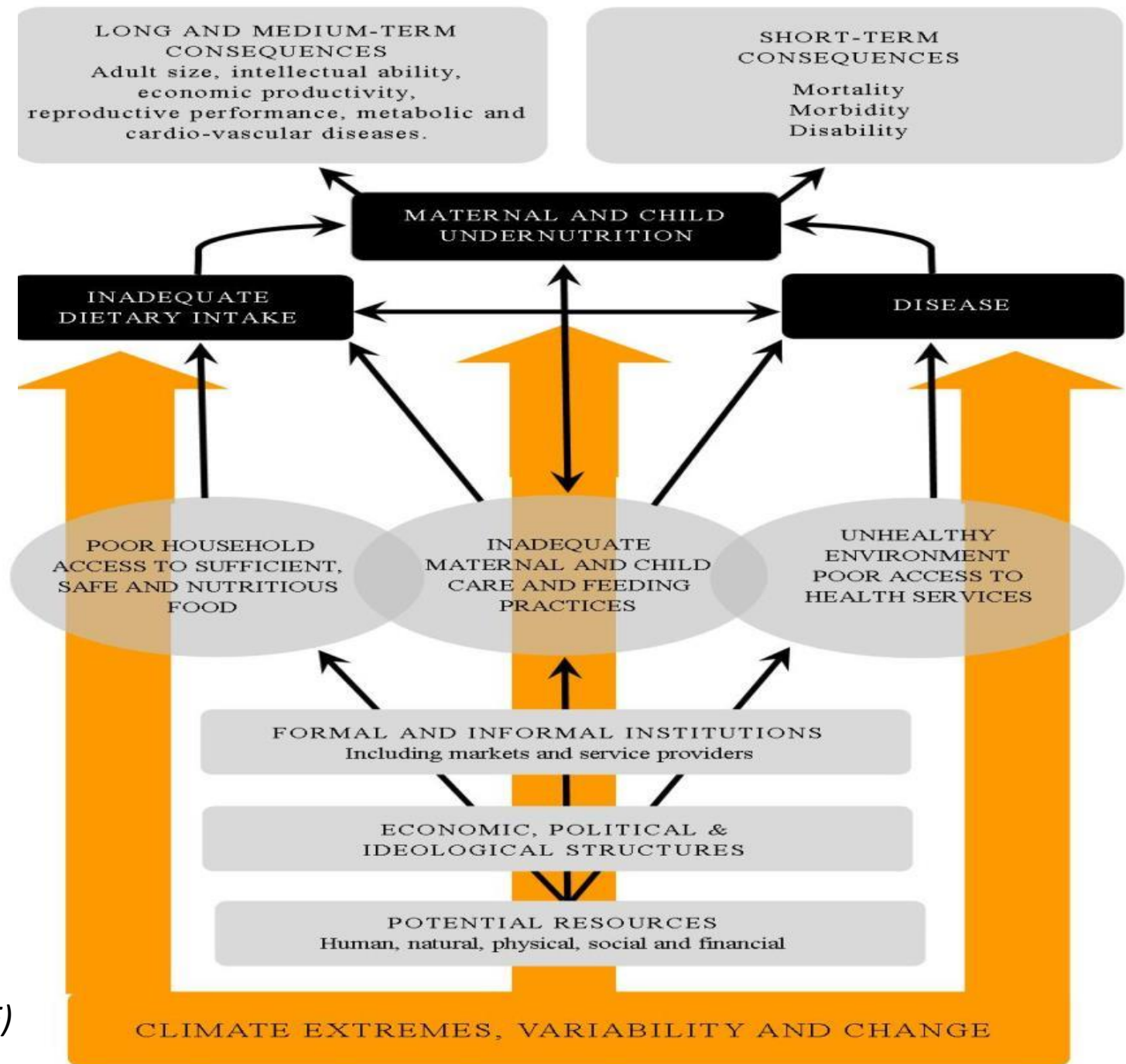


# Co-benefits of nutrition-sensitive adaptation and mitigation



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# Pathways through which climate change affects nutrition



