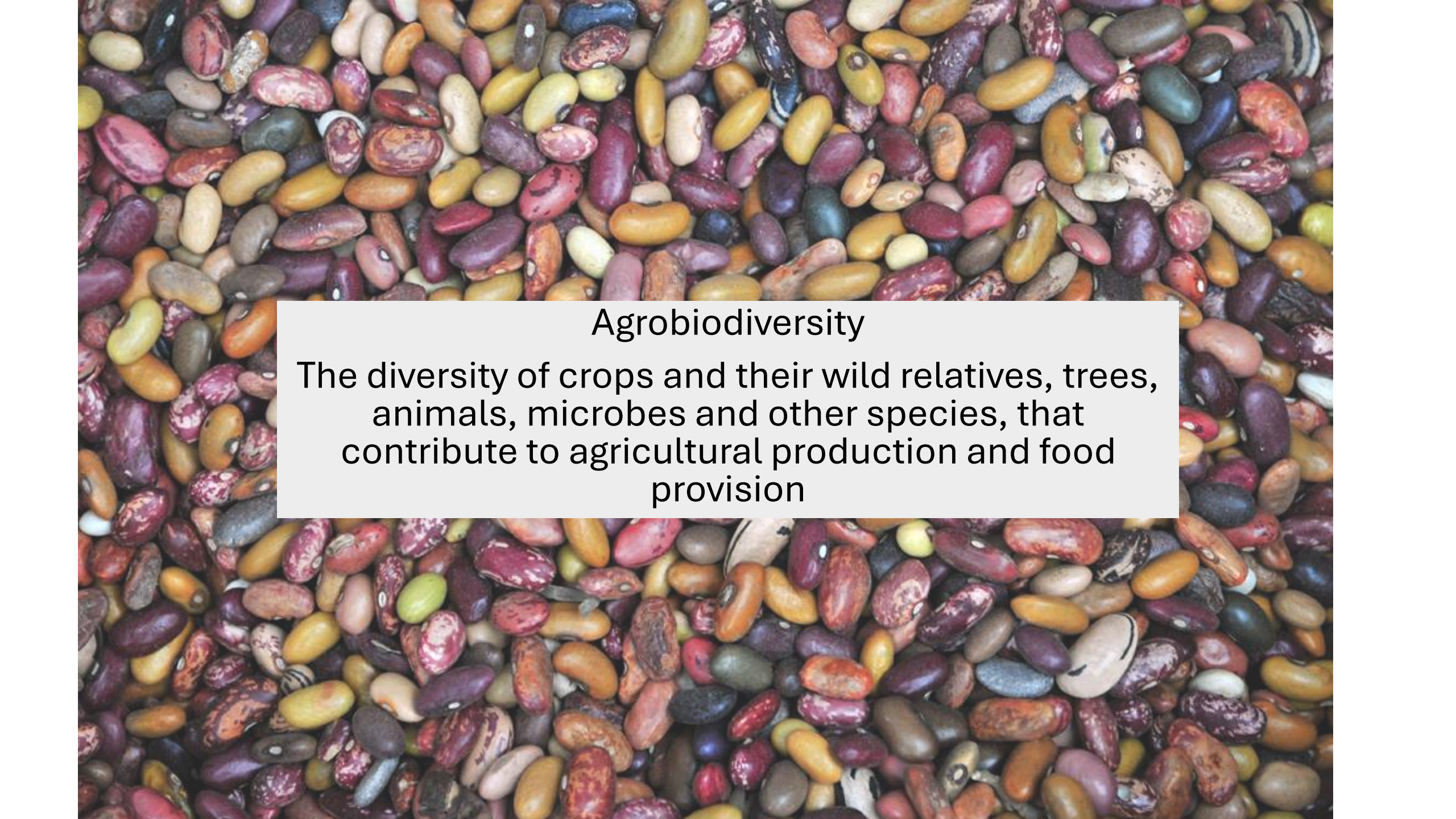




Agrobiodiversity, dietary diversity, and food system transitions: Reflections from Southeast Asia and the Pacific

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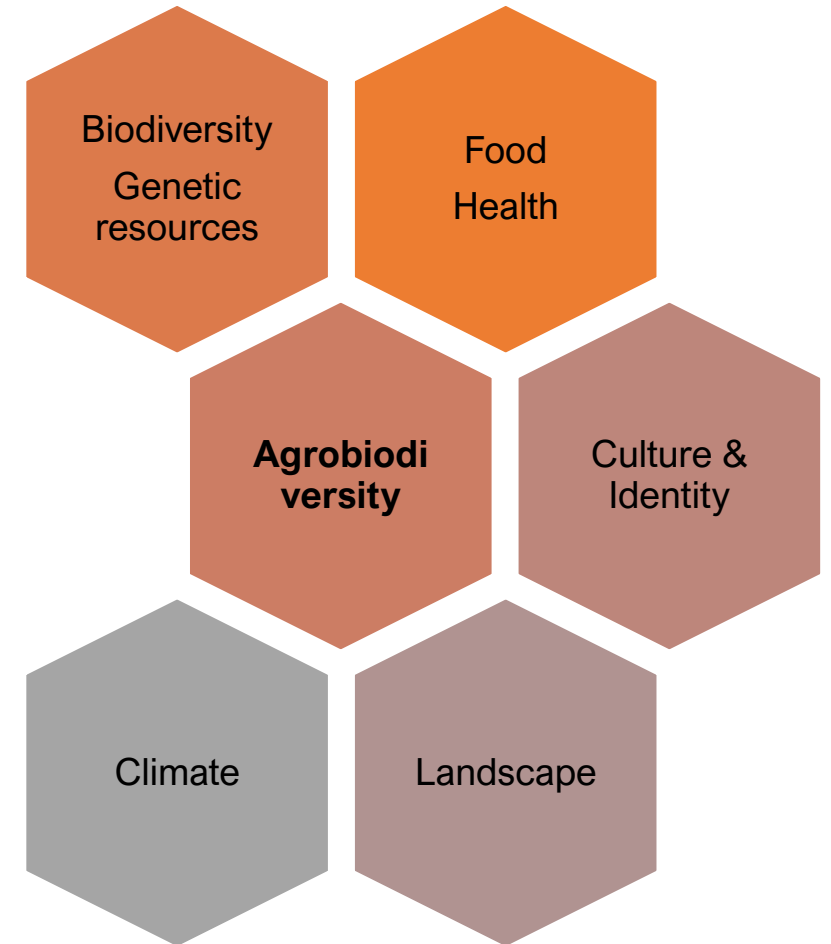


