

## Appendix 1: Database Matrix

In reviewing each article, we inserted the data for each variable listed below into the ready-formulated Excel database. Where information was not provided or not clear, the data cells were left blank. Answers were mostly quantitative, pre-coded and categorized (as shown in Table A1 and A2 below) to ease subsequent data analysis. Similarly, as seen in Table 3, we used pre-defined categories (Mobility, Exchange, Rationing, Pooling, Diversification, Intensification, Innovation, Revitalization, and Other) to analyze adaptation type. We used basic statistics in Excel to analyze our results. Throughout, we critically examined data collection procedures and analytical methods used to support the information provided in the studies.

### Part I:

**Table A1. Descriptive characteristics**

Variable	Description	Format	Categories
Num	Number of article (assigned by us: from 1 onwards)	Number	---
Ref	Full scientific reference, eg: Author et al. (Year) Title, Journal, vol: (issue), pgs.	Text	---
Year	Year that article published	Number	---
Jour	Journal title	Text	---
Auth	Lead author affiliation country	Text	---
Group	Group studied	Text	Coded later into the following:
Data year	Year(s) that data were collected	Number	
Cont	Continent (classification of Encyclopedia Britannica 2006)	Number	1 = Africa 2 = Europe 3 = Asia 4 = North America ( <i>including Central America</i> ) 5 = South America 6 = Australia 7 = Antarctica
Region	Region	Number	101 = Northern Africa (Maghreb) 102 = Sahel 103 = Rest of Western Africa 104 = East Africa (excluding the Horn of Africa) 105 = Central Africa 106 = Southern Africa 107 = Horn of Africa (Eritrea, Djibouti, Ethiopia and Somalia) 107 = African islands --- 201 = Eastern Europe 202 = Western Europe (excluding Nordic countries) --- 301 = Western Asia and Middle East 302 = South-East Asia (Pacific) 303 = South-Central Asia (including India and the Himalayas) 304 = Eastern Asia (including Mongolia and Taiwan) 305 = North Asia (Russia, excluding Siberia) --- 401 = United States and Canada (excluding Arctic regions) 402 = Mexico 403 = Rest of Central America

			404 = Caribbean Islands --- 501 = Andean region (including Altiplano) 502 = Amazon Basin 503 = Atlantic littoral 504 = Cerrado and Pampa 505 = The Guyana 506 = Southern South America (mainly Patagonia and Tierra de Fuego) --- 601 = Australia 602 = New Zealand 603 = South- Pacific islands --- 801 = Arctic (including Alaska, Siberia and Lapland)
Country	Country/ies of study	Text	---
Climate	Type of climate (Köppen climate classification)	Number	10= tropical/megathermal 20= dry (arid and semiarid) 30= temperate/mesothermal 40= continental/microthermal 50= polar and alpine
Livelihood_1	Main livelihood strategy / subsistence activity	Number	1= hunter-gatherer 2= small-scale agriculture 3= intensive agriculture 4= fishing 5=NTPF collection 6=Pastoralism/animal husbandry 7=wage labour 8=other
Livelihood_2	Secondary livelihood strategy / subsistence activity	Number	1= hunter-gatherer 2= small-scale agriculture 3= intensive agriculture 4= fishing 5=NTPF collection 6=Pastoralism/animal husbandry 7=wage labour 8=other
Livelihood_3	Tertiary livelihood strategy / subsistence activity	Number	1= hunter-gatherer 2= small-scale agriculture 3= intensive agriculture 4= fishing 5=NTPF collection 6=Pastoralism/animal husbandry 7=wage labour 8=other
Sample	Sample size studied (number of individuals studied/interviewed/surveyed)	Number	---
Method	Method for data collection	Number	1= quantitative 2= qualitative 3= both quantitative and qualitative
Goal_perc	Local perceptions of change as goal of article	Number	Was the primary goal of the article to collect local perceptions of change? 1 = Main goal 2 = one among several goals 3 = not a goal, perceptions appear only in a tangent way
Goal_chang	Documenting change as goal of article	Number	Was one of the goals of the article to collect actual documentation of change? 1 = Main goal 2 = one among several goals 3 = not a goal, documentation

			appears only in a tangent way
Goal_sci	Comparing scientific data with local perceptions as goal of article	Number	Was one of the goals of the article to compare local perceptions with scientific evidence? 1 = Main goal 2 = one among several goals 3 = not a goal, comparison appears only in a tangent way
Notes	Notes (be as brief and to the point as possible)!	Text	---

