

Food and Nutrition Security in the Hindu Kush Himalaya

Golam Rasul¹; Abdul Saboor²

¹ Theme Leader Livelihoods, International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal; ² Professor and the Dean, Faculty of Social Sciences, PMAS Arid Agricultural University, Rawalpindi, Pakistan



Introduction

- Food and nutrition insecurity remain major challenges in the Hindu Kush Himalaya (HKH)
- The problem is more severe in remote mountain areas.
- Challenges to food security in the mountains of the HKH differ from those in the plains due to constraints imposed by harsh biophysical conditions, inaccessibility, fragility, poor economic opportunities, and lack of access to markets and other institutional services.
- Most mountain families live in remote rural areas and depend heavily on agriculture for food and nutrition. They are highly vulnerable to climate change impacts such as erratic rainfall, increased dry spells, and higher incidence of pests, disease and floods.
- Rapid socioeconomic and environmental change are intensifying the challenges of food and nutrition security. These changes include increasing outmigration, shortage of labour, limited mechanization, changing food habits, less cultivation of traditional nutritious crops, and depletion of natural resources.
- Achieving food security and addressing malnutrition effectively is fundamental to meeting Sustainable Development Goal 2 and other SDGs.
- The HKH deserves special attention and concerted effort to address the food and nutrition on behalf of mountain people.

Key Messages

- Biophysical limitations, poor economic opportunity, low market access and seasonality have special implications for food and nutrition security in mountain areas and demand mountain specific approaches and strategies.
- Poor irrigation facilities, high dependence on precipitation, and drying springs and bodies of water make agriculture and food production in the HKH highly susceptible to climate change.
- Underlying causes of food and nutrition insecurity are multiple: declining per capita availability of land, high poverty, increased urbanization, changing food preferences, inadequate infrastructure and market access, inadequate access to improved drinking water, poor sanitation, and increasing natural disaster.
- Traditional food systems including nutritious traditional crops and native livestock are being replaced by rice and wheat, which has led to a decline in dietary diversity and reduces nutrition security in the HKH.
- Low returns from agriculture combined with youth preference for non-farm work has led to abandonment of land.
- Despite many challenges, opportunities for improving food and nutrition security is emerging. Fruits, vegetables, nuts, medicinal plants and many high value and organic products are being grown in mountain areas providing farmers with additional income to buy food to supplement their diets.

Policy Messages

- Achieving food and nutrition security will require a holistic approach to increase food availability, access, utilization, and stability—with integrated actions to revitalize local food systems, to reduce food loss, to increase purchasing power, to improve market access, and to strengthen policy and institutional support.
- Strategies for food and nutrition security in the HKH must recognize and address mountain-specific challenges, such as inaccessibility, fragility, vulnerability, seasonality and natural disasters.
- Strategies could take an area-specific approach based on agro-ecological potentials and access to markets and institutional services.
- A balanced approach of revitalizing local food systems and improving capacity to purchase foods needs to be pursued by investing in off-farm and non-farm employment opportunities including eco-tourism, rural enterprise development, and payments for ecosystem services.
- Strategies must equally focus on mountain specific opportunities, such as traditional food crops (e.g., buckwheat, barley, sorghum etc.); mountain rangelands and native livestock (e.g., yak); non-timber forest products (e.g. medicinal and aromatic plants); and high agro-ecological potential for cash crops, once necessary inputs are made available and market linkages are properly developed.
- Increased investment is required to develop irrigation facilities and managing water resources to increase agricultural production and diversify local food systems.



Case Study

In Gatlang VDC, Rasuwa, Nepal, households still highly depend on traditional food crops for food and income. They sell surplus produce of traditional crops to local resorts and small hotels in Guljung, Chilime and Saybrubesi, which have high tourism traffic. Local food systems and traditional storage also help people cope with food seasonality during the winter when heavy snowfall blocks roads and creates physical isolation of local communities from other areas.

