



Comment on **essd-2021-262**

Anonymous Referee #2

Referee comment on "Emissions of greenhouse gases from energy use in agriculture, forestry and fisheries: 1970–2019" by Alessandro Flammini et al., Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2021-262-RC2>, 2021

The manuscript presents a database of country-specific energy-related GHGs emission inventory for the agriculture, forestry and fisheries sectors from 1970 to 2019. It provides the country-specific information on the GHGs data and could potentially improve the understanding of long-term temporal trend of GHG emissions for the three sectors. To satisfy the needs of readers and potential users from multiple research background, the description of the data should be improved. In particular, I feel the data organization is not clearly explained and the details of the datasets should be better described. Moreover, the figures and tables should be improved as well. A substantial revision on the format of manuscript (including figures and tables) are needed.

- The figures and tables in the manuscript are not in good format. Should be carefully edited. Some figures actually provided very limited information and thus should be merged or reorganized (for example, Figures 6, 8 and 13).
- The text needs improvement as well. Section 2.1 is missing and there are two Sections of Gap filling. Sections 2.3 and 2.4 repeated twice. Please be careful on the text.
- I feel the description on the datasets (provided as .csv files) is insufficient. The datasets are valuable thus need better introduction. Why were those data fields selected and how were the data organized? What kinds of information could the dataset provide and how can the information be obtained? I encourage the authors to provide more examples.
- In Introduction, the structure of the source categories should be given clearly. The emissions of subcategories for the three sectors are important.
- The explanations of the results are too simple. Some specific issues should be included or improved, for example, the long-term temporal trend and its driving factors; the spatial pattern of GHG emissions and its reason; and the species characteristics of emissions. Better explanation would improve the significance of the work.
- Could the authors indicate the fractions of emissions for the sectors concerned in this work to the total GHGs emissions by country?
- How are the data obtained in this work for the three sectors compared with other available studies including the IPCC estimates? A more comprehensive comparison

should be conducted, if possible, at the country level.