

Hazard Resilience Index (HRI)

Food Shortages

Food Shortages:

For Communities that Depend Mostly on Local Food for Sustenance

For Communities that Depend Mostly on Food Grown Elsewhere for Sustenance

Food Shortages

Please refer to the Hazard Resilience Index Instructions (HRI) document for more information on using this document.

For Communities that Depend Mostly on Local Food for Sustenance

Hazard Resilience Rating				High Resilience <input type="checkbox"/>	Low Resilience <input type="checkbox"/>	Need More Info <input type="checkbox"/>	Not Applicable <input type="checkbox"/>	
Yes	No	Need More Info	Not Applicable	FACTORS				This factor is important to my community
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Community-based table-top exercises have taken place in the community-at-large to discuss strategies to deal with lack of food, including planning around observed climate change impacts on local species.		<input type="checkbox"/>		<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Food growers have consulted Traditional Knowledge holders and Elders to develop disease control plans for crops and adaptations for changing growing conditions.		<input type="checkbox"/>		<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Farmers use a diverse range of crops to minimize plant-based diseases.		<input type="checkbox"/>		<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hunting areas are preserved and wildlife management plans are in place.		<input type="checkbox"/>		<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Most homeowners and businesses who have large amounts of frozen food have back-up generators in case of extended power failures.		<input type="checkbox"/>		<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Community has back-up power supplies (fuel, etc.), as well as maintenance for generators, to preserve food in the case of communities who rely on generators as main power source.		<input type="checkbox"/>		<input type="checkbox"/>

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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Plans are in place to ensure sustainable fishing and hunting.	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The community has emergency food stocks stored in the community and a plan for distribution (e.g., delivering provisions to Elders), and considers traditional food sharing practices where appropriate.	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The community encourages and supports locally grown food (e.g., community gardens in the summer), as well as traditional hunting and fishing practices.	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A quota system is employed and enforced to protect species hunted for food, in line with Traditional Knowledge and Ministry of Natural Resources guidelines.	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	For communities where food delivery is not possible through winter, food supply planning is in place to ensure sufficient food stocks are available through until delivery is resumed (including considerations for late thaw of sea ice in spring, or early freeze in autumn).	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Community and household emergency plans include food sharing considerations, where appropriate; storage and distribution procedures are accounted for and needs for generators and backup power/fuel supplies.	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	School-aged children have access to adequate nutrition to support learning.	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The community has a plan in place to provide basic nutrition for families struggling to provide sufficient food and for those who are precariously housed or homeless.	<input type="checkbox"/>

For Communities that Depend Mostly on Food Grown Elsewhere for Sustenance

Hazard Resilience Rating				High Resilience <input type="checkbox"/>	Low Resilience <input type="checkbox"/>	Need More Info <input type="checkbox"/>	Not Applicable <input type="checkbox"/>	
Yes	No	Need More Info	Not Applicable	FACTORS				This factor is important to my community
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Alternate routes are available for the delivery of food (e.g., paved, gravel or winter ice roads, air or water), including promotion of investment in transportation to ensure high cost of transportation does not lead to food shortage (e.g., incentive programs or partnership agreements between community and transport company).				<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Community-based table-top exercises have taken place in the community-at-large to discuss strategies to deal with lack of food.				<input type="checkbox"/>
				Most community members have regular access to perishable foods.				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Most homeowners have large amounts of frozen or non-perishable food stored and have back-up generators in case of extended power failures.				<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Community has back-up power supplies (fuel, etc.), as well as maintenance for generators, to preserve food in the case of communities who rely on generators as main power source.				<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The community encourages and supports locally grown food (e.g., community gardens in the summer), as well as traditional hunting and fishing practices.				<input type="checkbox"/>

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The community has emergency food stocks stored in the community and a plan for distribution (e.g., delivering provisions to Elders) and considers traditional food sharing practices where appropriate.	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A quota system is employed and enforced to protect species hunted for food in line with traditional knowledge and Ministry of Natural Resources guidelines.	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	For communities where food delivery is not possible in winter, food supply planning is in place to ensure sufficient food stocks are available through until delivery is resumed (including considerations for late thaw of sea ice in spring, or early freeze in autumn).	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	School-aged children have access to adequate nutrition to support learning.	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The community has a plan in place to provide basic nutrition for families struggling to provide sufficient food and for those who are precariously housed or homeless.	<input type="checkbox"/>

References

- Cutler, P. (1984). *Food crisis in Bangladesh?* Report on a visit to Dhaka, 2nd-21st July 1984. *Disasters*, 8(4), 242-243.
- Juroszek, P., & von Tiedemann, A. (2011). Potential strategies and future requirements for plant disease management under a changing climate. *Plant Pathology* 60(1), 100-112.
- Mahmuti, M., West, J. S., Watts, J., Gladders, P., & Fitt, B. D. L. (2009). Controlling crop disease contributes to both food security and climate change mitigation. *International Journal of Agriculture Sustainability* 7(3), 189-202.