Figure 1: Incidence of climate induced extreme events in the HKH

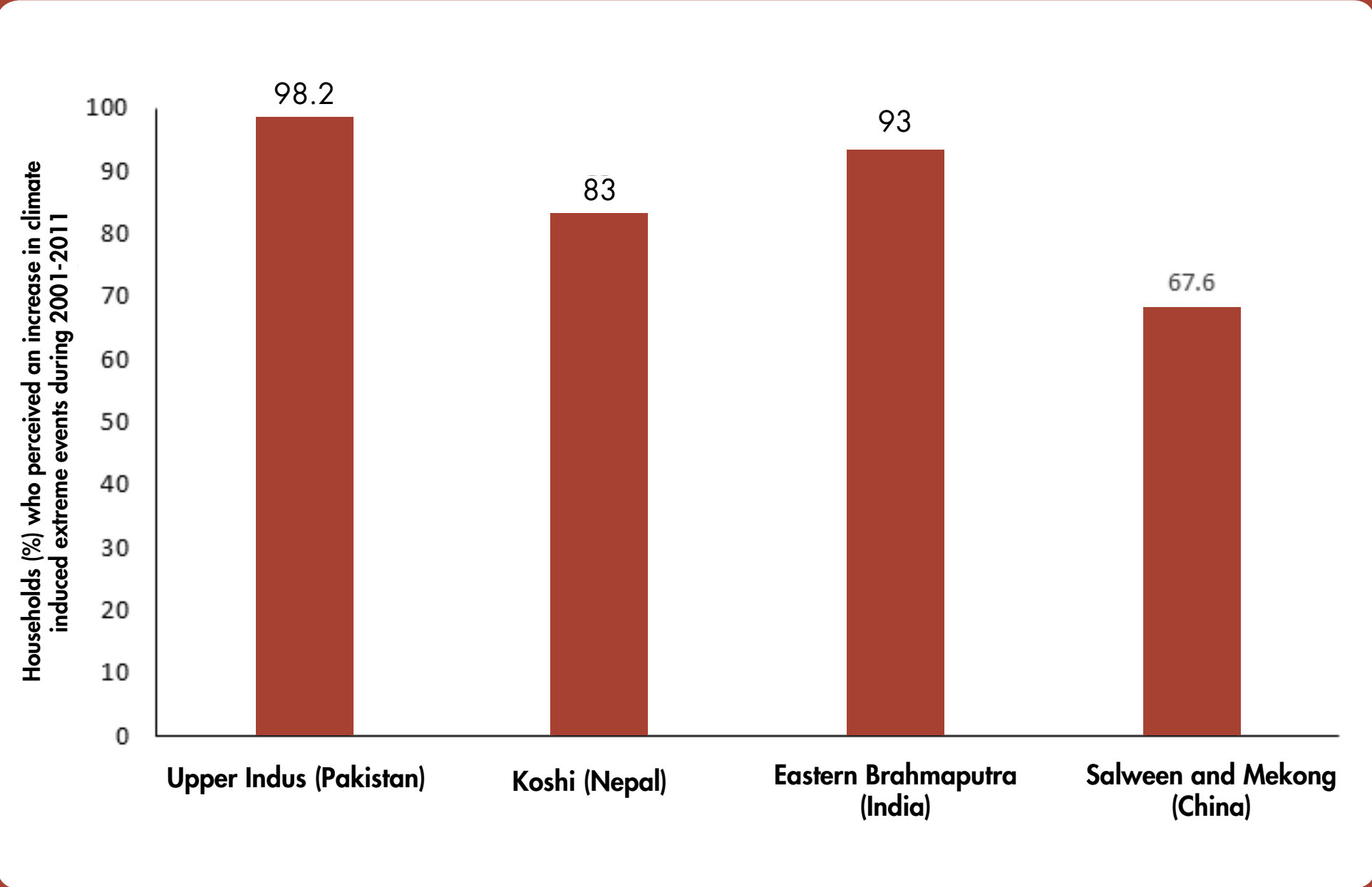


Figure 2: Post-harvest losses in Gilgit-Baltistan, Pakistan due to inadequate infrastructure and market access

