

Supplementary Table S2. Description of criteria used for classification analysis to match countries to each policy objective. Countries were classified to one of the four categories ‘highly relevant’, ‘relevant’, ‘less relevant’, and ‘missing data’, depending on how fully they matched the stipulated criteria outlined for each policy objective (Table S1). These criteria represent the conditions when policy objectives are hypothesized to be relevant. R code used for Boolean analysis is available here https://github.com/emmywas/BFA_Policy_analysis

BF=blue food, *countries with missing data for blue food availability were included in these categories.

Note that variables ‘blue food availability’ and ‘climate hazard score’ primarily differentiate between countries for which the policy is highly relevant, vs those where it is just relevant. The logic is that for a country with, for example, inadequate intake of B12 or omega-3, low blue food availability does not render the policy irrelevant. It simply means the conditions for most easily implementing it, given current conditions, exists in ‘highly relevant’ countries, while in ‘relevant’ countries blue food may need to be sourced.

Degree of policy relevance	Reducing blue food sensitive deficiencies		Reducing cardiovascular disease risk	Reducing environmental footprints of food consumption and production	Safeguarding food system contributions under climate change
	omega-3	Vitamin B12			
Highly relevant	(High insufficient intake of vitamin omega-3 AND BF availability above the cut-off	(High insufficient intake of vitamin B12 AND BF availability above the cut-off	Red meat consumption is high AND cardiovascular disease risk is high AND BF availability is above the cut-off	Ruminant meat consumption is high AND BF availability is above the cut-off	(The BF sector is important due to employment OR export revenue OR high nutritional contribution) AND country faces a high climate hazard
Relevant	(High insufficient intake of vitamin omega-3 AND BF availability is below the cut-off*	(High insufficient intake of vitamin B12 AND BF availability is below the cut-off*	Red meat consumption is high AND cardiovascular disease risk is high AND BF availability is below the cut-off*	Ruminant meat consumption is high AND BF availability is below the cut-off*	(The BF sector is important due to employment OR export revenue OR high nutritional contribution) AND the country does not face a high climate hazard
Less relevant	Low incidence of insufficient intake of vitamin omega-3	Low incidence of insufficient intake of vitamin B12	Red meat consumption is low OR cardiovascular disease risk is low.	Ruminant meat consumption is below the cut-off	The BF sector is not important for employment, export revenue, or high nutritional contribution (i.e., all variables below threshold).
Missing data	Data not available for intake of vitamin omega-3	Data not available for intake of vitamin B12	Data not available for red meat consumption or cardiovascular disease incidence variables	Data not available for ruminant meat consumption	Data not available for employment, export revenue, or nutritional contribution