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Downscaling SSPs in the GBM Delta - Integrating Science, Modelling and Stakeholders Through Qualitative and Quantitative Scenarios

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A downscaled scenario development process was adopted in the context of a project seeking to understand relationships between ecosystem services and human well-being in the Ganges-Brahmaputra delta. The aim was to link the concerns and priorities of relevant stakeholders with the integrated biophysical and poverty models used in the project. A 2-stage process was used to facilitate the connection between stakeholders concerns and available modelling capacity: the first to qualitatively describe what the future might look like in 2050; the second to translate these qualitative descriptions into the quantitative form required by the numerical models. An extended, modified SSP approach was adopted, with stakeholders downscaling issues identified through interviews as being priorities for the southwest of Bangladesh. Detailed qualitative futures were produced, before modellable elements were quantified in conjunction with an expert stakeholder cadre. Stakeholder input, using the methods adopted here, allows the top-down focus of the RCPs to be aligned with the bottom-up approach needed to make the SSPs appropriate at the more local scale, and also facilitates the translation of qualitative narrative scenarios into a quantitative form that lends itself to incorporation of biophysical and socio-economic indicators. The presentation will describe the downscaling process in detail, and conclude with findings regarding the importance of stakeholder involvement (and logistical considerations), balancing model capacity with expectations and recommendations on SSP refinement at local levels.