



Photo: Women in Mustang Nepal, by Dechenla Sherpa

Climate Change in the Himalayas: the Women's Perspective

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Outline

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1. Living in the Himalayas
2. Women's Experiences of Climate Change
3. Building Mountain People's Resilience to Climate Change with a Gender Perspective
4. Recommendations



The Himalayas

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The Hindu Kush Himalayas

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- Inhabited by over 210 millions people, amongst the most marginalized and vulnerable of the region.
- Mountains people's livelihood is largely based on agriculture and livestock raising and the exploitation of natural resources, small scale trade and migration.



Issues of the Mountain Environment

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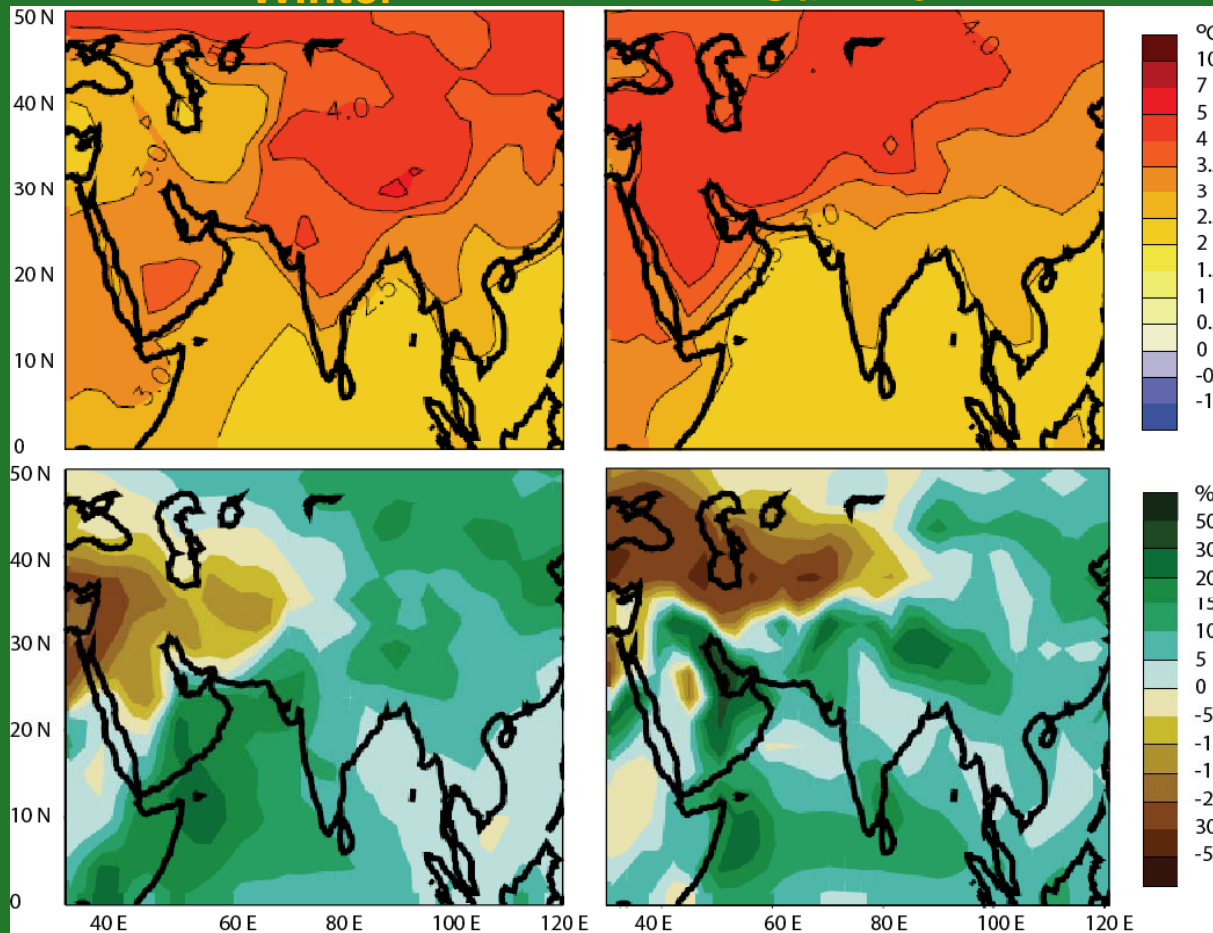
- Remoteness & Isolation
- Long distance from market limited the livelihood options
- Prone to Natural disasters
- Conflicts over natural resources



Climate Projections for the Region

Winter

Summer



All of Asia is likely to warm (around 4 °C above baseline)

Warming the Himalayas well above the global mean

Extreme rainfalls as well as drought events are likely to increase.

