Table A1.1. All 288 papers reviewed (title and country to provide figure 2)

Paper's _code	Title	Country
115	Conservation and monitoring of a persecuted African lion population by Maasai warriors	Kenya
140	Degradation and re-emergence of the commons: The impacts of government policies on traditional resource management institutions in China	China
136	Drivers of forage availability: An integration of remote sensing and traditional ecological knowledge in Karamoja sub-region, Uganda	Uganda
92	Ethnobotanical knowledge acquisition during daily chores: the firewood collection of pastoral Maasai girls in Southern Kenya	Kenya
141	Forgetting fire:Traditional fire knowledge in two vchestnut forest ecosystems of the Iberian Peninsula and its implications for European fire management policy	Spain
150	When Knowledge Follows Blood Kin Groups and the Distribution of Traditional Ecological Knowledge in a Community of Seminomadic Pastoralists, Gujarat (India)	India
220	Pyrenean Pastoralists' Ecological Knowledge: Documentation and Application to Natural Resource Management and Adaptation	Spain
105	A comparison of traditional plant knowledge between students and herders in northern Kenya	Kenya
159	A shepherd has to invent: Poetic analysis of social-ecological change in the cultural landscape of the central Spanish Pyrenees	Spain
31	Another vision of sound tree and forest management: Insights from traditional ash shaping in the Moroccan Berber mountains	Morocco
101	Continuity and change within the social-ecological and political landscape of the Maasai Mara, Kenya	Kenya
233	The Heterogeneity of Khumbu Sherpa Ecological Knowledge and Understanding in Sagarmatha (Mount Everest) National Park and Buffer Zone, Nepal	Nepal
58	Traditional uses of medicinal plants used by Indigenous communities for veterinary practices at Bajaur Agency, Pakistan	Pakistan
366	The role of Mongolian nomadic pastoralists' ecological knowledge in rangeland management	Mongolia
315	Traditional ecological knowledge of a riverine forest in Turkana, Kenya: implications for research and management	Kenya
282	Human ecology, ethnobotany and traditional practices in rural populations inhabiting the Monte region: Resilience and ecological knowledge	Argentina
261	Indigenous knowledge related to climate variability and change: insights from droughts in semi-arid areas of former Makueni District, Kenya	Kenya
212	Traditional ecological knowledge among transhumant pastoralists in Mediterranean Spain	Spain
184	Traditional Ecological Knowledge in Europe: Status Quo and Insights for the Environmental Policy Agenda	NA
182	Perception and Management of Spatio-Temporal Pasture Heterogeneity by Hungarian Herders	Hungary
169	Acacia trees on the cultural landscapes of the Red Sea Hills	Egypt; Sudan
281	Arctic climate change discourse: the contrasting politics of research agendas in the West and Russia	Russia
133	Comigrants and friends: Informal networks and the transmission of traditional ecological knowledge among seminomadic pastoralists of Gujarat, India	India
283	Community participatory landscape classification and biodiversity assessment and monitoring of	Kenya

	grazing lands in northern Kenya	
227	Ecological Conservation, Cultural Preservation, and a Bridge between: the Journey of Shanshui Conservation Center in the Sanjiangyuan Region, Qinghai-Tibetan Plateau, China	China
183	Herder Observations of Rangeland Change in Mongolia: Indicators, Causes, and Application to Community-Based Management	Mongolia
303	Herder Perceptions on Impacts of Range Enclosures, Crop Farming, Fire Ban and Bush Encroachment on the Rangelands of Borana, Southern Ethiopia	Ethiopia
310	Learning from local knowledge: modeling the pastoral nomadic range management of the Himba, Namibia	Namibia
11	Medicinal wild plants used by the Mongol herdsmen in Bairin Area of Inner Mongolia and its comparative study between TMM and TCM	China
235	Reindeer management during the colonization of Sami lands: A long-term perspective of vulnerability and adaptation strategies	Sweden
228	Tending for Cattle: Traditional Fire Management in Ethiopian Montane Heathlands	Ethiopia
	The sacred and the scientific: traditional ecological knowledge in Siberian river conservation	Siberia
62	Through the lens of a herder: insights into landscape ethno-ecological knowledge on rangelands in Namaqualand	South Africa
148	Oral traditional knowledge on medicinal plants in jeopardy among Gaddi shepherds in hills of northwestern Himalaya, J&K, India.	India
294	Participatory monitoring of biodiversity in East African grazing lands	Uganda
165	Communal institutions for the management of rangeland resources and dairy production in Taleghan Valley, Northern Iran	Iran
259	Remote Sensing and Local Knowledge of Hydrocarbon Exploitation: The Case of Bovanenkovo, Yamal Peninsula, West Siberia, Russia	Siberia
4	Indigenous knowledge for seasonal weather and climate forecasting across East Africa	Ethiopia; Tanzania; Uganda
292	Walking Behind the Old Women: Sacred Sakha Cow Knowledge in the 21st Century	Russia
363	Assessments of landscape level degradation in southern Ethiopia: pastoralists versus ecologists	Ethiopia
289	Indigenous Knowledge between Collapsion and Prospect of Genetic Conservation and Development	NA
175	Unexpected climate impacts on the Tibetan Plateau: Local and scientific knowledge in findings of delayed summer	China
36	Inuit Approaches to Naming and Distinguishing Caribou: Considering Language, Place, and Homeland toward Improved Co-management	Canada
180	Efficacy of Two Lion Conservation Programs in Maasailand, Kenya	Kenya
325	Long-term Abundance Patterns of Barren-ground Caribou Using Trampling Scars on Roots of Picea mariana in the Northwest Territories, Canada	Canada
286	Traditional livelihood based on sheep grazing in the Khangchendzonga national park, Sikkim	India
48	Analysis of observed and perceived climate change and variability in Arsi Negele District, Ethiopia	Ethiopia
181	Climate change and variability: perception and adaptation strategies of pastoralists and agro-pastoralists across different zones of Burkina Faso	Burkina Faso
28	This country just hangs tight: perspectives on managing land degradation and climate change in far west NSW	Australia
333	An ethnobotanical survey of wild edible plants of Paphos and Larnaca countryside of Cyprus	Cyprus

