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## What can('t) we do with global flood risk models?

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In recent years, several global scale flood risk models have become available. Within the scientific community these have been, and are being, used to assess and map the current levels of risk faced by countries and societies. Increasingly, they are also being used to assess how that level of risk may change in the future, under scenarios of climate change and/or socioeconomic development.

More and more, these 'quick and not so dirty' methods are also being used in practice, for a large range of uses and applications, and by an increasing range of practitioners and decision makers. For example, assessments can be used by: International Financing Institutes for prioritising investments in the most promising natural disaster risk reduction measures and strategies; intra-national institutes in the monitoring of progress on risk reduction activities; the (re-)insurance industry in assessing their risk portfolios and potential changes in those portfolios under climate change; by multinational companies in assessing risks to their regional investments and supply chains; and by international aid organisations for improved resource planning.

However, global scale flood risk models clearly have their limits, and therefore both modellers and users need to critically address the question 'What can('t) we do with global flood risk models?'. This contribution is intended to start a dialogue between model developers, users, and decision makers to better answer this question. We will provide a number of examples of how the GLOFRIS global flood risk model has recently been used in several practical applications, and share both the positive and negative insights gained through these experiences. We wish to discuss similar experiences with other groups of modelers, users, and decision-makers, in order to better understand and harness the potential of this new generation of models, understand the differences in model approaches followed and their impacts on applicability, and develop clarity on their limits and potential misuses.