IPCC, 2007

Impacts on Snow, Glacier and Water

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- Glaciers are degrading much faster in recent decades
- Many glacial lakes have formed
- 20 lakes potentially dangerous (GLOFs)
- Deglaciation impact on 9 river basins of the HKH – concern about 1.3 billion people

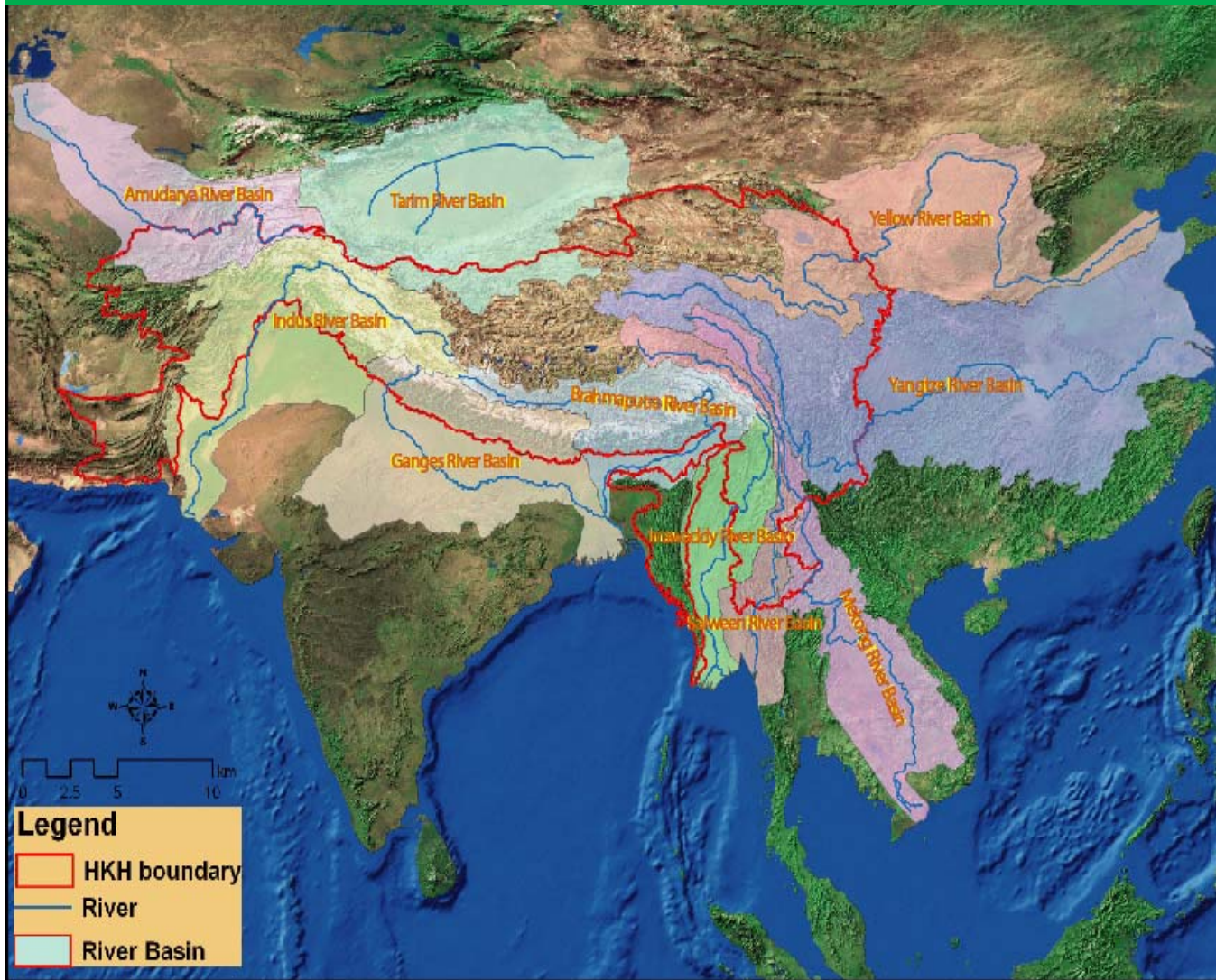


WATER TOWER OF SOUTH ASIA!

