

# Innovation in family farming: An FAO perspective

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# Innovation on family farms key to food security and sustainable development

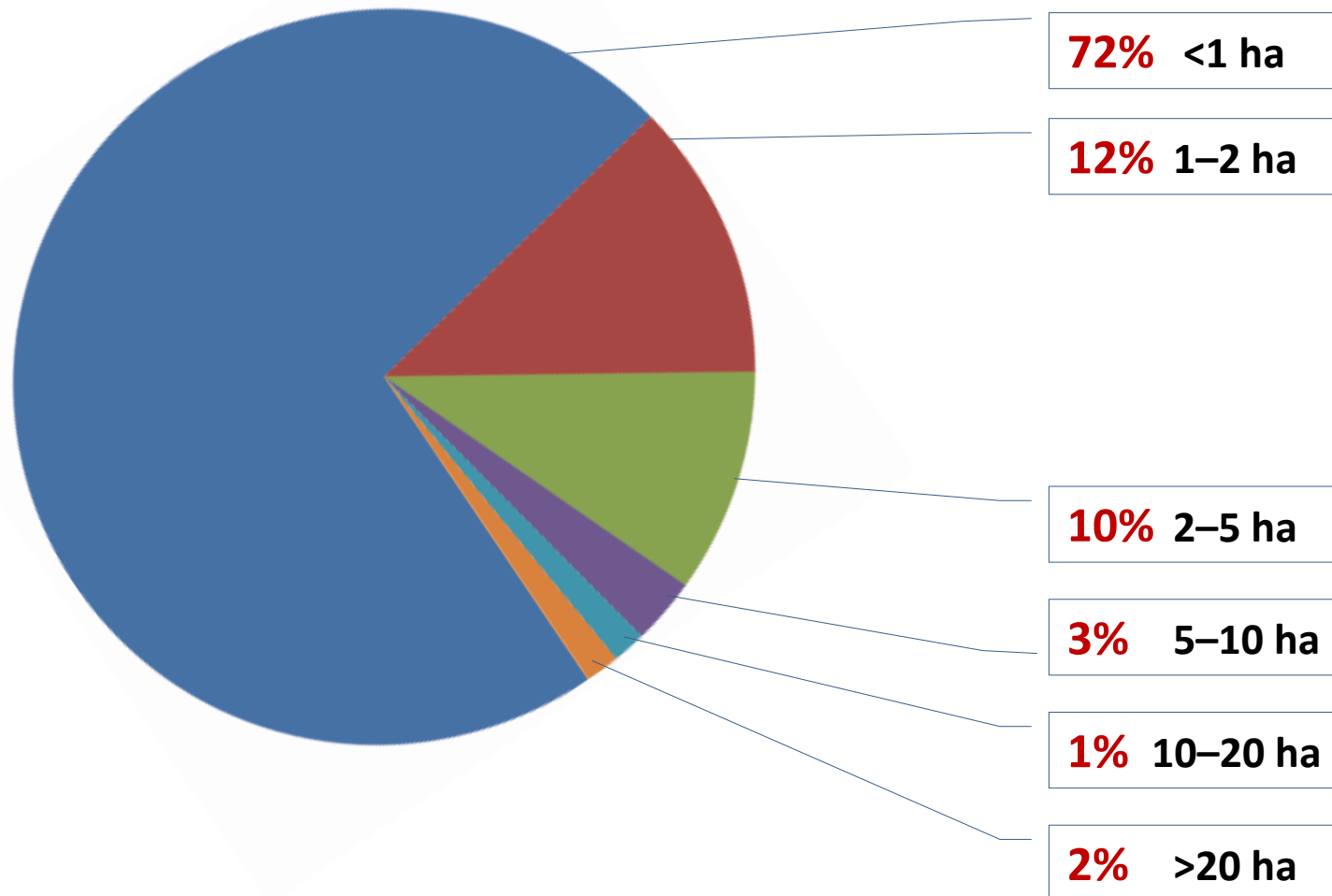
- Family farms are the dominant form of farming, but family farms are very diverse.
- They are essential for food security, poverty reduction and sustainable natural resource management.
- If they are enabled to innovate, they can:
  - increase production
  - preserve natural resources
  - raise rural incomes.
- We need innovation systems that meet the needs of diverse family farms.