176	Traditional nomadic tending of trees in the Red Sea Hills	Egypt; Sudan
129	Rangeland degradation assessment: a new strategy based on the ecological knowledge of indigenous pastoralists	Iran
278	Fulani Knowledge of the Ecological Impacts of Khaya senegalensis (Meliaceae) Foliage Harvest in Benin and its Implications for Sustainable Harvest	Benin
19	Tibetan Lake Expansion from a Pastoral Perspective: Local Observations and Coping Strategies for a Changing Environment	China
301	Integration of herder knowledge and ecological methods for land degradation assessment around sedentary settlements in a sub-humid zone in northern Kenya	Kenya
214	Medicinal plants potential and use by pastoral and agro-pastoral communities in Erer Valley of Babile Wereda, Eastern Ethiopia	Ethiopia
73	Reimagining invasions: The social and cultural impacts of Prosopis on pastoralists in southern Afar, Ethiopia	Ethiopia
229	The Shift from Herding to Hunting among the Siberian Evenki	Siberia
263	Riders under storms: Contributions of nomadic herders' observations to analysing climate change in Mongolia	Mongolia
164	Turkana indigenous knowledge environmental sustainability and pastoralist lifestyle for economic survival	Kenya
53	Knowledge and community resilience in rangelands recovery: the case of Wadi Allaqi Biosphere Reserve, South Eastern Desert, Egypt	Egypt
280	Evaluation of Local Ecological Knowledge as a Method for Collecting Extensive Data on Animal Abundance	Spain
80	Climate Change and Variability in Semiarid Palapye, Eastern Botswana: An Assessment from Smallholder Farmers' Perspective	Botswana
252	Assessing Resource Dependency on the Rangelands as a Measure of Climate Sensitivity	Australia
35	From traditional knowledge to novel adaptations of transhumant pastoralists the in face of new challenges in North Patagonia	Argentina
91	Exploring local knowledge and perceptions on zoonoses among pastoralists in northern and eastern Tanzania	Tanzania
226	Pastoralists' Perception and Ecological Knowledge on Savanna Ecosystem Dynamics in Semi-arid Botswana	Botswana
67	Contested understandings of yaks on the eastern Tibetan Plateau: market logic, Tibetan Buddhism and indigenous knowledge	China
260	Linking local ecological knowledge and habitat modelling to predict absolute species abundance on large scales	Spain
143	Misreading the Arctic landscape:Apolitical ecology of reindeer, carrying capacities, and overstocking in Finnmark, Norway	Norway
111	Communication for the development of pastoralism	
323	Behaviour of goats, sheep and cattle and their selection of browse species on natural pasture in a Sahelian area	Burkina Faso
94	Himalayan Grasslands: Indigenous Knowledge and Institutions for Social Innovation	China; India; Nepal
331	Use of participatory epidemiology to compare the clinical veterinary knowledge of pastoralists and veterinarians in East Africa	Sudan; Kenya
119	The use of indigenous climate forecasting methods by the pastoralists of Northern Kenya	Kenya

318	Tracking wildebeest, locating knowledge: Maasai and conservation biology understandings of wildebeest behavior in Northern Tanzania	Tanzania
132	Integrating local pastoral knowledge, participatory mapping, and species distribution modeling for risk assessment of invasive rubber vine (Cryptostegia grandiflora) in Ethiopia's Afar region	Ethiopia
102	Community perceptions on spatio-temporal land use changes in the Amboseli ecosystem, southern Kenya	Kenya
322	Indigenous rangeland resource management in the mountainous areas of northern Nepal: a case study from the Rasuwa District	Nepal
199	Wild plant folk nomenclature of the Mongol herdsmen in the Arhorchin national nature reserve, Inner Mongolia, PR China	China
240	Human stewardship or ruining cultural landscapes of the ancient Tula wells, southern Ethiopia	Ethiopia
87	Alignment between values of dryland pastoralists and conservation needs for small mammals.	Australia
268	Origins of Travelling Stock Routes. 1. Connections to Indigenous traditional pathways	Australia
97	Collaborative processes for exploring rural futures: The Exploring Futures Platform	New Zealand
272	Viewing Change Through the Prism of Indigenous Human Ecology: Findings from the Afghan and Tajik Pamirs	Afghanistan; Tajikistan
107	Coupled Socio-Environmental Changes Triggered Indigenous Aymara Depopulation of the Semiarid Andes of Tarapacá-Chile during the Late 19th-20th Centuries	Chile
130	Local knowledge production, transmission, and the importance of village leaders in a network of Tibetan pastoralists coping with environmental change	China
147	Ethnoveterinary of Sahrawi pastoralists of Western Sahara: camel diseases and remedies	Algeria; Mauritania; Morocco
25	Forest Fire and Indigenous Sami Land Use: Place Names, Fire Dynamics, and Ecosystem Change in Northern Scandinavia	Sweden
114	Meadow up a tree: Feeding flocks with a native ash tree in the Moroccan mountains	Morocco
284	Institutional development for sustainable rangeland resource and ecosystem management in mountainous areas of northern Nepal	Nepal
300	The effect of development interventions on the use of indigenous range management strategies in the Borana Lowlands in Ethiopia	Ethiopia
85	Species composition determines forage quality and medicinal value of high diversity grasslands in lowland England	England
65	Exploring knowledge and management practices on ticks and tick-borne diseases among agro-pastoral communities in Southern Highlands, Tanzania	Tanzania
234	The impact of agro-pastoral abandonment on the Rock Partridge Alectoris graeca in the Apennines	Italy
262	Learning the indigenous knowledge and biodiversity through contest: A participatory methodological tool of ecoliteracy	India
210	Ethno-veterinary practices for ephemeral fever of Yak: A participatory assessment by the Monpa tribe of Arunachal Pradesh	India
330	Indigenous ecological knowledge of Borana pastoralists in southern Ethiopia and current challenges	Ethiopia
238	Husbandry practices of El-Kababish camel herders: case study north Kordofan State, Sudan	Sudan
86	Husbandry practices of El-Kababish camel herders: case study north Kordofan State, Sudan	Lesotho
201	Derivation of a household-level vulnerability index for empirically testing measures of adaptive capacity and vulnerability	Mozambique

47	Climate change and cultural heritage in western Mongolia	Mongolia
90	Collecting Ophiocordyceps sinensis: an emerging livelihood strategy in the Garhwal, Indian Himalaya	India
178	The interplay of knowledge, attitude and practice of livestock farmers' land management against desertification in the South African Kalahari	South Africa
209	The good shepherd: remedying the fencing syndrome	South Africa
204	'Everybody knows', but the rest of the world: the case of a caterpillar-borne reproductive loss syndrome in dromedary camels observed by Sahrawi pastoralists of Western Sahara	Mauritania; Algeria
223	Accuracy of pastoralists' memory-based kinship assignment of Ankole cattle: a microsatellite DNA analysis	Uganda
45	Grazing and rangeland management: Trans-human adaptations by Brokpa community in fragile ecosystems of Arunachal Pradesh	India
9	Adaptation to climate change using indigenous weather forecasting systems in Borana pastoralists of southern Ethiopia	Ethiopia
302	Livestock grazing behaviour along a degradation gradient in the Somali region of eastern Ethiopia	Ethiopia
146	Ethnoveterinary medicines used by goat keepers in Marwar region of Rajasthan, India	India
3	Local Knowledge for Addressing Food Insecurity: The Use of a Goat Meat Drying Technique in a Rural Famine Context in Southern Africa	Mozambique
277	Efficacy of Integrating Herder Knowledge and Ecological Methods for Monitoring Rangeland Degradation in Northern Kenya	Kenya
256	Quantitative ethnobotany of medicinal plants used by Kara and Kwego semi-pastoralist people in lower Omo River Valley, Debub Omo Zone, Southern Nations, Nationalities and Peoples Regional State, Ethiopia	Ethiopia
314	Pastoralists' perceptions and realities of vegetation change and browse consumption in the northern Kalahari, Namibia	Namibia
258	Ethnoveterinary treatments by dromedary camel herders in the Suleiman Mountainous Region in Pakistan: an observation and questionnaire study	Pakistan
41	In the light of change: a mixed methods investigation of climate perceptions and the instrumental record in northern Sweden	Sweden
32	Turning the herding lifestyle into a learning opportunity: Experiences from Lesotho	Lesotho
34	Investigating criteria for valuation of forage resources by local agro-pastoralists in West Africa: using quantitative ethnoecological approach	Ghana; Burkina Faso
81	Can pastoral communities offer solutions for conserving the Endangered Grevy's zebra Equus grevyi at the periphery of its range?	Kenya
177	Past and Present Winter Feeding of Reindeer in Finland: Herders' Adaptive Learning of Feeding Practices	Finland
43	Ethnomedicinal applications of animal species by the local communities of Punjab, Pakistan	Pakistan
338	Plant Biodiversity and Ethnobotany of Borana Pastoralists in Southern Oromia, Ethiopia	Ethiopia
104	Changing year-round habitat use of extensively grazing cattle, sheep and pigs in East-Central Europe between 1940 and 2014: Consequences for conservation and policy	Hungary; Croatia; Serbia; Romania; Ukraine; Slovakia