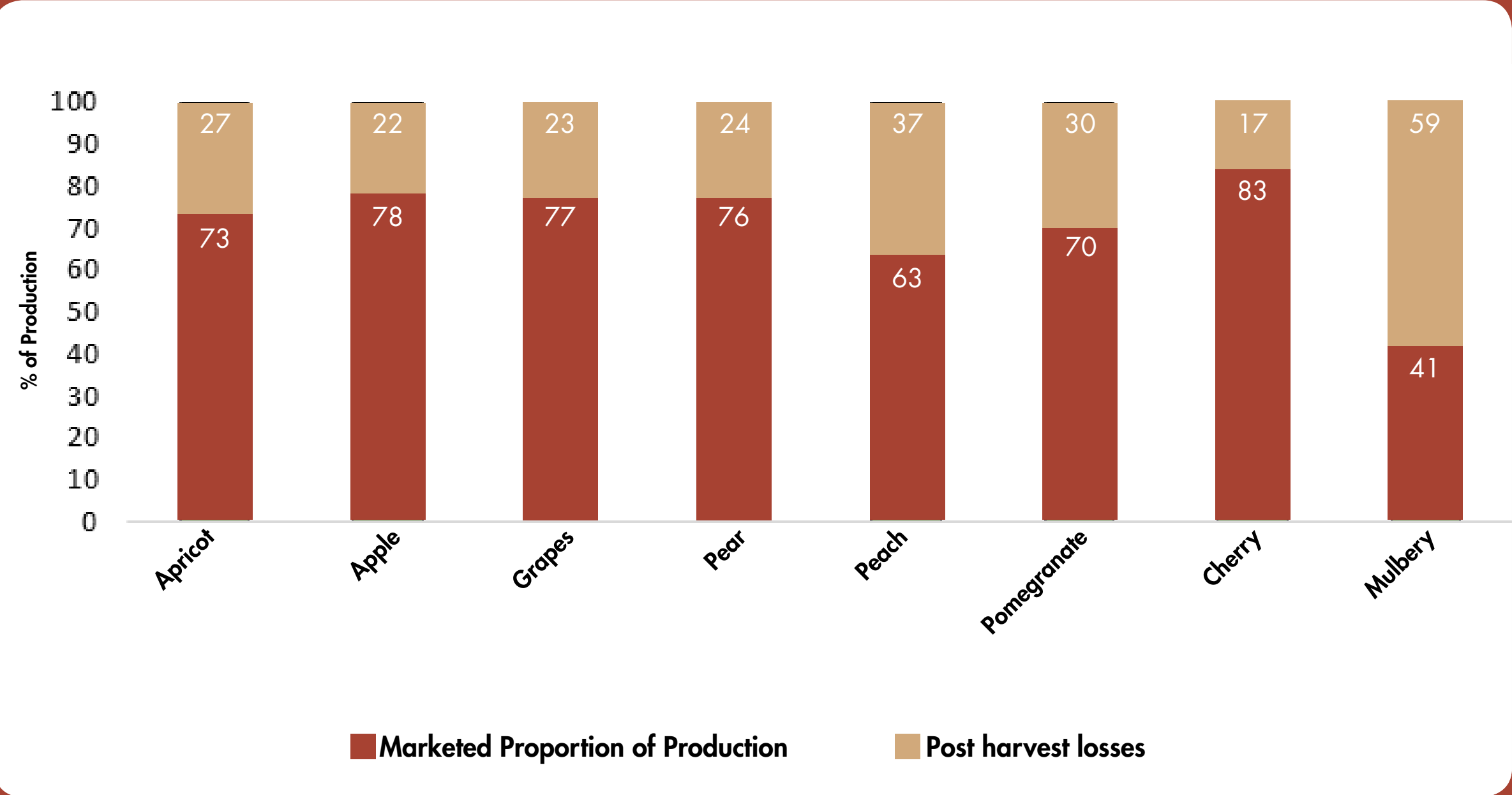


Table 1: Status of food and nutrition security in the mountains

Countries and selected mountain regions		Indicators of food (in)security		*Stunting (%)	**Wasting (%)	***Under-weight (%)
Nepal	National		51	40	11	29
	Mountain zone	% food insecure households	59	53	11	36
Pakistan	National		49	24 ^a	17	31
	Balochistan province	% prevalence of food insecurity	61	32 ^a	18	42
India	National		1983	48	20	42
	Meghalaya state	Dietary energy intake (kcal/day/capita)	1655	55	31	49
Myanmar	National		5	29	8	29
	Chin state	% incidence of food poverty	25	52	8	36
Afghanistan	National		35	50	10	25
	Eastern region	% households not meeting caloric needs	-	53	18	41
Bhutan ^b	National	% population below food poverty line	12	21	4	9
China	National		2328	18	3	8
	Yunnan province	Dietary energy intake (kcal/day/capita)	2131	25	5	20

*Height-for-age: children under age 5 year < -2 SD from the international reference median value
**Weight-for-height: children under age 5 year < -2 SD from the international reference median value
***Weight-for-age: children under age 5 year < -2 SD from the international reference median value
^a Severe stunting (as per National Nutrition Survey 2011)
^b whole country is mountainous