

Interactive comment on “Minimum forest cover for sustainable water flow regulation in a watershed under rapid expansion of oil palm and rubber plantations” by Suria Tarigan et al.

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The manuscript addresses one of the important ecosystem services (i.e. water regulation function) that was observed and modeled in a land use system mostly dominated by oil palm and rubber plantation. In particular, the expansion of oil palm plantation in Indonesia requires a lot of scientific data, information and knowledge on environmental settings, biodiversity & ecosystem services as well as human dimension aspects in order to determine the trade off between conservation and sustainable production, including the innovative ways to improve the socio-ecological performances of the system. This manuscript has discussed important findings that are useful for development

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planners and other relevant stakeholders in order to define the minimum coverage of forested areas and also manage further development of the existing land uses (i.e. crop plantations) that are usually already stable or unchanged. The findings may be used as baseline to model the future land use development in other areas where forest cover is still changing. We suggest to consider the use of landscape approaches within the context of sustainable watershed management in order to take into account other important ecosystem services such as production, information, habitat etc.

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