161	Local perceptions of rangeland degradation and climate change in the pastoral society of Qinghai-Tibetan Plateau	China
222	Pastoralists' indigenous selection criteria and other breeding practices of the long-horned Ankole cattle in Uganda	Uganda
63	Feeding flocks on rangelands: insights into the local ecological knowledge of shepherds in Boulemane province (Morocco)	Morocco
15	Knowledge, perceptions and experiences of trachoma among Maasai in Tanzania: Implications for prevention and control	Tanzania
44	Ethnobotanical knowledge of pastoral community for treating livestock diseases in Somali regional state, eastern Ethiopia	Ethiopia
296	Understanding pastoral mobility: the case of Senegalese Fulani	Senegal
123	Information sharing and climate risk management among Senegalese agropastoralists	Senegal
71	Rabari shepherds and the mad tree: the dynamics of local ecological knowledge in the context of Prosopis Juliflora invasion in Gujarat, India	India
361	An Institutionalized Human–Animal Relationship and the Aftermath: The Reproductive Process of Horse-Bands and Husbandry in Northern Yakutia, Siberia	Siberia
162	Paisang (Quercus griffithii): A Keystone Tree Species in Sustainable Agroecosystem Management and Livelihoods in Arunachal Pradesh, India	India
349	Mapping land cover change in a reindeer herding area of the Russian Arctic using Landsat TM and ETM+ imagery and indigenous knowledge	Russia
78	Herders' ecological knowledge and carnivore predation on livestock investigations in Makgadikgadi and Nxai Read online: Scan this QR code with your smart phone or mobile device to read online. national parks, Botswana	Botswana
358	Linking Local Perceptions of Elephants and Conservation: Samburu Pastoralists in Northern Kenya	Kenya
179	Female Camel Nomenclature among Arabia's Bedouins	Oman
75	Historical perspectives on pastoralism and land tenure transformation in Ngamiland, Botswana: What are the policy and institutional lessons	Botswana
22	Ethnobotanical knowledge among the semi-pastoral Gujjar tribe in the high altitude (Adhwari's) of Churah subdivision, district Chamba, Western Himalaya	India
231	Predicting the distribution of cryptic species: the case of the spur-thighed tortoise in Andalusia (southern Iberian Peninsula)	Spain
`196	The importance of being reliable e Local ecological knowledge and management of forage plants in a dryland pastoral system (Morocco)	Morocco
326	Comparison of production systems and selection criteria of Ankole cattle by breeders in Burundi, Rwanda, Tanzania and Uganda	Burundi; Rwanda; Tanzania; Uganda
218	Uses and management of Ximenia americana, Olacaceae in semi-arid east Shewa, Ethiopia	Ethiopia
88	Factors influencing local ecological knowledge of forage resources: Ethnobotanical evidence from West Africa's savannas	Ghana; Burkina Faso
72	Wolf and Bear Depredation on Livestock in Northern Sweden 1827–2014: Combining History, Ecology and Interviews	Sweden
125	Coping with difficult weather and snow conditions: Reindeer herders' views on climate change impacts and coping strategies	Finland

186	The social nature of environmental knowledge among the nomadic Woɗaaɓe of Niger	Niger
70	"I See the Grass Through the Mouths of My Animals" – Folk Indicators of Pasture Plants Used by Traditional Steppe Herders	Hungary
378	Gender, indigenous knowledge, and pastoral resource use in Morocco	Morocco
352	Traditional cattle-husbandry systems in Eritrea: cattle–man relationships	Eritrea
298	Towards Endogenous Livestock Development: Borana Pastoralists' Responses to Environmental and Institutional Changes	Ethiopia
1	Ethnoveterinary remedies used in the Algerian steppe: Exploring the relationship with traditional human herbal medicine	Algeria
2	Climate change has more adverse impacts on the higher mountain communities than the lower ones: people's perception from the northern Himalayas	China
6	Songs, Settings, Sociality: Human and Ecological Well-being in Western Mongolia	Mongolia
7	Like a Lullaby: Song as Herding Tool in Rural Mongolia	Mongolia
10	Seasonal fire management by traditional cattle ranchers prevents the spread of wildfire in the Brazilian Cerrado	Brazil
12	Nomads' indigenous knowledge and their adaptation to climate changes in Semirom City in Central Iran	Iran
13	Opportunities to integrate herders' indicators into formal rangeland monitoring: an example from Mongolia	Mongolia
14	Integrating Traditional Ecological Knowledge and Remote Sensing for Monitoring Rangeland Dynamics in the Altai Mountain Region	Mongolia; Russia; China; Kazakhstan
16	Socio-ecological dimensions of Andean pastoral landscape change: bridging traditional ecological knowledge and satellite image analysis in Sajama National Park, Bolivia	Bolivia
17	Indigenous weather and climate forecasting knowledge among Afar pastoralists of north eastern Ethiopia: Role in adaptation to weather and climate variability	Ethiopia
20	Reindeer Herders Without Reindeer. The Challenges of Joint Knowledge Production on Kolguev Island in the Russian Arctic	Russia
21	Traditional and local knowledge in land use planning: insights into the use of the Akwé: Kon Guidelines in Eanodat, Finnish Sápmi	Finland
23	Local agro-pastoralists' perspectives on forage species diversity, habitat distributions, abundance trends and ecological drivers for sustainable livestock production in West Afric	Ghana; Burkina Faso
24	Indigenous knowledge practices for sustainable lifelong education in pastoralist communities of Kenya	Kenya
27	The effect of climate information in pastoralists' adaptation to climate change A case study of Rwenzori region, Western Uganda	Uganda
29	Health risk perceptions and local knowledge of water-related infectious disease exposure among Kenyan wetland communities	Kenya
30	Shepherds' local knowledge and scientific data on the scavenging ecosystem service: Insights for conservation	Spain
37	Merging Indigenous Knowledge Systems and Station Observations to Estimate the Uncertainty of Precipitation Change in Central Mongolia	Mongolia
46	Increasing the Local Relevance of Epidemiological Research: Situated Knowledge of Cattle Disease Among Basongora Pastoralists in Uganda	Uganda