Sustaining over 1.3 billions people in the River basins
Impacting on food and energy production of 3 billions people

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River basins

- Indus
- Ganges
- Brahmaputra
- Irrawaddy
- Salween
- Mekong
- Yangtze
- Yellow
- Tarim
- Amu Darya

Not Everyone is Affected Equally by Climate Change

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People do not all have the same capacity to cope and adapt to climate change.

Vulnerability to climate change depends on:

- natural
- economic,
- social,
- cultural factors,

which impact on people's status, behavior, relationships, and power.





**In Asia,
Poverty, Caste,
Ethnicity and
Gender**

**are among the
factors that may
hinder people's
resilience to
climate change.**

Daily Life of Mountain Women

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- Steep slopes make the burden of collecting and carrying water, fuel wood and fodder heavier and more dangerous.
- The combination of the household work and productive work intensify their workload,
- and the increasing migration of men increase further more their workload.



Climate Changes Impacts Stories from Himalayan Women



Chitral in Pakistan

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- Livelihood based on livestock raising and little bit of agriculture
- Harsh winters and limited road infrastructure: the population is isolated 6 months a year.
- Prone to avalanches, floods, flash floods, earthquakes.



Chitrali Women Save Lives

Men are herders or migrate

Women play an important role in the community early warning system.

They have put in place a flood monitoring systems using stones.

When they see the signs, they inform people of their village and the ones living in the villages down the hill by shouting warning and using mirrors.

Women are then implementing their rescue plan and protect people and livestock

They clean the debris, rebuild the stone walls in the river banks... etc.



A Combination of Problems

Increased occurrence of flash floods and landslides affects greatly people's livelihoods.

Many livestock are missing

The already limited cultivated land is often washed away.

The warmer temperature also creates confusion in the cultivation cycle since crops come into maturity earlier;

Most of the springs that provided drinking water disappeared



Seasonal Changes

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Winters are warmer so the isolation period is reduced.

But the glaciers are melting faster and flash floods and landslides are frequently washing away the communication system.

The floods period between mid July to mid August is happening at different time; and the floods are more intense.

Causes a high level of stress and feeling of insecurity since women are losing their capacities to foreseen the occurrence of a natural hazard and reduce their capacity to respond in time.



Increased Occurrence of Natural Disasters: Different Vulnerabilities

Droughts increase women's workload and stress as they have to travel farther

Himalayas glaciers are degrading more rapidly
= Glacial Lakes Outburst Floods

Intensification of Natural Disasters = coping mechanisms may be stretched

The poor are more at risk - as women are more vulnerable to poverty, they are also more vulnerable to natural disasters.

Many more women victims: social norms and gender roles, such as dress codes, behaviour norms, and the mode of decision making

Early Warning and Disaster Preparedness

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- Remoteness and isolation deprive mountain population from accessing essential information about climate risks.
- Most disaster preparedness and management plans do not contain a gender perspective to address the differential vulnerabilities and needs of women and men.



India

- International Boundary
- State or Union Territory Boundary
- Road
- River

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0 200

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Warmer Winter & less Snowfall

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In the last 15 years, less snow falls and shorter winter periods.

In short term, positive impacts of the warmer weather in agriculture

Long term impact on water resources on the availability of surface and underground water and the green cover.



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Scarcity of Natural Resources

