Enhancing the Eora MRIO database

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Many studies show that aggregation in Multi-Region Input-Output (MRIO) databases can influence Input-Output Analysis results: when data are aggregated valuable information can be lost, allowing significant errors. For example, if aluminium and copper are grouped together in one industry sector (non-ferrous metals), this aggregation yields an underestimated energy intensity for aluminium and an overestimated energy intensity for copper, as copper requires less energy inputs than the aluminium production process. Thus, MRIO databases should ideally cover the entire world at high sector and country resolution to avoid errors due to aggregation. At the time of writing the broadest and most detailed database is Eora World MRIO: in a total of 187 countries some comprise up to 500 sectors. However, many developing countries in the database are still weak in detail, containing only 26 sectors. This sector aggregation can also affect, for example, tracing biodiversity and social consequences of consumption – often concerns in developing countries. We aim to enhance these countries sector resolution using 27 Social Accounting Matrices (SAMs) constructed and published by the International Food Policy and Research Institute (IfPRI). This paper describes the results from the Eora MRIO database update aimed at enhancing the sectoral level of developing countries that presented lack of data in the past.