51	Traditional ecological knowledge underlying herding decisions of pastoralists	Benin
52	Understanding roles and functions of cattle breeds for pastoralists in Benin	Benin
54	Integrating indigenous local knowledge and species distribution modeling to detect wildlife in Somaliland	Somalia
57	Factors Affecting Sustainable Animal Trypanosomosis Control in Parts of Kaduna State, Nigeria	Nigeria
59	The relevance of herders' local ecological knowledge on coping with livestock losses during harsh winters in western Mongolia	Mongolia
68	Integrating remote sensing and local ecological knowledge to monitor rangeland dynamics	Kyrgyzstan
69	Important knowledge gaps among pastoralists on causes and treatment of udder health problems in livestock in southern Ethiopia: results of qualitative investigation	Ethiopia
74	Medicinal and commercial uses of ostrich products in Tanzania	Tanzania
76	Botanical ethnoveterinary therapies used by agro-pastoralists of Fafan zone, Eastern Ethiopia	Ethiopia
77	Distribution and socio-ecological impacts of the invasive alien cactus Opuntia stricta in eastern Africa	Kenya
79	An ethnobotanical survey of medicinal and edible plants of Yalo Woreda in Afar regional state, Ethiopia	Ethiopia
82	Basotho herders learn through culture and social interaction	Lesotho
83	From Herders to Wage Laborers and Back Again: Engaging with Capitalism in the Atacama Puna Region of Northern Chile	Chile
89	Indigenous Control Methods for Parasites among Pastoralists Communities in Adamawa State, Nigeria	Nigeria
96	The future of pastoralism/L'avenir du pastoralisme/El futuro del pastoreo	NA
98	Tibetan Buddhism, Wetland Transformation, and Environmentalism in Tibetan Pastoral Areas of Western China	China
103	Indigenous ecological knowledge as the basis for adaptive environmental management: Evidence from pastoralist communities in the Horn of Africa	Ethiopia
106	Tracing innovation pathways in the management of natural and social capital on Laikipia Maasai Group Ranches, Kenya	Kenya
112	Indigenous knowledge of pastoralists on respiratory diseases ofcamels in northern Kenya	Kenya
116	Transhumant Pastoralism in the Context of Socioeconomic and Climate Change in the Mountains of Nepal	Nepal
117	Evolution of models to support community and policy action with science: Balancing pastoral livelihoods and wildlife conservation in savannas of East Africa	Ethiopia; Kenya
118	Herding conditions related to infectious keratoconjunctivitis in semi-domesticated reindeer: a questionnaire-based survey among reindeer herders	Sweden; Norway
120	Broad-scale assumptions on available pasture resources and reindeer's habitat preferences shown to be decoupled from ecological reality of Arctic-alpine landscapes	Norway
121	Are trees of intermediate densitymore facilitative? Canopy effects of four East African legume trees	Ethiopia
122	Sharing local ecological knowledge as a human adaptation strategy to arid environments: Evidence from an ethnobotany survey in Morocco	Morocco
126	Resilience of small-scale societies: a view from drylands	NA
127	Strengths and weaknesses of traditional feeding management of dairy goat farms in mountain areas	Spain
128	Terra Nullius: Colonial Violence in Prynne's Acrylic Tips	Australia
134	Pastoral livelihoods under pressure: Ecological, political and socioeconomic transitions in Afar	Ethiopia

	(Ethiopia)	
135	Morels of Palas Valley, Pakistan: A Potential Source for Generating Income and Improving Livelihoods of Mountain Communities	Pakistan
137	An ethnobotany of the Lukomir Highlanders of Bosnia & Herzegovina	Bosnia and Herzegovina
139	Wood-pastures of Europe: Geographic coverage, social–ecological values, conservation management, and policy implications	Europe
142	Loss of traditional knowledge aggravates wolf–human conflict in Georgia (Caucasus) in the wake of socio-economic change	Georgia
144	Persistence of Two Small Antelope Species in the Degraded Mutara Rangelands (Akagera Ecosystem) Based on Pastoralists' and Farmers' Perceptions	Rwanda; Tanzania; Uganda
153	Sámi reindeer herders' perspective on herbivory of subarctic mountain birch forests by geometrid moths and reindeer: a case study from northernmost Finland	Finland
154	Climate Change and Rural Livelihoods -adaptation and vulnerability in Rajasthan	Pakistan
157	A study of medicinal plants used as ethnoveterinary: harnessing potential phytotherapy in Bheri, District Muzaffarabad (Pakistan)	Pakistan
158	Trees dynamics (1955-2012) and their uses in the Senegal's Ferlo region: insights from a historical vegetation database, local knowledge and field inventories	Senegal
168	Traditional knowledge of wild food plants in a few Tibetan communities	India; China; Nepal
171	Relationship Between Pastoralists' Evaluation of Rangeland State and Vegetation Threshold Changes in Mongolian Rangelands	Mongolia
173	Herding strategies during a drought vary at multiple scales in Mongolian rangeland	Mongolia
174	Livelihood Diversification as an Adaptation Approach to Change in the Pastoral Hindu-Kush Himalayan Region	Afghanistan; Bhutan; China; India; Nepal; Pakistan
189	Ethnoveterinary knowledge of Raikas of Marwar for nomadic pastoralism	India
192	Working Knowledge: characterising collective indigenous, scientific, and local knowledge about the ecology, hydrology and geomorphology of Oriners Station, Cape York Peninsula, Australia	Australia
194	Adaptation of herders to droughts and privatization of rangeland-use rights in the arid Alxa Left Banner of Inner Mongolia	China
195	Herders' Perceptions of and Responses to Climate Change in Northern Pakistan	Pakistan
197	Traditional vegetation knowledge of the Hortobágy salt steppe (Hungary): a neglected source of information for vegetation science and conservation	Hungary
198	Sustainable Rangeland Management: Pastoralists' attitudes toward integrated programs in Iran	Iran
200	The role of drought among agro-pastoral communities in a semi-arid environment: The case of Botswana	Botswana
203	Ethnobotanical study of plants used in management of livestock health problems by Afar people of Ada'ar District, Afar Regional State, Ethiopia	Ethiopia
206	Pastoralists' knowledge of plant palatability and grazing indicators in an arid region of South Australia	Australia
207	Ethno-veterinary practices amongst livestock farmers in Ngamiland District, Botswana	Botswana