*Tirado et al. 2013  
adapted from  
Black and UNICEF)*



**By 2080 1-3 billion people will experience water scarcity and 200 to 600 million, hunger** *(IPCC 2007; 2014)*



# Nutrition-sensitive climate adaptation

- Integrated family farming (synergies of agro-forestry horticulture, aquaculture and livestock systems)
- Mangrove repopulation: Aqua-silviculture – *Disaster risk reduction*
- Extension services - food diversity- Good Agriculture Practices food safety (e.g. aflatoxins, FBD)
- Education - local food systems & micronutrient-rich foods
- Social protection, conditional transfers, school feeding programs





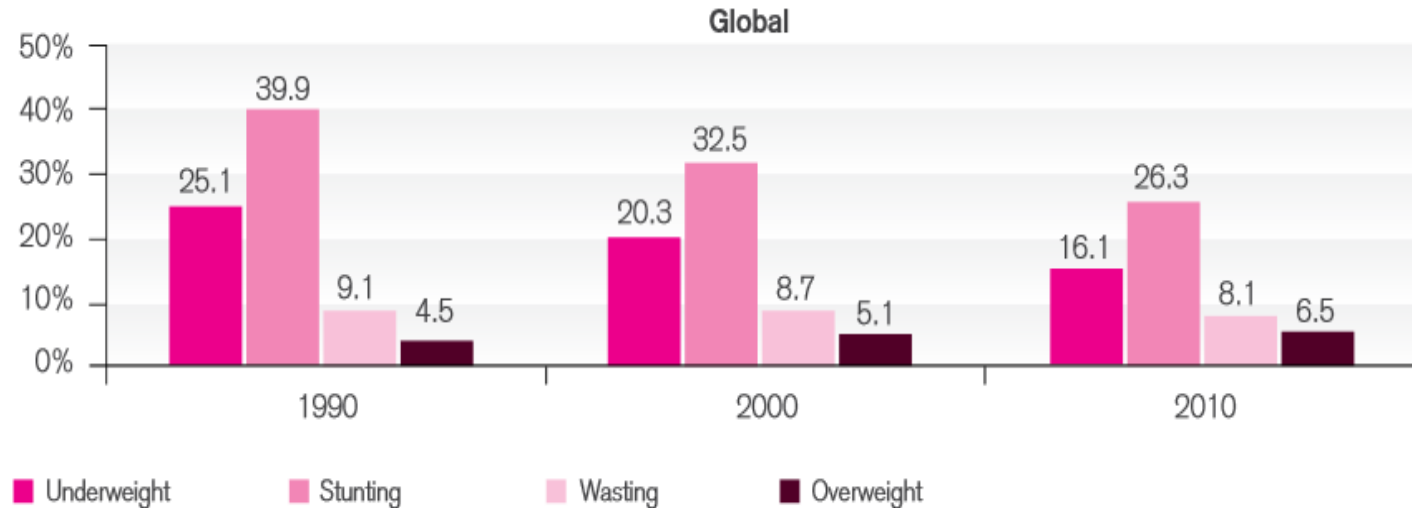
# Nutrition-sensitive climate-change mitigation

## increase diet diversity while reducing GHGs

- Conservation Agriculture
- Agroecology
- Agroforestry/Silviculture
- Rice Intensification/fish farming
- Traditional breeds
- Integrated food-energy systems