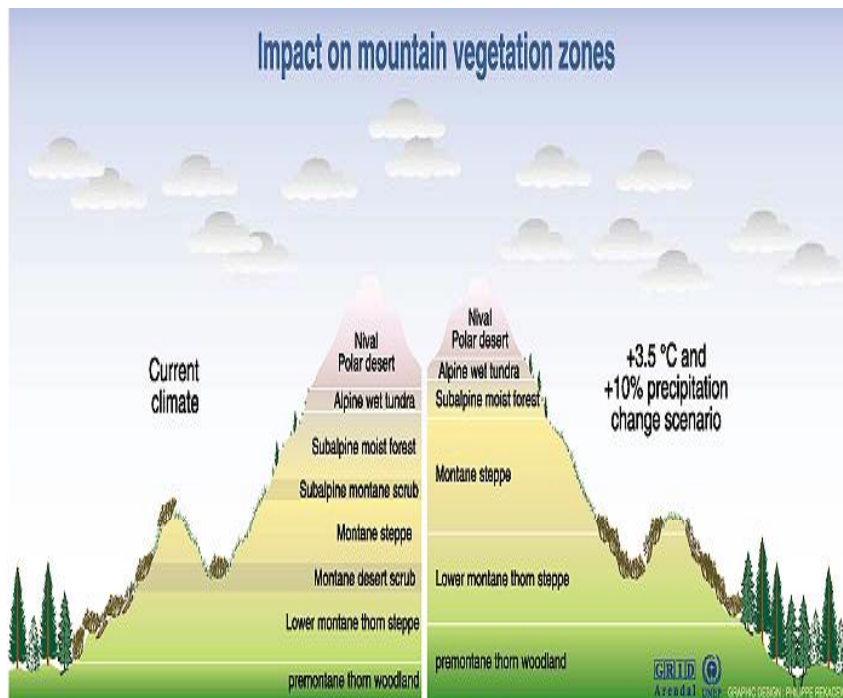
- Some fodder species are now growing in higher altitude which means that the herders have to go farther for grazing their animals.
- Women are responsible for collecting fuel wood and fodder, they have to walk and carry the load on longer distances.



Depletion of Natural Resources: Increased Workload

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Source: Martin Berntson, Mountain environments in changing climates, Routledge, London, 1994; Climate change 1995, Impacts, adaptations and migration of climate change, contribution of working group 2 to the second assessment report of the intergovernmental panel on climate change (IPCC), UNEP and WMO, Cambridge press university, 1996.

- The Himalayas has a rich biodiversity that is highly at risk because of global warming.
- The changes in the climate can greatly affect the resistance and quality of natural resources, cause the migration of some species to higher elevations, and lead to the extinction of others.

Women Manage Natural Resources

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Loss of biodiversity will have a great impact on people's health, as well as their livelihoods.

Women and men use natural resources differently.

- Women collect fuel wood and medicinal and aromatic plants, mainly for household needs, and fodder for livestock;
- men collect timber wood to generate income.

While women's role is underestimated and they are often excluded from conservation initiatives. They are sometimes even forbidden to use such resources.

District Map of Nepal





Dandaphaya, Humla



Livelihood based on Agriculture

- Food security for 4 months a year



Trade of Forest Products

- Contributing to Deforestation



*“We need to improve our crops to increase to prevent famine.
“Our children are crying ; they are hungry”*



Women's Drudgery Increased during Men's Migration
"We work very hard and we are tired, but we are living here in the mountain. What can we do?"

Food Insecurity: Different Coping Strategies

Food Security challenges

Men trade or migrate

Women are farmers: their knowledge about seed selection and crop breeding is important to climate change adaptation.

Women rarely access land ownership, technology, extension services, financial resources

Mountain Women are Farmers

- Adaptation strategies need to incorporate a gender perspective:
- recognize that men and women may face different problems
- pay specific attention to both women's and men's needs
- in order to reduce their vulnerability and improve their adaptation.

Impacts on Health

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- Risks of resurgence and spread of tropical diseases
- Water borne diseases to increase
- Droughts challenge food security = malnutrition
- Increased work to access natural resources = increase hardship

Increased Incidence of Diseases and Epidemic Outbreaks: Differential Risks

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- Different risks towards different diseases
- Different risks of malnutrition
- Different risks vs Natural Disasters
- Different workload and stress: women are primarily responsible for the care of children, the elderly, and the sick

