

## Supplemental material for

“Signs of Climate Warming Through the Eyes of Yak Herders in Northern Bhutan,” by Kesang Wangchuk and Jigme Wangdi, published in *Mountain Research and Development* 38(1), 2018. (See <http://www.bioone.org/toc/mred/38/1>)

**TABLE S1 Survey questionnaire.**

General awareness			
	Yes	No	Don't know
Have you heard of climate change?			
	Fearful	Sad	Don't know
How do you feel about climate change?			
	Yes	No	Don't know
Have you noticed any changes in your environment (weather) over the past 10 years?			
	Yes	No	Don't know
The climate was colder in my area 15 years ago			
	Yes	No	Don't know
Is there any change in temperature in your area?			
	Warm	Cold	very cold
How is the climate of your area at present?			
	Decreasing	Increasing	Don't know
Rainfall in my area is			
	More use of machines	Natural phenomenon	Increasing human population
In my view, the causes of climate change are			
Signs of climate change	Yes	No	Don't know
Cold period getting shorter and warm period getting longer			
Glaciers melting			
More frequent lake outbursts			
Ascent of snowline			
Early snow melt			
Ascent of treeline			
Decline in water availability			
More occurrence of flash floods			

Decrease in size of water source			
More rain			
More landslides			
More hailstorms			
Decline in soil fertility			
Decrease in soil moisture			
<b>Weather pattern</b>	<b>Yes</b>	<b>No</b>	<b>Don't know</b>
Weather pattern is changing.			
Weather is getting bad.			
Weather is becoming unpredictable.			
Weather will be worse in the future.			
<b>Impact of climate change on water and vegetation</b>	<b>Yes</b>	<b>No</b>	<b>Don't know</b>
There is water scarcity			
Size of river is increasing			
Size of river is decreasing			
There is drought and desertification			
There is fast growth of vegetation			
Vegetation growing period is becoming longer			
There are new species growing in meadows			
Rhododendron are encroaching faster			
Size of grassland and fodder availability are decreasing			
Fodder quality is increasing			
Fodder quality is decreasing			
Barren lands are gradually occupied by vegetation			
<b>Personal impacts of climate change</b>	<b>Yes</b>	<b>No</b>	<b>Don't know</b>
I have been affected by climate change.			
Annual income is increasing.			
Annual income is decreasing.			
Due to bad weather, I have lost livestock to flash flooding.			
Due to bad weather, I have lost livestock to landslides.			
I have lost livestock to predation.			
Due to climate change, milk production is increasing.			
Due to climate change, milk production is decreasing.			

<b>Impact of climate change on herding and migration</b>	<b>Yes</b>	<b>No</b>	<b>Don't know</b>
Climate change is partially responsible for herders' migration to the city.			
Due to bad weather, herding is becoming difficult.			
Timing of migration has changed.			
Transhumant migration route has changed.			
Transhumant migration has become easier.			
Transhumant migration has become difficult.			
Due to climate change, animals find it easier to migrate.			
Due to climate change, animals find it difficult to migrate.			
Transhumant migration route has become longer.			
Transhumant migration route has become shorter			
Generally, animal health is improving.			
Generally, animal health is declining.			
<i>Gid</i> disease prevalence is increasing.			
Gid disease prevalence is decreasing.			

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