Appendix 5. Results of permutation tests.

Mosaic plots allow the visualization of contingency tables and independence tests (Friendly 2017). Box colors show the outcome of the independence test using Pearson residuals as the test statistic. Blue boxes indicate positive residuals (i.e. it is more likely to find stakeholders in this category than expected) and red boxes indicate negative residuals. Blue gradients (or red gradients) indicate residuals with absolute values exceeding critical values (i.e. significant differences at the 99%, 95% and 90% percentiles in the distribution of absolute Pearson residuals). For sake of simplicity, boxes with absolute residuals below the critical value of 90% are white. The plots were drawn with the vcd package in R and the distribution of absolute Pearson residuals were calculated with the function coindep_test of this package (R Core Team 2016, Meyer et al. 2017).



Figure A5.1. Mosaic plots of the frequency of being/not being beneficiary of ES for different groups of stakeholders. Each box is associated with a binary variable in left list (Yes beneficiary, and No beneficiary) and stakeholders groups in top list (Sector in panel A - BUS=Business, SOC=Civil Society, NGO=Non-Governmental Organizations, PUB=Public Sector - and scale of influence in panel B - LOC=Local, SUB=Sub-national, NAT=National and International). The height of a box is proportional to the number of observations for being/not being beneficiary of ES. The width of a box is proportional to the number of stakeholders in each group.



Figure A5.2. Mosaic plots of the frequency of the involvement of different stakeholder groups to different form of ES management (Direct/Indirect management). Each box is associated with a form of management in left list (Direct and Indirect forms of management) and stakeholders groups in top list (type of stakeholder in panel A and scale of influence of stakeholder in panel B). The height of a box is proportional to the number of observations of the corresponding form of management. The width of a box is proportional to the number of stakeholders in each group.



Figure A5.3. Mosaic plot of the frequency of being/not being beneficiary of ES depending on different form of ES management implemented (Direct/Indirect management). Each box is associated with a binary variable in left list (Yes beneficiary, and No beneficiary) and form of management in top list (Direct and Indirect forms of management). The height of a box is proportional to the number of observations for being/not being beneficiary of ES. The width of a box is proportional to the number of stakeholders implementing direct and indirect management.



Figure A5.4. Mosaic plots of the frequency of observation of different stakeholder groups into different clusters. Each box is associated with a cluster in left list (Crowd, Subjects, Context setters and Key players) and stakeholders groups in top list (Sector in panel A and Scale of influence in panel B). The height of a box is proportional to the number of stakeholder in each cluster. The width of a box is proportional to the number of stakeholders in each group.

Literature cited

Friendly, M. 2017. Working with categorical data with R and the vcd and vcdExtra packages.

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