Guest editorial

Management of environmental awareness, protection and pro-environmental behaviours

Since recent years, environmental protection has got prominence due to increased environmental awareness among people and policy makers. Environmental awareness and protection can play a significant role in reinforcing pro-environmental behaviours. According to Steg and Vlek (2009) human behaviour patterns are crucial for the management of environmental quality. Globally, the world is suffering from environmental issues such as air pollution, global warming and scarcity of safe drinking water, these environmental problems are somewhat rooted in the human behaviours (Steg *et al.*, 2014). To deal with such environmental problems organizations and governments around the globe consume a large sum of resources for the cultivation of pro-environmental behaviours. Previous researchers in this area focused on the role of environmental awareness to protection of the environment (Bassi *et al.*, 2019), environmental education and environmental protection (Li, 2018) and cultivating environmental awareness (Nazarenko and Kolesnik, 2018).

Environmental protection is related to economic development. Peng et al. (2020) argued environmental protection and economic development has become controversial since the recent decade. A large stream of literature has focused on exploring the linkage of economy and the environment (Acheampong, 2018; Balsalobre-Lorente et al., 2018; Giddings et al., 2002; Hou et al., 2021; Shahbaz et al., 2021; Zameer et al., 2020a, b). Most of these studies explored the linkage and confirmed the relationship either positive or negative. However, none of the researches emphasized are exploring how and what factors can play a critical role in reinforcing pro-environmental behaviours. In addition, existing researchers also missed to study how environmental protection and awareness can work as triggering factors for the management of environmental quality. To provide insights for environment related decision making, this special issue entitled "management of environmental awareness, protection and pro-environmental behaviours" advance the existing knowledge in the area of proenvironmental behaviours and environmental quality management to meet the scholarly requirements of the futuristic challenges of the sustainable development of the environment. Thus, we believe, this special issue opens a fruitful discussion upon new avenues and mechanisms that can play a pivotal role for the management of environmental awareness, protection and pro-environmental behaviours.

The accepted papers in this issue explored a variety of ways through which management and protection of environment is possible. First paper entitled "Automobile industry managers' views on their roles in environmental sustainability: a qualitative study" focused on exploring the role of HR managers, health and environment managers to promote environmental sustainability in Malaysian automotive sector. The next paper "How environmental awareness and corporate social responsibility practices benefit the enterprise? An empirical study in the context of emerging economy" studied the relation of environmental awareness and firm green practices with firm performance and its reputation. The third paper "The effect of heavy metal pollution on urban ecosystem and the evaluation of different land classifications; in Bingöl city/ Turkey" emphasized on the management of eco-systems and explored how heavy metal pollution is impacting it in the context of Bingol, Turkey.

The fourth paper "Consumer attitude towards green products: revisiting the profile of green consumers using segmentation approach" studied environmental consciousness of consumers and focused on exploring consumer attitudes toward opting green products. The fifth paper "The impact of individual motivation on employee voluntary pro-environmental

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behaviours: the motivation toward the environment of Polish employees" studied the proenvironmental behaviours of Polish employees. The sixth paper "Systemic support and environmental awareness in a normalised environmental management system consistent with ISO 14001" highlighted the systematic support for the challenge of cultivating environmental awareness. Another paper "The role of governance indicators to minimize the carbon emission: a study of Saudi Arabia" indicated the role of governance indicators to minimize the emissions for the management of environmental quality.

The next paper "Promoting environmental sustainability: the influence of knowledge of eco-labels and altruism in the purchase of energy-efficient appliances" argued the importance of eco-labels for promoting environmental sustainability. Another paper entitled "How Industry 4.0 technologies and open innovation can improve green innovation performance?" highlighted the role of industry 4.0 for reinforcing green innovation performance. The tenth paper "Impact of blockchain technology on green supply chain practices: evidence from emerging economy" focused the exploring about blockchain technology and its contribution in promoting green supply chains. Next paper "Green product preferences considering cultural influences: a comparison study between Malaysia and Indonesia" study the cultural influences for green product preference in consumer decision making.

One other paper "Determinant analysis of employee attitudes towards pro-environmental behavior in textile firms of Pakistan: a serial mediation approach" explored employees' attitudes toward reinforcing pro-environmental behaviours in Pakistan. The next paper "Managing environmental quality in Pakistan through sustainable development of energy–economy–environment (3E): insights from graph model of conflict resolution (GMCR)" developed a GMCR based strategy for the management of environmental quality. The last paper of this issue "Sustainable management of national resources through implementation of balanced scorecard" emphasized on the sustainable management of resources and argued their role for environmental management.

Guest editors hope that this special issue shall positively impact the debate upon the management of environmental awareness, protection and pro-environmental behaviours.

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