

Review of: "Debal Deb. (2023). The Dual Role of Culture in Evolutionary Play: Anthropogenic Expansion Vss Destruction of Biodiversity. Qeios. doi:10.32388/CWBMG2.2."

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Potential competing interests: No potential competing interests to declare.

Dear Dr. Deb,

As per your request, I have gone through the article entitled "The Dual Role of Culture in Evolution Play: Anthropogenic Expansion versus Destruction of Biodiversity". My humble submission is that I have attended to your request only; otherwise, I am not fit for reviewing or evaluating this highly knowledge-based article, especially at my age of 77.

No doubt, the article is well-written, and the title and abstract are appropriate for the content of the text. You have addressed various issues with the support of several documents and needful citations. Some of the points I will discuss in the context of your article as it has impressed me considerably.

1. You have referred to issues like the Green Revolution and its impact on agriculture. Really, it is unfortunate that the use of high external inputs, especially agrochemicals, in staple foods like the rice we eat, badly deprives us of the quality of living. It is owing to these inputs and their negative impacts that the IPCC has noted that agriculture, as practiced today, accounts for about one-fifth of the projected anthropogenic greenhouse gases, producing about 50 percent and 70 percent, respectively, of anthropogenic methane and nitrous oxide. Further, we have lost several potential indigenous crop varieties during the period of green revolution agriculture.
2. Another important point is that several recent measures like a higher level of agricultural intensity and the introduction of new technologies are feared to have resulted in a decrease in biological diversity all over the world. A rapid decline in the numbers and body size of coastal cod in the Gulf of Maine is due to the introduction of fishing technology.
3. It is really a matter of great concern that three hundred and twenty (320) landraces have disappeared from farm fields by the end of 2020, and new samples of extant aromatics like Basmati, Gandheswari, Gobindabhog, and Badshabhog rices of India are often aroma-less due to the non-maintenance of genetic purity by farmers. The situation is alarming.
4. You have rightly mentioned that the process of domestication of a species from the ancestral stock is lengthy. Mazoyer and Roudart (2006) have mentioned that many species were domesticated rather early in the centre of origin; the ox, sheep, goat, pig, and pigeon in the Northeast; the hen, pig, ox, and maybe also the dog in China; the turkey and the musk duck in Central America; and the llama, Alpaca, and Guinea pig in South America.
5. In your document, I have seen that you referred to the name of E K J Ammal, an Indian Botanist. It is ironic to note that

her contribution to plant breeding and cytogenetics is not known to new generation research workers. It is also a part of the destruction of our culture.

Regards

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