used to approach two pioneering models of environmentally based output growth follows.

In Section 'Natural Capital and Sustainability: a Qualitative Conceptual Approach' we define natural capital and establish the link between it and sustainability. Section 'Environmentally Based Output Growth Models: an Analytical Apparatus' presents two pioneering models of output growth considering depletion of a non-renewable natural resource and pollution control. Section 'Integrating the Qualitative-Analytical Approaches towards a New Conceptual Perspective on Sustainability' goes on to argue, according to the essay's main contribution, that it is possible to attain sustainability even allowing for environmental bounded damage. Section 'The New Conceptual Perspective on Sustainability: Implications to Environmental Management' focuses on implications of the analysis for environmental management and the final section gives conclusive remarks shedding light on directions for future work.

Methodological Procedure: From a Qualitative-Analytical Apparatus to a New Conceptual Perspective on Sustainability

As far as the essay's main goal is concerned, the methodological procedure used integrates two different apparatuses. First, a qualitative approach was undertaken in order to obtain, in the environmental literature, a suitable definition of natural capital. The objective is to clearly define natural capital and connect it to sustainability. This latter concept follows the premises of the Brundtland Commission (1987). A set of important contributions was selected to that end, such as, Lima (1999); Daly (2002, 2004, 2005, 2008); Lawn (2006); Turner, Brouwer, Georgiou and Bateman

(2000); Sahu and Choudhury (2005); England (2006); Costantini and Monni (2008); and Irwin and Ranganathan (2007).

Second, an analytical approach was used in order to conceive two different models regarding optimal output production growth - one considering output production constrained by the use of a nonrenewable natural resource input, and the other contemplating pollution control over a production process that damages air quality (pollution) as output paces its path. To that end, two pioneering models of optimal output growth were intentionally selected due to their innovative approach on optimal environmentally based production growth away back in the seventies. To provide updated support for the two pioneering models used, a set of important recent contributions was used, including Geldrop and Withagen (2000); Palmada (2003); Islan (2005); Charles (2005); Comolli (2006); Auty (2007); Bretschger and Smulders (2006); and Voinov and Farley (2007); all using analytical frames jointly treating output production and environmental variables under a single approach - optimal environmentally based output growth.

The main objective of applying this methodology was to setup a way leading to a new conceptual qualitative perspective allowing for sustainability being appraised even with constrained environmental damage, e. g., via renewing renewable natural resources, as a compensating device counterbalancing the depletion of nonrenewable natural resources. Thus, the analysis to be undertaken in what follows has to be understood, under the methodological procedure here delineated, in the context of a qualitative frame (even using two analytical theoretical models) in order to reach a new conceptual construct to better understand and analyze sustainability.

Natural Capital and Sustainability: a Qualitative Conceptual Approach

A general definition of capital is very important to clearly understand natural capital. Capital here is to be considered as a stock that yields a flow of valuable goods and services into the future, as suggested by England (2006), no matter whether the stock is manufactured or natural. If it is natural, e.g., a population of trees or fish, the sustainable flow or annual yield of new trees or fish is called sustainable income, and the stock that yields it is defined as natural capital. Natural capital may also provide services such as recycling waste materials or pollution (or even erosion) control, which are also considered as sustainable income. From this definition we can see that the structure and diversity of the system is an important component of natural capital, according to Daly (2008), since the flow of services from ecosystems requires that they function as whole systems. Irwin and Ranganathan (2007) propose an interesting action agenda showing ways to sustain ecosystem services. Another qualification has to do with the distinctive character of natural capital, income and natural resources. All three concepts are distinct, in the sense that natural capital and natural income are just the stock and flow components of natural resources.

According to Daly (2005) and Lima (1999), there are two broad types of natural capital, renewable (RNC) or active and nonrenewable (NRNC) or inactive. Examples of RNC are ecosystems and of NRNC, fossil fuel and mineral deposits. There is an interesting analogy between RNC/NRNC and machines/inventories. Renewable natural capital is analogous to machines and is subject to depreciation; nonrenewable natural capital is analogous to inventories and is subject to liquidation.

Having defined natural capital, a definition of sustainability is needed in order to establish a logical connection between them. First of all, it is important to note that, as affirmed by Daly (2004), the stock of total natural capital equals renewable natural capital plus nonrenewable natural capital.

The concept of sustainability is related to the maintenance of the constancy of the stock of total natural capital. According to Lawn (2006) and Costantini and Monni (2008), a minimum necessary condition for sustainability is the maintenance of the total natural capital stock at or above the current level. Hence, the constancy of the stock of total natural capital is the key idea behind the sustainability concept. Since the stock of nonrenewable natural capital can be depleted with use, a logical way to maintain constant total natural capital is to reinvest part of the prospects coming from the use of nonrenewable natural capital into renewable natural capital.