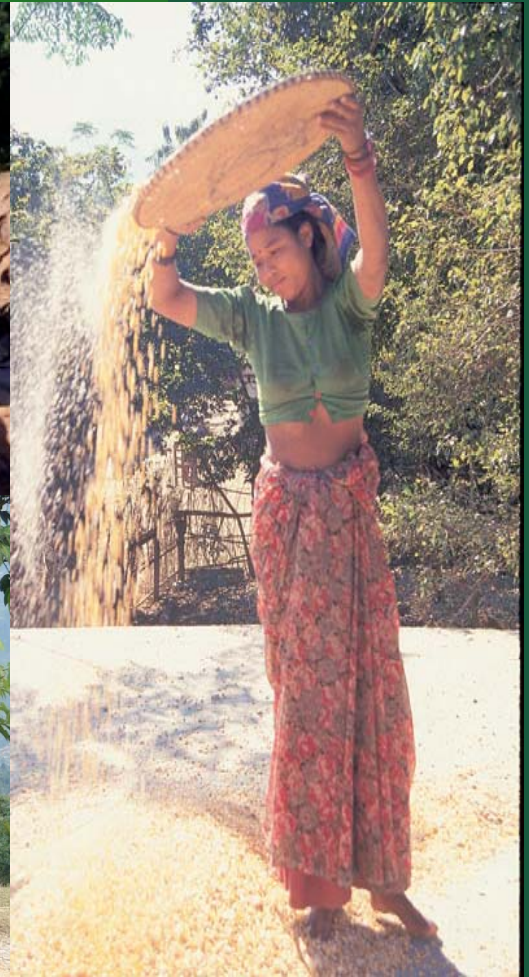
Unknown Impacts

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- People's adaptation strategies
- Socio economic factors than enhance or inhibit adaptation



Mainstreaming Gender in Climate Change Adaptation Strategies

Gender & Climate Change

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- New topic = few information
- Climate Change will increase food insecurity
- Natural resources will be affected in term of quantity and quality
- Increase women's drudgery
- Migration is an alternative livelihood option

Vulnerability & Adaptation

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- Who is more vulnerable?
- Why are they more vulnerable?
- What factors enhance or inhibit adaptation to climate change?
- Who access and who control?
- *Information*
- *Infrastructure & services*
- *Technologies*
- *Mobility*
- *Capacity to make choices and take decisions*

Next?

Mainstreaming Gender

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- Research
- Development
- Disaster Preparedness Strategies
- Adaptation and Mitigation Strategies



Research

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- Socioeconomic impacts of climate change
- People's adaptation strategies and capacities
- Sex disaggregated data
- Gender sensitive methodologies and indicators to measure the impacts of climate change
- Preparation of context-specific scenarios
 - scarcity of natural resources
 - potential conflicts
 - food insecurity
 - change in agriculture patterns
 - displacement of population



Natural Disasters Preparedness

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- Disaster preparedness plans usually focused on technical aspects and are generally gender-blind.
- Gender analysis to measure vulnerability
- Involving women and men in warning systems



Adaptation & Equity

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- Put a human face on climate change mitigation and adaptation strategies
- Mainstreaming gender into policies and strategies to benefit to and involve both men and women.
- Environment-friendly technologies ... to reduce women's drudgery



Gender Equality: the Essential Ingredient

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- Gender equality and women empowerment are essential conditions to achieve development goals;
- they are also essential to build mountain people's capacities to face the challenges of climate change.
- Women represent at least half of the population and the world cannot meet those challenges without their contribution
- Women's movement has to play a role in the global climate change mitigation and adaptation negotiations in advocating the integration of a gender perspective, focusing on people's needs and capacity.

Recommendations

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1. Document the gendered impacts of climate change in the Himalayan mountains in all sectors.
2. Promote equity and mainstream gender in adaptation and mitigation strategies taking into account the particular challenges mountain people are facing.
3. Mainstream gender and address mountain specificities in disaster preparedness plans and involve women in early warning systems.

Recommendations

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4. Promote gender sensitive development initiatives to build mountain people's resilience to climate change.
5. Facilitate mountain women's access to alternative and renewable sources of energy with the perspective to alleviate their workload.
6. Promote mountain people participation in climate change negotiations and policy making.

Recommendations

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7. Involve gender experts and women scientists in the preparation of national climate change mitigations and adaptation policy/strategies.
8. Conduct gender analysis of proposed mitigation and adaptation to climate change interventions and assess their impacts on the mountain environment.

Recommendations

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- 9. Develop effective information channels to reach out to mountain women, especially in remote areas, with information about climate change.
10. Facilitate and equitable access to technologies and other productive resources to build mountain people's resilience to climate change and ensure that women needs are properly addressed.

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25 years dedicated to improve the well-being of mountain people by:

- documenting the issues of the mountain development and environment,
- developing and experimenting new approaches to address those issues,
- building the capacities in the region to address the mountain issues,
- and supporting regional dialogue and cooperation.

Thank you

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