Note: For all the above, code “-9” for “Not mentioned/not clear”

### Table A2. Perceptions and understandings of Global Environmental Change

This Table is intended to compile all the information on the perceptions, understandings and manifestations of Global Environmental Change in the publications referred to in Table 2. If some information is missing, not available, or not mentioned, code as “-9”.

Variable	Description	Format	Categories
Num	Number	Number	---
Type_chang_1 Type_chang_2 Type_chang_3 Type_chang_4 Type_chang_5 Type_chang_6 Type_chang_7	Type of perceived contemporary change	Number	1= temperature change 2= rainfall change 3= drought 4 = erosion 5 = floods 6= sea level rise 7= deforestation 8= biodiversity change 9= invasive species 10= permafrost/ice/glaciers 11= fire 12= winds (excl. tornadoes/cyclones) 13 = storms 14= extreme events (incl. tornadoes/cyclones/tsunamis/earthquakes) 15 = phenology/seasonality 16=other (name what)
Length	Decade	Number	Decade since change is recorded/perceived (e.g. 1980s)
Spat_imp	Spatial impact	Number	Is the change perceived to be only local, or also regional, or even global? 1= local 2= regional 3= global 4= locally not perceived as change
Spat_driver	Spatial driver of change	Number	Is the perceived main driver of change perceived to be local, regional, or global? 1= local 2= regional 3= global 4= locally not perceived as change
Driver	Perceived driver of change	Number	Perceived driver of change? 1 = human-induced; 2= natural phenomena; 3=supernatural/religious/cosmological

			4= other
Change_eval	Change perceived as positive or negative	Number	Change perceived as positive or negative? 1=Positive 0=Negative 2=Both positive and negative
Change_inv	Invisibility of change	Number	Is the change perceived by the naked eye (=1)? Has it been recorded only through the use of technological equipment/measurement (=0)? Or both (=2)?
Imp_liv	Explicitly stated direct impact on livelihood	Number	Are there direct impacts of the change on local livelihoods? Yes=1 No=0
Imp_cult	Explicitly stated direct impact on culture/social norms	Number	Are there direct impacts of the change on culture/social norms? Yes=1 No=0
Imp_envir	Explicitly stated direct impact on the environment	Number	Are there direct impacts of the change on the environment? Yes=1 No=0
Local_conc	Local epistemology, ontology, cosmology, cultural meaning, conceptualisation, etc	Number	Do the authors take into account local conceptions of the environment in their study? (i.e. do they rely -even partly- on local ethnological explanations?) Yes=1 No=0
Local_psy	Local psychology and processes that shape perceptions of change	Number	Do the authors take into account psychological dimensions of the environmental perceptions? (e.g. shifting baselines, change blindness, amnesia, media effects, etc.) Yes=1 No=0
Conc_sci	Report/perceptions concordant or not with scientific data/info?	Number	1=Yes, local=scientific reports 0=No, local differs from scientific 2= Both yes and no -9= not reported
Own_sci	Self-measured scientific data	Number	Does the article contain primary scientific data, measurements, records on the change apart from local perceptions? 1=Yes 0=No
Loc_resp	Local response to change	Number	Does the article mention any local responses to change? 1=Yes 0=No
Loc_adapt	Local adaptation to change	Number	If there are responses/adaptation measures to change, are these: 1= based on local knowledge 2= based on modern technology 3= both

Loc_init	Externally or locally driven adaptation strategies	Number	If there are responses/adaptation measures to change, are these: 1= only locally driven 2= externally driven (ex. NGOs, development aid, scientists, government) 3= both
Notes	Notes	Text	---