It is important for operational purposes to define sustainability in terms of constant or nondeclining stock of total natural capital. This is a very significant point, since sustainability implicitly incorporates the notion of intergenerational equity. According to the Brundtland Commission (1987), the primary implication of sustainability is that future generations should inherit an undiminished stock of 'quality of life' assets. According to England (2006), this broad stock of assets can be measured or interpreted in the following three ways: i) as comprising human-made and environmental assets; ii) as comprising only environmental assets; or iii) as comprising human-made, environmental, and human capital assets. The notion of intergenerational equity, thus, lies at the core of the definition of sustainability. Najam, Papa and Taiyab (2006) and Najam, Runnalls and Halle (2007) developed important contributions related to sustainability definitions and their relations to governance and globalization.

Holmberg and Samdbrook (1992) emphasize that the

Brundtland Commission (1987), -The World Commission on Environment and Development -, was the first entity to give geopolitical significance to the use of the sustainable development concept, and thus is an important benchmark on environmental issues.

It is clear and desirable that item iii) above is the most relevant one to consider under the given definition of sustainability. According to Daly (2002), human-made capital, renewable and nonrenewable natural capital and diverse ecosystem services all interact with human capital and productive processes to determine the production level of market goods and services of a country. The specific form of this interaction is very important to sustainability. As suggested by Sahu and Choudhury (2005), linking those more general arguments with the definition of total natural capital given above and owing to the intergenerational issue, the frame developed up to this point is crucial for an appropriate definition of sustainability.

We see the interconnections between natural capital and sustainability. It is necessary to have the definition of the former in order to achieve the latter, and to reach the minimum necessary condition for sustainability the maintenance of the stocks of total natural capital is a requirement.

A tangent issue is related to the traditional way to conceive and measure standard production growth. It is well known that the measure of welfare via Gross National Product [GNP] misconceives the relevance of natural capital, despite its significance in terms of the production of real goods and services in the ecological-economic system. To deal with this shortcoming, there has been recent interest in improving national income and welfare measures to account for natural capital depletion and other corrections of mismeasured variables of economic welfare. As a consequence, a new index (Index of Sustainable Economic Welfare [ISEW]) has been used to allow for those corrections related to the depletion of nonrenewable resources and long-run environmental damage.

According to Daly and Coob (1994), after taking into account the corrections, while GNP increased over the 1950 to 1986 interval in the USA, the ISEW index remained relatively unchanged from around 1970 onwards. When depletion of natural capital, pollution costs, and income distribution effects are accounted for, the USA is seen as making no improvements at all. Therefore, it is possible that if we continue to ignore natural capital, we may well push welfare down while we think we are building it up. England (2006) shows the importance of the ISEW-index to recent research on environmental economics. The ISEW-index is presented in Daly and Coob (1994) and, according to Harris (1995), such a measure has not yet been used in developing countries. Boyd (2006) also shows what is needed to take into account when green gross domestic product (GGDP) is under focus.

Another relevant issue concerns the constraints posed by measurement problems on quantifying environmental assets. As posted by Turner *et al.* (2000), ecosystems are characterized by extreme complexity and to handle computations under different management structures is always a formidable challenge. Issues regarding environmental measurability will be discussed under the emergence of the so-called contingent valuation approach in 'Section Integrating the Qualitative-Analytical Approaches towards a New Conceptual Perspective on Sustainability'.

Having given the relevant definitions of natural capital and sustainability, Section 'Environmentally Based Output Growth Models: an Analytical Apparatus' presents two environmentally balanced output growth models considering, in one perspective, a finite and depletable natural resource, and in another, pollution control as a way of augmenting the stock of a renewable natural resource (fresh air). The choice of both models was intentional, due to their pioneering contribution applying optimal constrained output growth to environmental issues and also the fact that they fit perfectly to the essay's main contribution of jointly considering separate theoretical pieces and contemplating an integrative perspective.

The first model of production growth by Anderson (1972) will be examined, and in the second model, output growth with pollution controls by Forster (1973) will be analyzed. Both models make use of a mathematical method called optimal control theory to address issues on environmental-production growth. The main goal is to show how standard production growth has to be slowed down when constraints on natural resource uses and pollution generation are imposed. Furthermore, this result is a key factor for the analysis of sustainability conceived here.

To meet the sustainability criterion, at the same time that we know that rapid production growth leads to depletion of the stocks of natural resources and pollutes the environment, production processes (accumulation of physical capital) have to face constraints. The possibility of using productive factors (e.g. natural resources) in an unsustainable manner and the eventuality of damaging the environment (e.g. pollution) are two negative by-products of rapid production growth that need to be tackled.

