



CLIMATE-SMART FOOD SYSTEMS FOR ENHANCED NUTRITION

POLICY BRIEF No. 2 | September 2015

SUMMARY MESSAGES FOR DECISION MAKERS

The need for action

- By 2100, up to 40% of the world's land surface will have to adapt to altered climates.
- Each decade through to 2050, agricultural output is projected to fall by 2%, while food demand will rise by 14%.
- Sub-Saharan Africa and South Asia face the prospect of most serious impacts of climate change. These regions already have the highest burdens of malnutrition and the greatest reliance on agriculture.

Climate change and agriculture seen through a nutrition lens

- Promoting higher production of staple crops will not be enough to make agriculture more resilient to climate change or better able to address the world's need for improved diets.
- Nutrient-rich foods are particularly susceptible to droughts, pests, diseases, and temperature fluctuations.
- There is growing evidence that higher levels of carbon dioxide in the atmosphere may reduce the nutrient content and/or quality of various staple crops.

Nutrition-sensitive food systems can also be climate-smart

- While evidence of effective climate change actions remains scarce, there is ample evidence of how diets and food systems are adversely affected by weather shocks and price volatility.
- Solutions lie in the diversification of agricultural investments, the mitigation of climate-related stresses on crop and livestock quality, greater resource use efficiency along value chains, and the protection of diet quality in the face of supply and food price shocks.
- Climate-smart actions which support nutrition entail a focus on diverse, high-quality and healthy diets.

Policy recommendations

- Actions are needed today to both optimise current diets and the nutrient quality of food systems around the world, and to adapt and protect those systems against climate change.
- Decision makers should adopt a pro-nutrition lens when designing policies aimed at protecting and promoting agriculture in the face of climate change.

The Global Panel recommends six policy actions:

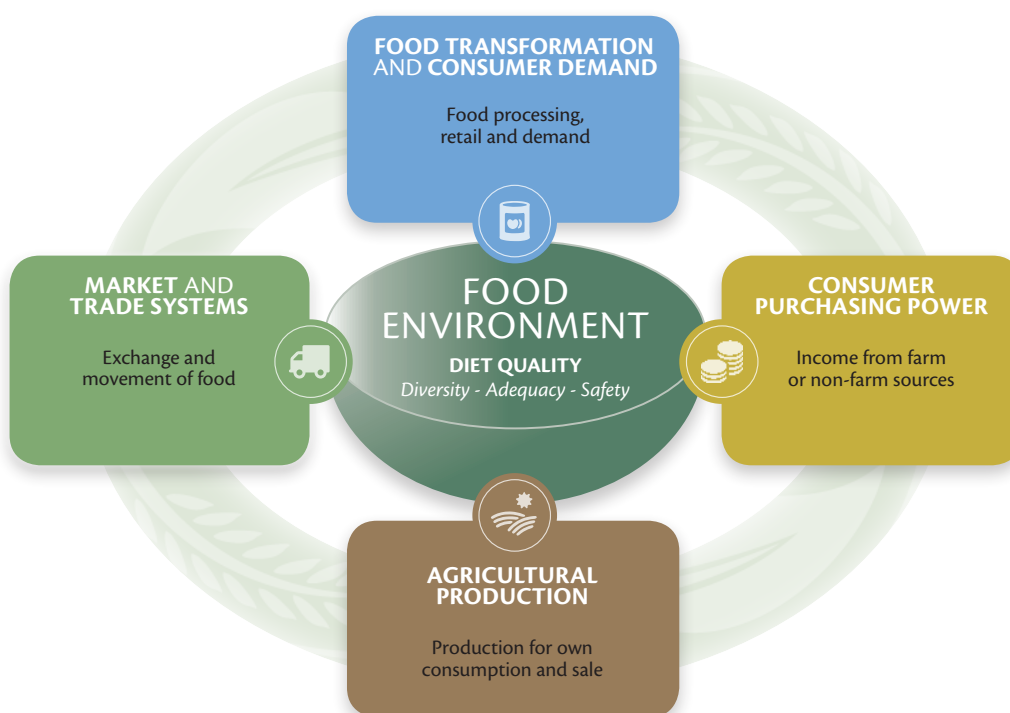
- 1. Include diet quality goals within adaptation targets proposed for climate action.**
- 2. Diversify agricultural investments, factoring in the local realities of ecological suitability and comparative advantage.**
- 3. Support greater food system efficiency, so that outputs per unit of water, energy, land and other inputs are optimised and the footprint of agriculture and non-farm activities are better managed to meet both food demand and higher quality diets.**
- 4. Integrate measures to improve climate change resilience and nutritional value of crop and livestock products along the value chain, from production to marketing.**
- 5. Protect the diet quality of the poor in the face of supply shocks and growing food demand.**
- 6. Promote the generation and use of rigorous evidence on appropriate investments along food value-chains which are resilient to climate change and also deliver positive dietary outcomes and support improved nutrition.**

How can Agriculture and Food System Policies improve Nutrition?

There are specific opportunities for policy change across multiple domains in the food system that can simultaneously enhance food and nutrition security in the face of climate change.

The multiple burdens on health created today for low and middle income countries by food-related nutrition problems include not only persistent undernutrition and stunting, but also widespread vitamin and mineral deficiencies and growing prevalence of overweight, obesity and non-communicable diseases. These different forms of malnutrition limit people's opportunity to live healthy and productive lives and impede the growth of economies and whole societies.

The food environment from which consumers should be able to create healthy diets is influenced by four domains of economic activity:



In each of these domains, there is a range of policies that can have enormous influence on nutritional outcomes. In the Global Panel's technical brief, we explain how these policies can influence nutrition, positively and negatively. We make an argument for an integrated approach, drawing on policies from across these domains, and the need for more empirical evidence to identify successful approaches.

Find out more here: www.glopan.org/technical-brief

Download Policy Brief No.2 here: www.glopan.org/climate-change

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