# Double burden of malnutrition

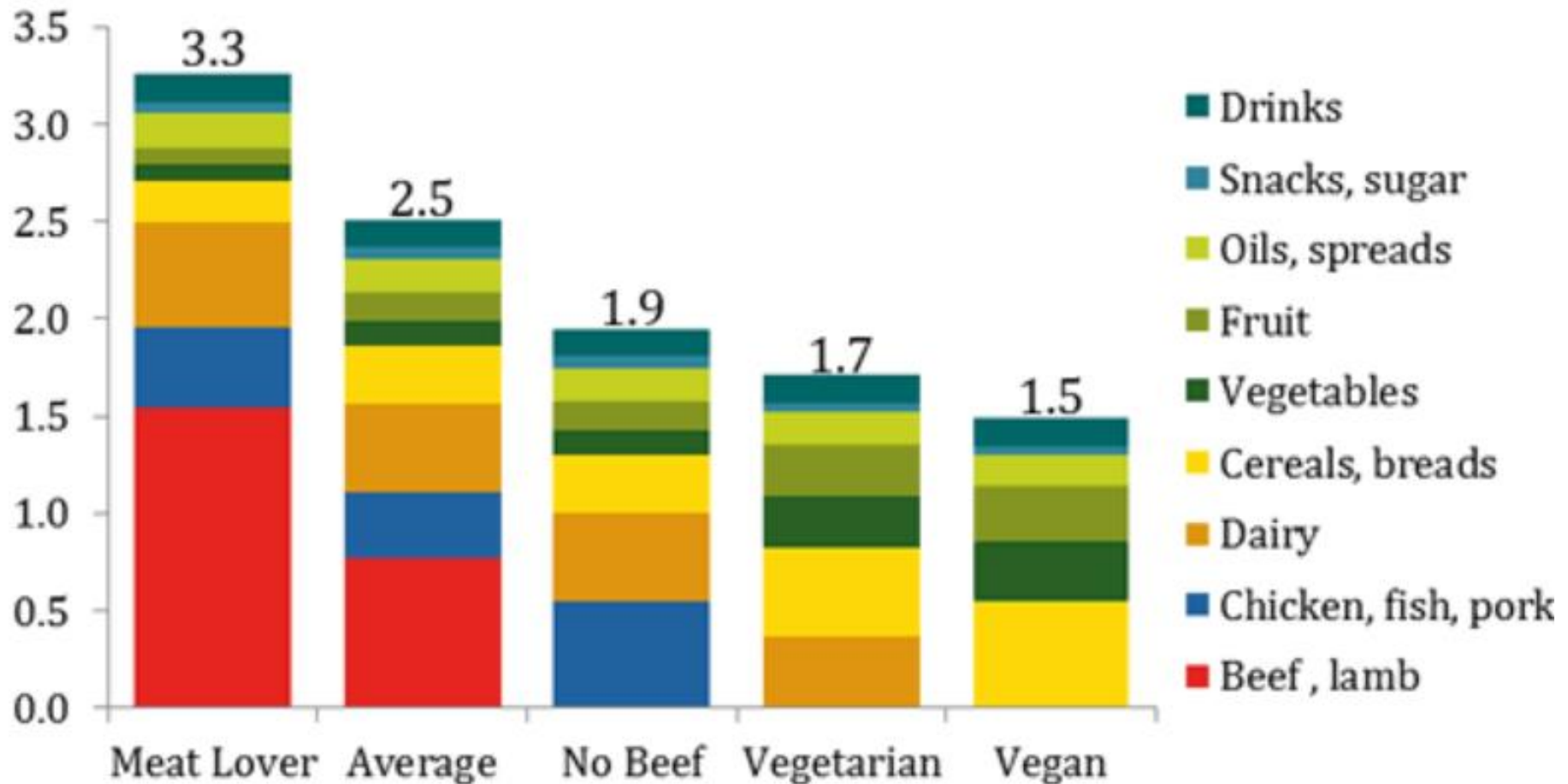


About **805 million** people are chronically undernourished

**1 billion adults** and **20 million children** are estimated to be overweight.

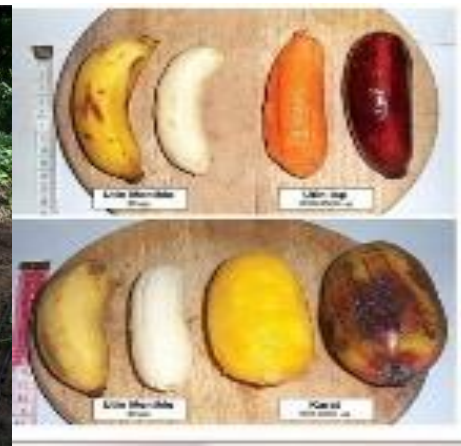
**Diets low fruit and vegetable intake – high in meat & saturated fats**

# “Foodprint” by diet type tCO<sub>2</sub> e/person USA



# Co-benefits of sustainable diets

- **Healthy – diet rich in fruits & vegetables (400gr/day) can save 2.7 million lives**
- Environmentally sustainable (e.g. legumes - soil N fixing)
- Biodiversity/ traditional crops/ indigenous peoples /socio-cultural values
- Socially equitable





# Key messages

- Nutrition sensitive adaptation and mitigation in agriculture and food systems bring **co-benefits to health and the environment**
- Critical inclusion of **nutrition indicators (such as diet diversity e.g. Women Minimum Dietary Diversity)** in adaptation and mitigation planning in the agriculture & food sectors and in relation to several SDGs
- Climate, agriculture, health, nutrition **policy coherence**