208	Envisioning the future of transhumant pastoralism through participatory scenario planning: a case study in Spain	Spain
211	The Role of Indigenous Ecological Knowledge in Managing Rangelands Sustainably in Northern Iran	Iran
213	Pastoralists' perceptions of biodiversity and land management strategies in the arid Stony Plains region of South Australia: Implications for policy makers	Australia
215	Traditional coping mechanisms for climate change of pastoralists in South Omo, Ethiopia	Ethiopia
216	Climate Change Adaptation Among Tibetan Pastoralists: Challenges in Enhancing Local Adaptation Through Policy Support	China
219	Pasture use and management strategies in the Ankole pastoral system in Uganda	Uganda
221	Ethnoknowledge of Bukusu community on livestock tick prevention and control in Bungoma district, western Kenya	Kenya
224	Febrile illness experience among Nigerian nomads	Nigeria
225	"I'd Be Foolish to Tell You They Were Caribou": Local Knowledge of Historical Interactions between Reindeer and Caribou in Barrow, Alaska.	United States
236	Challenges of assessing the sustainability of (agro)-pastoral systems	Kenya; Niger
237	Sámi traditional ecological knowledge as a guide to science: snow, ice and reindeer pasture facing climate change	Sweden
239	Resonance Strategies of Sámi Reindeer Herders in Northernmost Finland during Climatically Extreme Years	Finland
241	Seasonal precipitation forecasts: Agro-ecological knowledge among rural Kalahari communities	Botswana
245	Impacts of Arctic Climate and Land Use Changes on Reindeer Pastoralism: Indigenous Knowledge and Remote Sensing	NA
247	Gums and resins: The potential for supporting sustainable adaptation in Kenya's drylands	Kenya
248	Landscape change in the lower Omo valley, southwestern Ethiopia: burning patterns and woody encroachment in the savanna	Ethiopia
249	Doing is Learning: Analysis of an Unsuccessful Attempt to Adapt TEK/ IK Methodology to Norwegian Sa´mi Circumstances	Norway
250	Cultural dimension of wolves in the Iberian Peninsula: implications of ethnozoology in conservation biology	Portugal; Spain
264	Combining facilitated dialogue and spatial data analysis to compile landscape history	Australia
269	Traditional Ecological Knowledge Informing Resource Management: Saxoul Conservation in Inner Mongolia, China	China
270	Traditional rangeland resource utilisation practices and pastoralists' perceptions on land degradation in south-east Ethiopia	Ethiopia
275	Of forest, snow and lichen: Sami reindeer herders' knowledge of winter pastures in northern Sweden	Sweden
276	Indigenous yak and yak-cattle crossbreed management in high altitude areas of northern Nepal: A case study from Rasuwa district	Nepal
279	Partnering with local communities to identify conservation priorities for endangered Grevy's zebra	Kenya
287	Traditional fire management: historical fire regimes and land use change in pastoral East Africa	Tanzania
291	Botanical Knowledge and its Differentiation by Age, Gender and Ethnicity in Southwestern Niger	Niger
293	Participatory investigation of Contagious Caprine Pleuropneumonia (CCPP) in goats in the Hammer and Benna-Tsemay districts of southern Ethiopia	Ethiopia

297	Lifestyle and herding practices of Bahima pastoralists in Uganda	Uganda
299	Participatory indicator development: what can ecologists and local communities learn from each other?	Botswana
306	Framework for participatory assessments and implementation of global environmental conventions at the community level	Tanzania
307	Tūhoe Tuawhenua mātauranga of kererū (Hemiphaga novaseelandiae novaseelandiae) in Te Urewera	New Zealand
309	Changing communal land tenure in an East African pastoral system: Institutions and Socio-Economic transformations among the Pokot of NW Kenya	Kenya
311	Environmental perceptions and practices of livestock keepers on the Namaqualand Commons challenge conventional rangeland management	South Africa
313	Eliciting indigenous knowledge on tree fodder among Maasai pastoralists via a multi-method sequencing approach	Kenya
316	Saami reindeer pastoralism under climate change: Applying a generalized framework for vulnerability studies to a sub-arctic social–ecological system	Norway
317	Integrating local and scientific knowledge for adaptation to land degradation: Kalahari rangeland management options	Botswana
319	Ecological implications of traditional livestock husbandry and associated land use practices: A case study from the trans-Himalaya, India	India
320	Changing grazing systems in central north Namibia	Namibia
321	Herders' Perceptions on Ruminant Livestock Breeds and Breeding Management in Southwestern Niger	Niger
327	Genetic defects or generative prototypes? Competing models for livestock improvement in southern Bolivia	Bolivia
328	Herder knowledge of landscape assessments in arid rangelands in northern Tanzania	Tanzania
334	Indigenous knowledge and the desertification debate: problematising expert knowledge in North Africa	Morocco
335	Carved trees in grazed forests in boreal Sweden—analysis of remaining trees, interpretation of past land-use and implications for conservation	Sweden
336	Effects of anthropogenic fire history on savanna vegetation in northeastern Namibia	Namibia
339	Influence of selective tree cutting, livestock and prescribed fire on herbaceous biomass in the savannah woodlands of Burkina Faso, West Africa	Burkina Faso
342	The role of participatory problem analysis in performance improvement and sustainable management of rainwater harvesting (RWH) systems: A case study of Makanya village,Tanzania	Tanzania
345	Community Based Interventions as a Strategy to Combat Desertification in the Arid and Semi-Arid Rangelands of Kajiado District, Kenya	Kenya
346	Natural remedies and nutraceuticals used in ethnoveterinary practices in inland southern Italy	Italy
347	Use of indigenous ecological knowledge of the Maasai pastoralists for assessing rangeland biodiversity in Tanzania	Tanzania
348	Conflict Resolution by Participatory Management: Remote Sensing and GIS as Tools for Communicating Land-use Needs for Reindeer Herding in Northern Sweden	Sweden
350	Beyond Ground Truth: GIS and the Environmental Knowledge of Herders, Professional Foresters, and Other Traditional Communities	India
353	Current range condition in southern Ethiopia in relation to traditional management strategies: The perceptions of Borana pastoralists	Ethiopia

357	Tracking Pastoralist Migration: Lessons from the Ethiopian Somali National Regional State	Ethiopia
359	The use of herders' accounts to map livestock activities across agropastoral landscapes in Semi-Arid Africa	Niger
360	Participatory selection process for indicators of rangeland condition in the Kalahari	Botswana
362	Using indigenous knowledge in land use investigations: a participatory study in a semi-arid mountainous region of Lebanon	Lebanon
367	Representations of Nature on the Mongolian Steppe: An Investigation of Scientific Knowledge Construction	Mongolia
371	Environmental Change and Pastoral Perceptions: Degradation and Indigenous Knowledge in Two African Pastoral Communities	Kenya; Namibia
373	Traditionallo1owledge and practices of Bhotiya pastoralists of Kumaon Himalaya:.the need for value addition	India
376	Sense or nonsense? Traditional methods of animal parasitic disease control	NA
379	Sustaining indigenous communities: Symbolic and instrumental dimensions of pastoral resource use in Shimshal, northern Pakistan	Pakistan
380	Incorporating indigenous knowledge of fodder trees into small-scale silvopastoral systems in Jamaica	Jamaica
381	Ethnoveterinary medicine in Afghanistan: an overview of indigenous animal health care among Pashtun Koochi nomads	Afghanistan
383	Evaluating the effectiveness of participatory agroforestry extension programmes in a pastoral system, based on existing traditional values	Kenya

Table A1.2. Data elicited from 152 fully reviewed papers (Title, affiliation, abstract, keywords, intro, M&M, result and discussion, conclusion). Abbreviations: Pastoral_type) 1: Nomad and semi-nomad, 2: Transhumant and semi-transhumant; 3: Sedentary; 4: Trabshumant and sedentary; 5: Nomad, Semi-nomad, Sedentary; 6: Nomad, Transhumant, Sedentary: 7: Not reported. TEK_Trans) if transition was mentioned 1; if transition was not mentioned: 0. Trans_Types) Erosion: 0; Hybrid: 1; Adaptation: 2; Retention: 3.