Environmentally Based Output Growth Models: an Analytical Apparatus

Two classes of environmentally based output growth models will be analyzed in this section: i) production growth using finite and depletable natural resources and ii) output growth with pollution as waste generation. The first pioneering model comes from Anderson (1972), who explores the

implications for production growth of accounting explicitly for the depletion of a nonreproducible natural resource, such as a fossil fuel reserve. Stiglitz (1974) uses a similar construction to model production growth in the presence of exhaustible natural resources. More recently, Palmada (2003) makes extensive use of the quantitative tools used in optimal growth models and applies them to formalize optimal allocations of different natural resources, such as air, water and forests during production growth phases.

The analysis to be conducted below follows the standard procedure of considering a one-sector economy, such as in the Bretschger and Smulders (2006) analysis of optimal uses of nonrenewable resources, as well as in Farzin and Akao (2006) and Voinov and Farley (2007), both treating explicitly environmentally based output production models using optimal control in a one-sector economy. The main objective of these models is to find an optimal capital accumulation trajectory that maximizes the present value of per capita consumption over a finite-planning horizon, subject to some specific terminal conditions on the stocks of traditional capital and natural resources.

References

1. Van Huis A et al. Edible Insects. Future Prospects for Food and Feed Security (FAO, 2013).
2. Post MJ. Cultured beef: medical technology to produce food. *J Sci Food Agric* 2014; 94: 1039–1041.
3. Wells ML et al. Algae as nutritional and functional food sources: revisiting our understanding. *J Appl Phycol* 2016; 29: 949–982.
4. *FAOSTAT* FAO, 2017. http://www.fao.org/faostat/
5. Van Zanten HHE et al. Defining a land boundary for sustainable livestock consumption. *Glob Change Biol* 2018; 24: 4185–4194.
6. Van Zanten HHE et al. Defining a land boundary for sustainable livestock consumption. Glob Change Biol 2018; 24: 4185–4194.
7. Herrero M et al. Farming and the geography of nutrient production for human use: a transdisciplinary analysis. Lancet Planet. Health 1, 2017; e33–e42.
8. Wang X et al. Red and processed meat consumption and mortality: dose–response meta-analysis of prospective cohort studies. *Public Health Nutr* 2016; 19: 893–905.
9. Pan A et al. Red meat consumption and mortality: results from 2 prospective cohort studies. *Arch Intern Med* 2012; 172: 555–563.
10. Gerber P et al. Tackling Climate Change through Livestock. A Global Assessment of Emissions and Mitigation Opportunities (FAO, 2013).
11. Leip A et al. Impacts of European livestock production: nitrogen, sulphur, phosphorus and greenhouse gas emissions, land-use, water eutrophication and biodiversity. Environ Res Lett 2015; 10: 115004.
12. Mottet A et al. Livestock: on our plates or eating at our table? A new analysis of the feed/food debate. *Glob Food Sec* 2017; 14: 1–8.
13. Alexandratos N, Bruinsma J. World Agriculture towards 2030/2050: The 2012 Revision (FAO, 2012).
14. Alexander P et al. Could consumption of insects, cultured meat or imitation meat reduce global agricultural land use? *Glob Food Sec* 2017; 15: 22–32.
15. Low JW et al. A food-based approach introducing orange-fleshed sweet potatoes increased vitamin A intake and serum retinol concentrations in young children in rural Mozambique. *J Nutr* 2007; 137: 1320-1327.
16. Pawlak R, Lester SE, Babatunde T. The prevalence of cobalamin deficiency among vegetarians assessed by serum vitamin B12: a review of literature. *Eur J Clin Nutr* 2014; 68: 541–548.
17. Gladyshev MI, Sushchik NN, Makhutova ON. Production of EPA and DHA in aquatic ecosystems and their transfer to the land. *Prostaglandins Other Lipid Mediat* 2013; 107: 117–126.
18. Kainz M, Arts MT, Mazumder A. Essential fatty acids in the planktonic food web and their ecological role for higher trophic levels. Limnol. *Oceanogr* 2004; 49: 1784-1793.
19. Hixson SM et al. Long-chain omega-3 polyunsaturated fatty acids have developmental effects on the crop pest, the cabbage white butterfly Pieris rapae. PLoS ONE 11, e015226. 2016.
20. Liland NS et al. Modulation of nutrient composition of black soldier fly (Hermetia illucens) larvae by feeding seaweed-enriched media. PLoS ONE 12, e0183188. 2017.
21. Hussein M et al. Sustainable production of housefly (Musca domestica) larvae as a protein-rich feed ingredient by utilizing cattle manure. PLoS ONE 12, e0171708. 2017.