different time zones. The search methods could include accurate search ('health informatics') and fuzzy search (health informatics). Both methods have advantages and disadvantages. The accurate search may miss some important articles; the fuzzy search may expand the search range, but it can find all the relevant articles. Therefore, we chose the fuzzy search.

Ho also mentions that due to biases from WoSCC, the filter 'front page' proposed by Ho's group can avoid introducing unrelated articles for analysis.

We agree that the 'front page' is more desirable. Nevertheless, VOSviewer is effective in constructing and visualizing scientific landscapes. It has a powerful function in an easy-to-interpret way of co-citation and co-authorship analysis. CiteSpace is another computer program which can visualize abrupt changes and emerging trends in specific fields within a designated period of time. Each method has its advantages. The titles and abstracts can also identify articles that are used by data visualization tools (VOSviewer and CiteSpace).

We again thank Ho for his useful comments, which have provided an opportunity to enhance our collective understanding on scientometrics.

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Wasteland or degraded land – the dilemma continues

Land degradation (LD) is one of the major concerns of the 21st century. It can be attributed to both natural and anthropogenic factors. The article by Sreenivas *et al.*[1] is a commendable effort to envision integration of ecological services from the perspective of human sustenance. The foundation of a food-production system is good land, i.e. soil. Definition of a land according to Food and Agriculture Organization (FAO) is as follows: 'Land is a delineable area of the earth's terrestrial surface, encompassing all attributes of the Biosphere immediately above or below this surface, including near-surface climate, the soil and terrain forms, the surface hydrology (including shallow lakes, rivers, marshes and swamps), the near-surface sedimentary layer and associated groundwater reserve, the plant and animal populations, the human settlement pattern and physical results of past and present human activity (terracing, water storage or drainage structures, roads, buildings, etc.)[2].' Technically, there may or may not be any difference between land and soil. However, productivity of the land is determined by the ability of the soil to supply nutrients and sustain biological activities. In any scenario, the significant concern of any stakeholder will be the extent of possible utilization of a given piece of land. For agriculturists, food production per unit of land will be the focus, while for a mineralogist or geologist it will be the mineral deposit per unit of land. Irrespective of the various perspectives, the agenda of focus is always on the productivity per unit of land. Thus, the land is an invaluable resource, especially fertile soil or land for food-production systems. In this context, the above-mentioned article highlights the significance of land and the difficultly in preventing as well as reclaiming degraded land given the population increase in India[1]. For instance, in India over the past 10 years, only 0.1 million ha of land has been recovered from degradation. One noteworthy argument of the article is the discontent in land statistics data, especially degraded land statistics by different agencies.

As readers, we too perceived the confusion. For instance, the article exclusively deals with degraded land and states that 91.20 m ha of land is degraded in India. Recently, the Department of Land Resources, Ministry of Rural Development, Government of India released the Wasteland Atlas of India – 2019, which specifies that 55.76 m ha of land falls under 32 categories of wasteland; this is not discussed in the above-mentioned article[1]. The authors, however, have mentioned a previously published Wasteland Atlas in table 1. The matter of concern here is not only the difference in the land area values, but also in the terminology – 'wasteland' and 'degraded land'. Do both terminologies mean the same? The integrated wasteland development programme webpage under the Ministry of Rural Development, GoI, defines wasteland as 'Degraded land which can be brought under vegetative cover, with reasonable effort, and which is currently underutilized and land which is deteriorating for lack of appropriate water and soil management or on account of natural causes' (https://dolr.gov.in/integrated-wasteland-development-programme). Irony abounds here. Furthermore, the article states that 27.77% of land is degraded in India, but does not mention the total geographical area used for this computation[1].

Also, the article provides the Land Degradation Map of India 2015–16, which portrays the need for revamping our efforts to achieve 'LD neutrality', as quoted. It would have been worthy if the authors had mentioned whether they had included the recorded forest area (71.22 m ha) of India in their analysis to evolve the land degradation map. This could have helped unveil the degradation level even in the recorded forest land and protected area network, which would give insights into the challenges and opportunities for ecosystem restoration per se. Notwithstanding, there are increasing concerns for creating maps at the regional and local scales; the effectiveness of these maps can be ascertained only if some clarity on the intricate details is given, as stated earlier.

