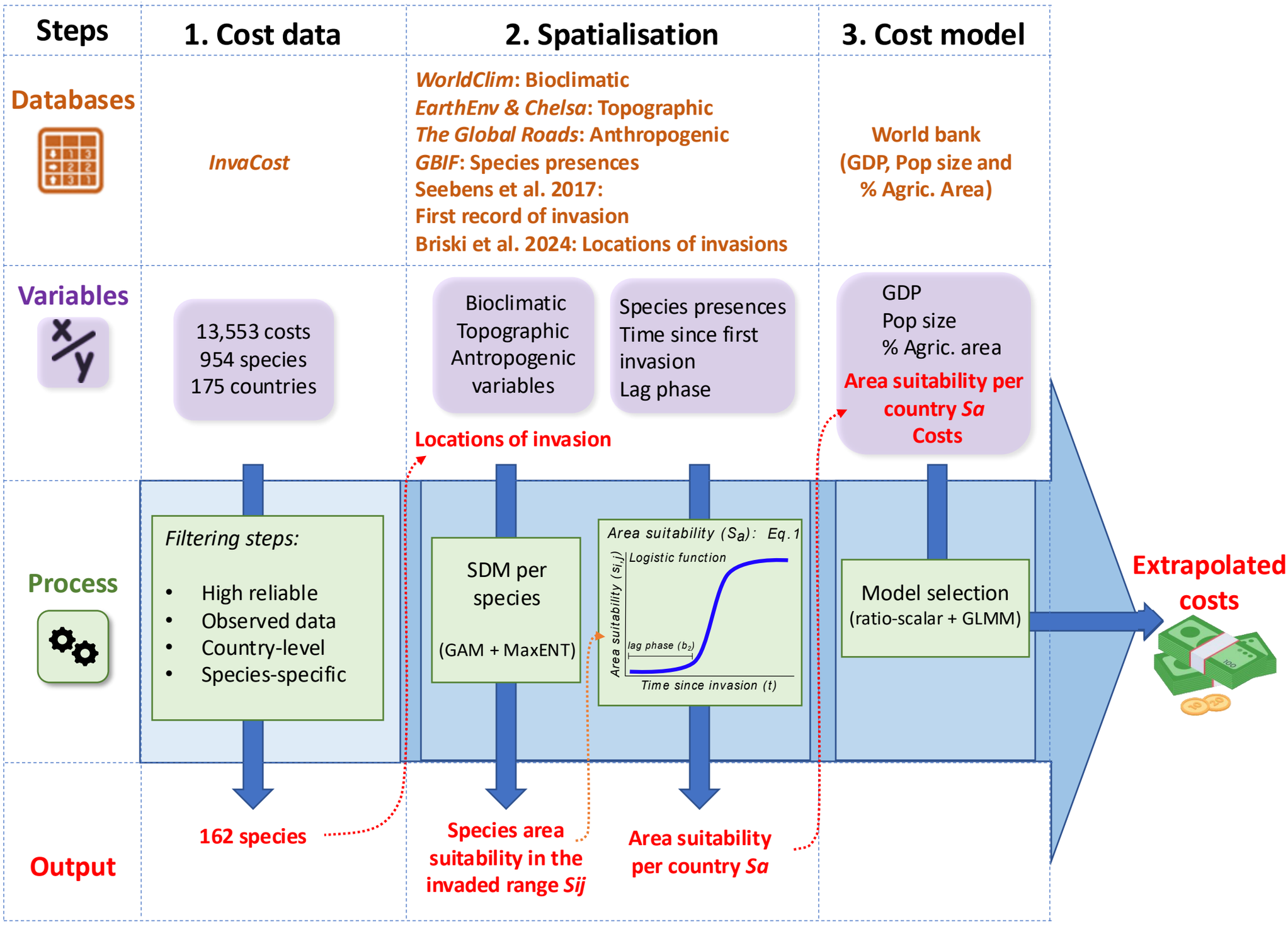
Steps
1. Cost data
2. Spatialisation
3. Cost model
Databases
InvaCost
WorldClim: Bioclimatic
EarthEnv & Chelsa: Topographic
The Global Roads: Anthropogenic
GBIF: Species presences
Seebens et al. 2017:
First record of invasion
Briski et al. 2024: Locations of invasions
World bank
(GDP, Pop size and
% Agric. Area)
Variables
13,553 costs
954 species
175 countries
Bioclimatic
Topographic
Antropogenic
variables
Species presences
Time since first
invasion
Lag phase
GDP
Pop size
% Agric. area
Area suitability per
country Sa
Costs
Locations of invasion
Process
Filtering steps:
High reliable
Observed data
Country-level
Species-specific
SDM per
species
(GAM + MaxENT)
Area suitability (Sa): Eq.1
Logistic function
Area suitability (si,j)
lag phase (b2)
Time since invasion (t)
Model selection
(ratio-scalar + GLMM)
Extrapolated
costs
Output
162 species
Species area
suitability in the
invaded range Sij
Area suitability
per country Sa