Random_nu	Year	Pastoral_type	Ethnozology	Ethnobiology	Ethnomedicine	Ethnobotany_L	Ethnobotany	Ethnoecology	Herd management	Soco-economic-polit	Ethnoveterinary	Fire knowledge	Animal Husbandary	Ethnograpgy	Ethnoclimatology	TEK_Trans	Trans_Type	Robustness
115	2016	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA
140	2015	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	3
136	2015	4	0	0	0	1	0	1	0	0	0	0	0	0	0	0	NA	NA
92	2017	2	0	0	1	0	0	0	0	0	0	0	0	0	0	1	2	1
141	2015	3	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	3
150	2015	1	0	0	1	1	0	1	0	1	1	0	0	0	0	1	0	1
220	2012	2	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	1
105	2016	1	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1
159	2015	2	0	0	1	1	0	1	1	1	1	0	0	0	0	1	0	2
31	2018	3	0	1	1	0	1	0	0	0	0	0	0	0	0	0	NA	NA
101	2016	2	0	0	1	0	1	1	1	0	1	0	1	0	0	1	0	2
233	2011	2	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1
58	2018	1	0	0	1	0	1	0	0	0	1	0	0	0	0	1	0	1
366	2000	1	0	0	0	1	0	1	1	0	0	0	0	0	0	1	0	3
315	2007	5	0	0	1	0	1	1	0	0	0	0	0	0	0	1	3	1
282	2009	2	0	0	1	0	1	1	0	0	0	0	0	0	0	1	0	1
261	2010	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	3
212	2013	2	0	0	0	0	1	1	1	0	1	0	1	1	0	1	0	1
184	2014	6	0	1	1	0	1	1	1	0	0	0	0	0	0	1	0	1
182	2014	3	0	0	0	0	1	1	1	0	1	0	0	0	0	1	0	3

169	2014	1	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	3
281	2009	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA
133	2016	1	0	0	0	0	1	1	0	1	1	0	1	0	0	0	NA	NA
283	2009	7	0	0	0	1	1	1	0	0	0	0	1	0	0	0	NA	NA
227	2012	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	NA	NA
183	2014	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	NA	NA
303	2008	7	0	0	0	0	0	1	0	0	0	0	0	1	0	0	NA	NA
310	2007	1	0	0	0	1	0	1	1	0	0	0	0	0	0	0	NA	NA
11	2019	7	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	3
235	2011	7	0	0	0	1	0	1	0	0	0	0	0	0	0	0	NA	NA
228	2012	7	0	0	0	0	0	1	0	0	0	1	0	0	0	0	NA	NA
	2000	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	NA	NA
62	2018	3	0	0	0	1	0	1	1	0	0	0	0	0	0	0	NA	NA
148	2015	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1
294	2008	7	0	0	0	1	0	0	0	0	0	0	0	0	0	0	NA	NA
165	2015	1	0	0	0	0	0	0	1	1	0	0	1	0	0	0	NA	NA
259	2010	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	NA	NA
4	2019	7	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	3
292	2008	7	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	2
363	2001	3	0	0	0	1	0	1	1	0	0	0	0	0	0	0	NA	NA
289	2009	7	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
175	2014	7	0	0	0	0	0	1	0	0	0	0	0	0	1	0	NA	NA
36	2018	3	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	3
180	2014	7	1	1	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA
325	2006	7	0	0	0	0	0	0	1	0	0	0	0	0	0	0	NA	NA
286	2009	1	0	0	0	1	0	1	1	0	0	0	0	0	0	0	NA	NA
48	2018	7	0	0	0	0	0	1	0	0	0	0	0	0	1	0	NA	NA
181	2014	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NA	NA
28	2018	2	0	0	0	0	0	1	0	0	0	0	0	0	1	0	NA	NA
333	2006	3	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2

176	2014	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2
129	2016	7	0	0	0	0	0	1	0	0	0	0	0	0	0	0	NA	NA
278	2009	4	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1
19	2019	7	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	3
301	2008	3	0	0	0	1	0	1	0	0	0	0	0	0	0	0	NA	NA
214	2012	2	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1
73	2017	6	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	3
229	2012	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	1
263	2010	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	NA	NA
164	2015	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	NA	NA
53	2018	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	2
280	2009	7	1	1	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA
80	2017	7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NA	NA
252	2011	7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	NA	NA
35	2018	2	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	3
91	2017	2	0	0	0	0	0	0	0	0	1	0	1	0	0	0	NA	NA
226	2012	7	0	0	0	1	1	1	0	0	0	0	0	0	0	0	NA	NA
67	2017	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	3
260	2009	7	0	0	0	0	1	1	0	0	0	0	0	0	0	0	NA	NA
143	2015	7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	NA	NA
111	2016	7	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	3
323	2007	7	0	0	0	1	0	0	1	0	0	0	1	0	0	0	NA	NA
94	2017	2	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	3
331	2006	7	0	0	0	0	0	0	0	0	1	0	0	0	0	0	NA	NA
119	2016	7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NA	NA
318	2007	7	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	3
132	2016	7	0	0	0	0	1	1	0	0	0	0	0	0	0	0	NA	NA
102	2016	5	0	0	0	0	1	1	0	0	0	0	0	0	0	0	NA	NA
322	2007	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	NA	NA
199	2013	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	3