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Response

We thank Arunachalam and Suresh Ramanan for their comments on our article.

The authors mention that one noteworthy argument of our article is the discontent in land statistics data, especially degraded land statistics by different agencies. This is because of the adoption of various methodologies to assess degraded land as well as the classification systems used. We have clearly mentioned in table 1 the broad methodology used by various organizations. All the studies were associated with a certain level of uncertainty due to choice of datasets, satellite-data resolution, methodology used, etc. Hence the area statistics provided by all the various organizations may differ.

Regarding the Wasteland Atlas of India – 2019, since wasteland and land degradation (LD) are different by definition and as the current scope of the work is on land degradation, we did not discuss wastelands.

With regard to the confusion on terminologies 'wasteland' and 'degraded land', we would like to mention that they are not the same. Land degradation includes part of land currently put to various uses like agriculture, forest, etc. with notable land degradation processes like water erosion, wind erosion, salinisation, acidification, etc. that could restrict the productivity of the land. Wasteland is a form of severe land degradation and currently not put to any economic use, and requires additional efforts to make it useful. Thus, wasteland mostly forms a subset of land degradation. Besides, some of the LD processes like acidification, sheet erosion, frost heaving, etc. were not considered in the wasteland mapping project.

According to the authors, our article states that 27.77% of the land is degraded in India, but it does not mention the total geographical area used for this computation. Though the geographical area has not been mentioned explicitly in our article, it can be easily derived using % LD area and its spatial extent: (91,206,650 * (100.0/27.77)) = 328,435,902 ha (from table 3).

Arunachalam and Suresh Ramanan also want to know whether we have included the recorded forest area (71.22 m ha) of India. The mapping of land degradation in our study includes both non-forest and forest areas.

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Fisheries ecolabelling – clearing the haze

This is regarding the article by Ramachandran and Parappurathu[1] on ecolabelling and fisheries sustainability. The article comes at a time when the Voluntary Sustainability Standards have an increasing global presence for many natural commodities, and the Food and Agriculture Organization (FAO) has initiated a harmonization process through a separate forum[2]. In fisheries, the most widely used standard is that of the Marine Stewardship Council (MSC), which follows the FAO ecolabelling[3] and responsible fisheries guidelines with a footprint of ~15% of the 90+ million tonnes global fish catch. The authors argue against non-state entities in fisheries governance, where none exists[1]. Reading this article one gets the distinct feeling of eating a half-cooked meal, as the authors fail to fathom the current global and national scenario and perspectives. The MSC has several critics, most of whom have been cited by the authors[1]; but most critics aim at improving the system and toughening the standards. Fishery resources are an unseen public resource in a public space held in trust by the Government, which manages the exploitation through regulations. Under a wider commons than that of Hardin's example, with multitudinous stakeholders, most governments fail to manage the fisheries sustainably. The MSC standards, a non-state and not-for-profit entity, force governments to manage and regulate the fishery resources sustainably, but do not per se get involved in any management. For example, the establishment of a small participatory Clam Fisheries Management Council to fulfil the requirements of the MSC standards for India's Ashtamudi short-neck clam later led to a new regulation on fisheries co-management by the Government of Kerala.

An example of the authors' lack of understanding of the process is given in the statement: 'It is almost impossible for the fish consumer to verify whether the standards are followed in a marine fishery, which is invisible and often fugitive'. They seem unaware of the dual facets of the MSC standards, one on fish stock sustainability and the other on the chain of custody (CoC) or traceability. After catching fish, the seafood products may pass through many stages. The MSC CoC standard ensures that products from MSC-certified sustainable fisheries are traceable and separated from non-certified products. Another flawed statement made by the authors is 'MSC has given ecolabel certification to two molluscan fisheries, the Ben Tre Clam in Vietnam and Ashtamudi short-necked clam in India, without charging the normal fee from the stakeholders'. This makes it amply clear that the authors have not done a proper literature survey. Details about the Ashtamudi short-neck clam certification and the cost of certification are available in the public domain[4].

Yet another unsound contention put forth by the authors is that the cost of management of the fisheries is borne by the state and the sustainability certificate agencies take a cut from the proceeds (0.5% royalty on the wholesale value[1]). Rightly so, as management of fishery resources is the responsibility of the state and the benefits of sustainable exploitation are trickled down