Agrobiodiversity

The diversity of crops and their wild relatives, trees, animals, microbes and other species, that contribute to agricultural production and food provision

Agrobiodiversity for the food system

- Nutrition: Access to a variety of nutritious foods; year-round availability
- Food culture and indigenous knowledge: From production, preparation, consumption, to cultural heritage and identity
- Market opportunities and economic benefits: from high value products to unique and niche products; different products with the seasons
- Resilience: against environmental stressors - climate change, pests, and diseases, etc.



Agrobiodiversity for the food system



Harnessing agrobiodiversity for more sustainable, resilient, and nutritionally diverse food systems

consumers
producers
custodians farmers retailers
processors
innovators

Available resources

- ❖ Land: which farming system, crops, and species to prioritise
 - Market demand versus local nutrition
- ❖ Knowledge & skills:
 - Learning/ re-learning practices that incorporate & support diversity
 - New technologies and applicability across species
 - Loss and displacement of traditional practices and indigenous knowledge systems
- ❖ Labour:
 - Fewer household/ community members involved in agriculture
 - Access to sufficient and skilled labour
- ❖ What can feasibly be expected of farmers?



Northern Vietnam:

- 500 ethnic minority households
- Large vegetable diversity: 90 vegetables
- Only a quarter of the diversity was produced by >10% of the households
- Land and labour major limitations of the diversity and quantities

Needs and preferences

❖ Livelihoods

- Rising cost of living & challenging environment –focus on high value crops & animals
- Nutritious and underutilised foods can also end up fully commercial

❖ Food

- Diet transition and urbanization of diets
- Diverse landscapes: reduced consumption – lowering likelihood of production & maintenance
- Less diverse landscapes: promoted diversity needs to have multiple (tangible & perceived) benefits

- ❖ Does the food environment support demand for healthy diets and the translation of income into healthy & diverse diets?



Solomon Islands and Vanuatu:

- 30% experienced moderate or severe food insecurity
- >90% did not meet the recommended infant and young child feeding practices and minimum dietary diversity for women
- Large diversity of species and varieties of foods like taro, yam, plantain, nut trees, fruits
- Increasing consumption of rice, noodles, tinned foods, etc.
- Poor taste, low preference and limited preparation skills limited regular use and consumption of locally available foods

Market access

- ❖ Input and output markets:
 - Adequate inputs tailored/ required for a more diverse agricultural system
 - Accessing markets for diverse crops; profitability
- ❖ Food markets:
 - Produced diversity available for other markets/ consumers
 - Producing communities: Access to high quality, affordable, safe, diverse, preferred foods?
 - Appeal of processed and ultra-processed foods
 - Well marketed, varying nutritional quality, cheaper, less seasonal effects and time requirements
- ❖ How do knowledge and income fare against price, nutritional quality, preference, and diversity?



Solomon Islands and Vanuatu:

- Participatory development of nutrition behaviour change strategies:
 - Wide variety of crops available from on-farm, market, shops, and wild
 - Increasing availability and access of affordable easy to cook, highly processed foods
 - Inaccessibility of markets with diverse foods

Policy environment

❖ Addressing multiple food system objectives:

- | | | |
|-----------------|--------------------------------|---------------------------------|
| – Productivity | – Climate Resilience | – Equity and social inclusion |
| – Food Security | – Agrobiodiversity | – Economic Growth |
| – Livelihoods | – Environmental Sustainability | – Nutrition and Health Outcomes |

- Unique contexts, Complex interactions, Trade-offs, ...
- Island nations face unique challenges related to food sovereignty, with high dependence on imported foods and fragile ecosystems



More questions than answers?



- ❖ Holistic and integrated approaches that considers the socio-economic, cultural, and environmental contexts of farming communities and nutritional aspects of agrobiodiversity along the entire value chain
 - Supporting sustainable food systems and the nutrition and livelihood outcomes
- ❖ Multidisciplinary approaches that consider the complex interactions between agriculture, ecology, economics, and social dynamics to develop (and assess, understand, monitor, implement) the agri-food system

- How well do the holistic, integrated approaches link with how we presently design, implement and assess impact of agrobiodiversity/ agri-food system research?
- How can our research perspectives align with and motivate farmers, consumers, and policymakers to make decisions that support agrobiodiversity, livelihoods and nutrition outcomes?



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Thank You!

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