240	2011	7	0	0	0	0	0	1	0	0	0	0	0	0	0	0	NA	NA
87	2017	7	1	1	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA
268	2010	7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	NA	NA
97	2017	7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	NA	NA
272	2009	5	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1
107	2016	7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	NA	NA
130	2016	1	0	0	0	0	0	1	0	0	0	0	1	1	1	1	0	1
147	2015	1	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	1
25	2019	7	0	0	0	0	0	1	0	0	0	1	0	0	0	0	NA	NA
114	2016	3	0	0	0	1	0	0	0	0	1	0	1	0	0	0	NA	NA
284	2009	7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	NA	NA
300	2008	3	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	2
85	2017	7	0	0	1	1	1	1	0	0	0	0	0	0	0	1	0	3
65	2018	7	0	0	0	0	0	0	0	0	1	0	0	0	0	0	NA	NA
234	2011	7	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	3
262	2010	7	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	3
210	2013	7	0	0	0	0	0	0	0	0	1	0	0	0	0	0	NA	NA
330	2006	7	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1
238	2011	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	NA	NA
86	2017	1	0	0	1	1	0	1	0	0	0	0	1	0	0	1	0	3
201	2013	7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	NA	NA
47	2018	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	3
90	2017	2	0	0	1	0	0	1	0	1	0	0	0	0	0	0	NA	NA
178	2014	7	0	0	0	0	0	1	1	0	0	0	0	0	0	0	NA	NA
209	2013	7	0	0	0	0	0	0	1	1	0	0	0	0	0	0	NA	NA
204	2013	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	NA	NA
223	2011	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	NA	NA
45	2018	2	0	0	0	0	0	0	1	1	0	1	0	1	0	1	0	3
9	2018	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NA	NA
302	2008	7	0	0	0	1	1	0	1	0	0	0	0	0	0	0	NA	NA

146	2015	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	NA	NA
3	2019	5	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3
277	2009	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	NA	NA
256	2010	7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	NA	NA
314	2007		0	0	0	1	0	1	0	1	0	0	0	0	0	0	NA	NA
258	2010	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	3
41	2018	7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NA	NA
32	2018	1	0	0	1	0	0	0	0	1	1	0	1	0	0	0	NA	NA
34	2018	7	0	0	0	1	0	1	0	0	0	0	0	0	0	0	NA	NA
81	2017	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA
177	2014	7	0	0	0	0	0	0	0	1	0	0	1	0	0	0	NA	NA
43	2018	7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	NA	NA
338	2005	7	0	0	1	1	0	0	0	1	0	0	0	0	0	0	NA	NA
104	2016	7	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	3
161	2015	2	0	0	0	0	0	0	1	1	0	0	0	0	1	0	NA	NA
222	2012	7	0	0	0	0	0	0	0	1	0	0	1	0	0	0	NA	NA
63	2018	2	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1
15	2019	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	NA	NA
44	2018	7	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2
296	2008	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	NA	NA
123	2015	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	NA	NA
71	2017	1	0	0	1	0	1	1	0	1	0	0	0	0	0	1	2	1
361	2002	7	0	0	0	0	0	0	0	1	0	0	1	0	0	0	NA	NA
162	2015	2	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	3
349	2003	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	NA	NA
78	2017	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA
358	2002	7	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
179	2014	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
75	2017	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	NA	NA
22	2019	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	3	1

231	2012	7	1	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA
`196	2013	1	0	0	0	1	0	0	0	0	0	0	0	0	0	NA	NA
326	2006	5	0	0	0	0	0	0	0	1	0	0	1	0	0	0	NA	NA
218	2012	2	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2
88	2017	7	0	0	0	1	0	0	0	0	0	0	0	0	0	1	3	1
72	2017	2	1	0	0	0	0	0	0	1	0	0	0	0	0	1	2	1
125	2016	7	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	2
186	2014	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	NA	NA
70	2017	2	0	0	0	1	1	1	0	0	0	0	0	0	0	0	NA	NA
378	1996	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	NA	NA
352	2003	1	0	0	0	0	0	0	1	1	0	0	1	0	0	0	NA	NA
298	2008	3	0	0	0	0	0	0	1	1	0	0	0	0	0	0	NA	NA

Comparing initial (102 papers) and total (152 papers) datasets to find out if the number of the subsamples should increase or not. Wilcoxon test was used to compare two groups regarding TEK transition variable as following:

Table A1.3. Mean ranks and comparison between initial and final dataset

Dataset	N	Mean Rank	Sig
Initial dataset	102	131.76	0.378
Total dataset	152	124.64	

