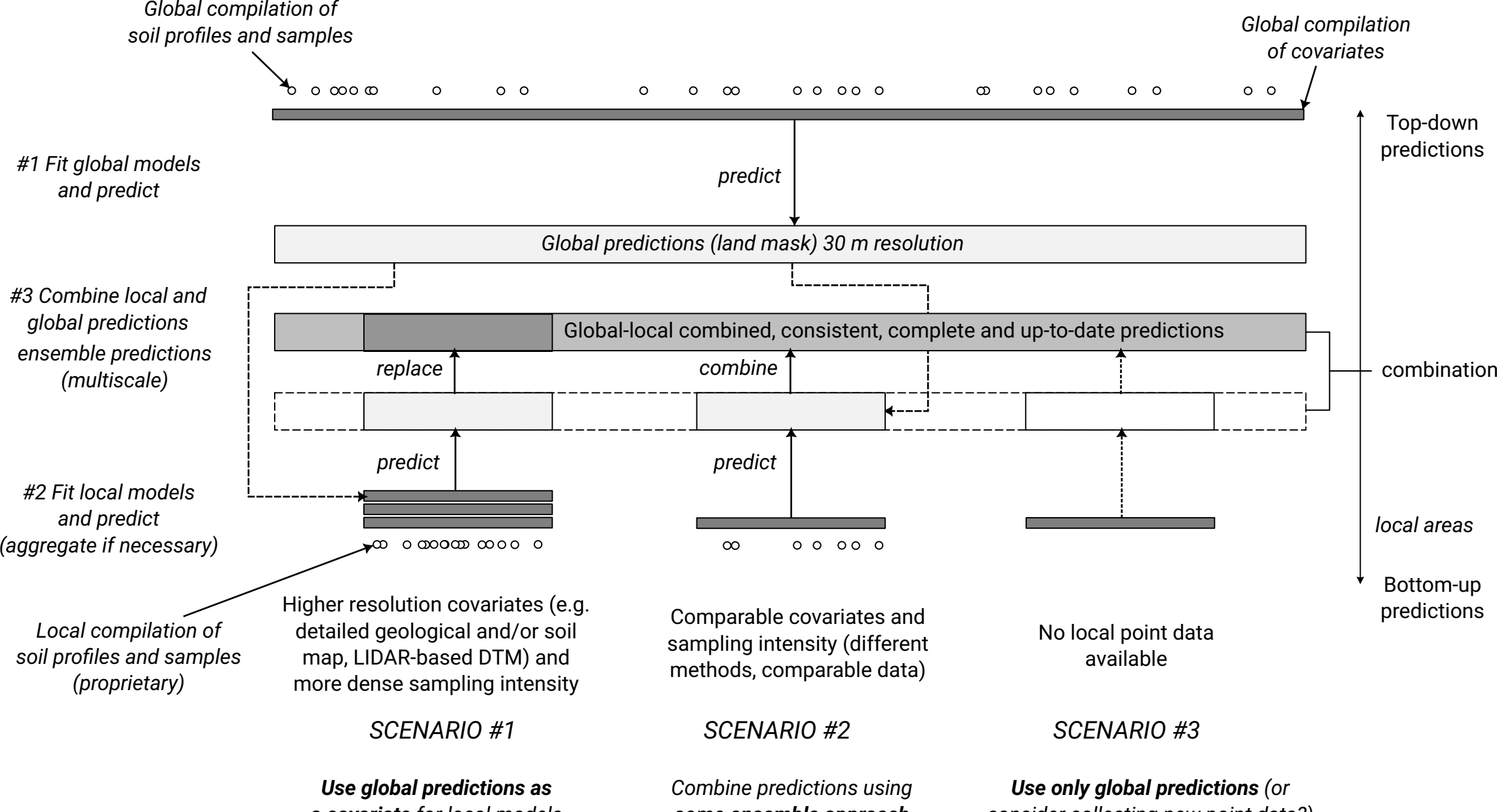
Global compilation of soil profiles and samples
Global compilation of covariates
#1 Fit global models and predict
predict
Global predictions (land mask) 30 m resolution
Top-down predictions
#3 Combine local and global predictions
ensemble predictions (multiscale)
Global-local combined, consistent, complete and up-to-date predictions
replace
combine
combination
predict
predict
#2 Fit local models and predict (aggregate if necessary)
local areas
Bottom-up predictions
Local compilation of soil profiles and samples (proprietary)
Higher resolution covariates (e.g. detailed geological and/or soil map, LIDAR-based DTM) and more dense sampling intensity
Comparable covariates and sampling intensity (different methods, comparable data)
No local point data available
SCENARIO #1
SCENARIO #2
SCENARIO #3
Use global predictions as a covariate for local models
Combine predictions using some ensemble approach
Use only global predictions (or consider collecting new point data?)