CodeA1.1. Script code in R

```r
############## Statistical analysis for review paper
############## "global transition of pastoral traditional
############## ecological knowledge"


############## Countries of study
##############

install.packages(c("RgoogleMaps", "ggmap", "mapproj", "sf",
                "dplyr", "OpenStreetMap", "devtools"))

install.packages("rworldmap")
library(rworldmap)

worldmap <- getMap(resolution = "coarse")

plot(worldmap, col = "white",
     fill = T, border = "black",
     xlim = c(-180, 180), ylim = c(-90, 90),
     bg = "aliceblue",
     asp = 1, wrap=c(-180,180))



countriesvisited <- data.frame(country = c("AFG", "DZA","ARG","AUS","BEN","BWA",
                        "BFA","BDI","CAN","CHL","CHN","HRV","CYP",
                        "EGY","GBR","ERI","ETH","FIN","GHA","HUN",
                        "IND","IRN","ITA","KEN","LSO","MRT","MNG",
                        "MAR","MOZ","NAM","NPL","NZL","NER","NOR",
                        "OMN","PAK","ROU","RUS","RWA","SEN","SVK",
                        "ZAF","ESP","SDN","SWE","TJK","TZA","UGA",
                        "UKR","BTN","BOL","BIH","BRA","GEO","JAM",
                        "KAZ","KGZ","LBN","NGA","PRT","SOM","USA"),
                   visited = c(3,3,2,9,3,10,6,1,2,2,18,1,1,3,1,1,33,5,3,4,19,
                        5,2,31,3,2,13,8,2,5,8,2,5,5,1,9,1,10,2,3,1,4,11,
                        4,9,1,13,11,1,1,2,1,1,1,1,1,1,1,3,1,1,1))

visitedMap <- joinCountryData2Map(countriesvisited,
                        joinCode = "ISO3",
                        nameJoinColumn = "country")
```

```r
mapParams <- mapCountryData(visitedMap,
                            nameColumnToPlot="visited",
                            oceanCol = "white",
                            catMethod = "categorical",
                            missingCountryCol =NA ,
                            colourPalette = c("gray95","gray90","gray85","gray78",
                                              "gray71","gray64","gray57","gray50",
                                              "gray43","gray36","gray29","gray22",
                                              "gray15","gray8","gray1"),
                            addLegend = F,
                            mapTitle = "",
                            border = "black")



do.call(addMapLegendBoxes, c(mapParams,
                             x = 'bottom',
                             horiz = TRUE,
                             bg = "transparent",
                             bty = "n"))


############## Frequenct of domains

ggplot(Year_Domains_TEKStatus, aes(x=Domain))+
  theme_bw()+
  geom_bar(width = 0.8,color="black",size=0.5,alpha=0.7)+
  labs(y="Frequency",x="Domains")


############## Frequenct of domains VS TEK status (relatively)

Year_Domains_TEKStatus$TEK_Status <- factor(Year_Domains_TEKStatus$TEK_Status,
                                            levels = c("No_report","Adaptive",
                                                       "Hybrid","Constant",
                                                       "Erosion"))

ggplot(Year_Domains_TEKStatus, aes(x=Domain, y=,fill=TEK_Status))+
  theme_bw()+
  geom_bar(position = 'fill',
           width = 0.8,color="black",size=0.5,alpha=0.7)+
  labs(y="Frequency",x="Domains")


############## Frequenct of domains VS TEK status (Aboslute frequency)


ggplot(Year_Domains_TEKStatus, aes(x=Domain, y=,fill=TEK_Status))+
  theme_bw()+
  geom_bar(width = 0.8,color="black",size=0.5,alpha=0.7)+
  labs(y="Frequency",x="Domains")


############## Frequenct of domains VS Year (violin graph)
```

```r
ggplot(Year_Domains_TEKStatus, aes(x=Domain, y=Year))+
  theme_bw()+
  geom_violin()


############## Frequenct of domains VS Year (violin graph)


ggplot(Year_Domains_TEKStatus, aes(x=TEK_Status, y=Year))+
  theme_bw()+
  geom_violin()


############## Frequenct of TEK transmision and robustness

TEK_Type_1 <- TEK_Frequencies[,3]


ggplot(TEK_Frequencies, aes(x=TEK_Trans, fill=Trans_Type))+
  theme_bw()+
  geom_bar(width = 0.8,color="black",size=0.5,alpha=0.7)+
  labs(y="Frequency",x="TEK transition")



ggplot(Robustness, aes(x=Robust))+
  theme_bw()+
  geom_bar(width = 0.8,color="black",size=0.5,alpha=0.7)+
  labs(y="Frequency",x="Ethics and credits")


############## Frequenct of TEK transmision and robustness


ggplot(Moral_VS_Year, aes(x=Moral, y=Year))+
  theme_bw()+
  geom_violin()


ggplot(Moral_YES_NO, aes(x=Criteria, fill=Status))+
  theme_bw()+
  geom_bar(width = 0.8,color="black",size=0.5,alpha=0.7)+
  labs(y="Frequency",x="Criterion")



##############
############## Frequenct of TEK transition VS pastoral types


ggplot(Pastoral_TEK, aes(x=Type, y=Measure,fill=Pastoral))+
  theme_bw()+
  geom_bar(stat = 'identity', position = 'dodge',
           width = 0.8,color="black",size=0.5,alpha=0.7)+
  labs(y="Frequency",x="TEK type")
```

```r
Pastoral_TEK$Pastoral <- factor(Pastoral_TEK$Pastoral,
                                levels = c
                                ("Nomad","Transhumant","Sedentary"))


ggplot(Pastoral_TEK, aes(x=as.factor(Pastoral), y=Measure,fill=Type))+
  theme_bw()+
  geom_bar(stat = 'identity', position = 'dodge',
           width = 0.8,color="black",size=0.5,alpha=0.7)+
  labs(y="Frequency",x="TEK type")




Satisfaction_New$Education <- factor(Satisfaction_New$Education,
                                     levels = c
                                     ("Under Diplome","Diplome","Bachelor","Msc or Higher"))

PublicationYEAR_VS_TEK$Trans_Type <- factor(PublicationYEAR_VS_TEK$Trans_Type,
                                            levels = c("No report","Adaptive",
                                                       "Hybrid","Constant",
                                                       "Erosion"))

ggplot(PublicationYEAR_VS_TEK, aes(x=Year, fill=Trans_Type))+
  theme_bw()+
  geom_bar(width = 0.8,color="black",size=0.5,alpha=0.7)+
  labs(y="Frequency",x="Year")


##############
############# TEK transition VS Nomadism (Piechart)


install.packages("tidyverse")
library(tidyverse)

install.packages("plotly")
library(plotly)

install.packages("IRdisplay")
library(IRdisplay)

colors <- c("#0033FF","#33FF00","#FF0000","#FFCC00")

donut <- ggplot(data = Data_Pastoralists, aes(x=2, y = Percentage_T, fill = color))+
  geom_col(color = "black") +
  coord_polar("y", start = 0) +
  geom_text(aes(label = paste0(round(Percentage_T*100), "%")),
            position = position_stack(vjust = 0.5)) +
  theme(panel.background = element_blank(),
        axis.line = element_blank(),
        axis.text = element_blank(),
        axis.ticks = element_blank(),
        axis.title = element_blank(),
        plot.title = element_text(hjust = 0.5, size = 30)) +
```

```r
  scale_fill_manual(values = colors) +
  xlim(0.6, 3.5)

donut


############## TEK transition VS Transhumance (Piechart)

colors <- c("#0033FF","#FF0000","#FFCC00")

donut <- ggplot(data = Transhumance_Data, aes(x=2, y = Percentage_T, fill = color))+
  geom_col(color = "black") +
  coord_polar("y", start = 0) +
  geom_text(aes(label = paste0(round(Percentage_T*100), "%")),
            position = position_stack(vjust = 0.5)) +
  theme(panel.background = element_blank(),
        axis.line = element_blank(),
        axis.text = element_blank(),
        axis.ticks = element_blank(),
        axis.title = element_blank(),
        plot.title = element_text(hjust = 0.5, size = 30)) +
  scale_fill_manual(values = colors) +
  xlim(0.6, 3.5)

donut

############## TEK transition VS Sedentary (Piechart)

colors <- c("#33FF00","#FF0000","#FFCC00")

donut <- ggplot(data = Sedentary_Data, aes(x=2, y = Percentage_S, fill = color))+
  geom_col(color = "black") +
  coord_polar("y", start = 0) +
  geom_text(aes(label = paste0(round(Percentage_S*100), "%")),
            position = position_stack(vjust = 0.5)) +
  theme(panel.background = element_blank(),
        axis.line = element_blank(),
        axis.text = element_blank(),
        axis.ticks = element_blank(),
        axis.title = element_blank(),
        plot.title = element_text(hjust = 0.5, size = 30)) +
  scale_fill_manual(values = colors) +
  xlim(0.6, 3.5)

donut






############## Frequenct of domains
Domain_TEK_Status$Domain_AB <- factor(Domain_TEK_Status$Domain_AB,
```

```r
                                      levels = c("Herd management","Plant",
                                                  "Biology_Ecology","Climate",
                                                  "Sociocultural"))


ggplot(Domain_TEK_Status, aes(x=Domain_AB))+
  theme_bw()+
  geom_bar(width = 0.8,color="black",size=0.5,alpha=0.7)+
  labs(y="Frequency",x="Domains")


############## Frequenct of domains VS TEK status (relatively)

Domain_TEK_Status$Domain_AB <- factor(Domain_TEK_Status$Domain_AB,
                                      levels = c("Herd management","Plant",
                                                  "Biology_Ecology","Climate",
                                                  "Sociocultural"))

Domain_TEK_Status$TEK_Status_AB <- factor(Domain_TEK_Status$TEK_Status_AB,
                                          levels = c("No_report","Adaptive",
                                                      "Hybrid","Constant",
                                                      "Erosion"))

ggplot(Domain_TEK_Status, aes(x=Domain_AB, y=,fill=TEK_Status_AB))+
  theme_bw()+
  geom_bar(position = 'fill',
           width = 0.8,color="black",size=0.5,alpha=0.7)+
  labs(y="Frequency",x="Domains")
```