# More than 570 million farms in the world

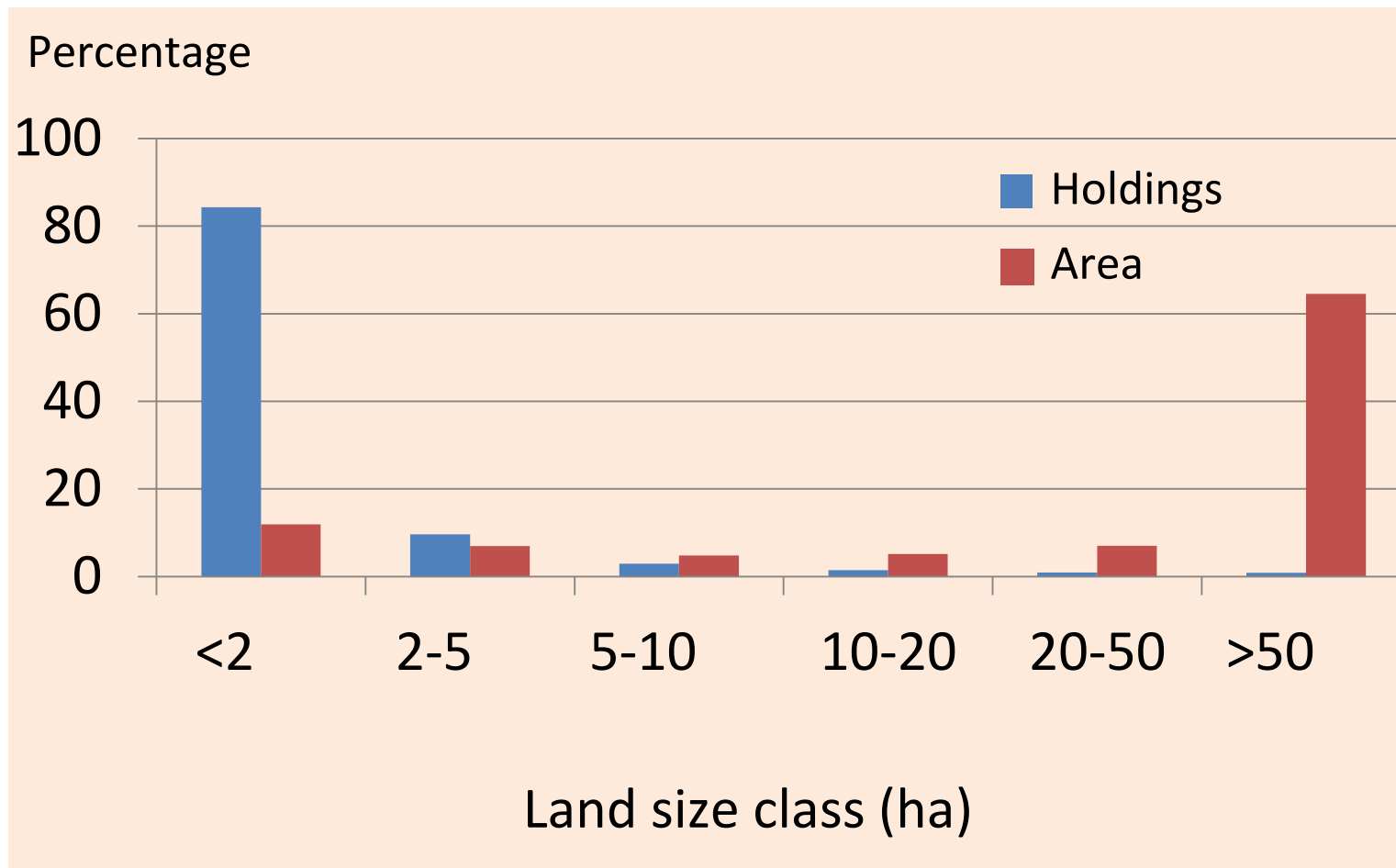


## Share of farms, by land size class



# ... but family farms are not necessarily small

## Distribution of farms and farmland worldwide



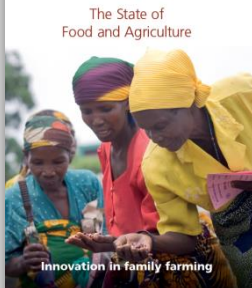
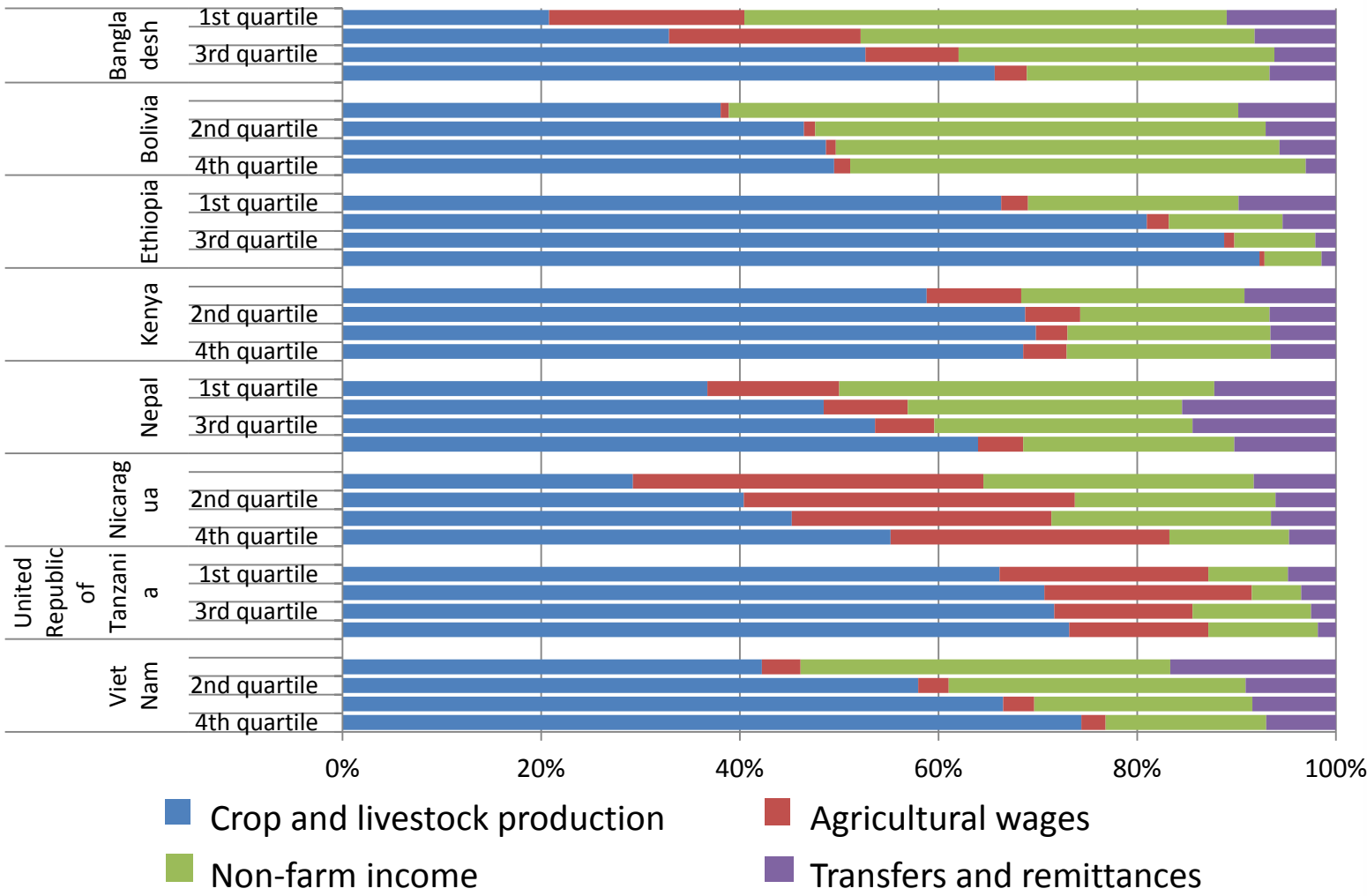
# Different family farms have different needs

- Large family farms – similar to large business ventures
- Small or medium-sized farms that:
  - are already commercial (generating a surplus for the market)
  - have potential to become commercial
- Subsistence smallholders with little potential for commercial production



# Farm households have many sources of income

Average share of household income by source and farm size quartile



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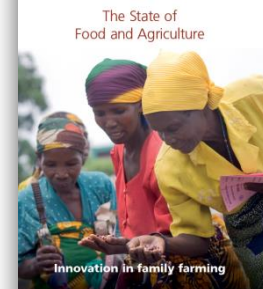
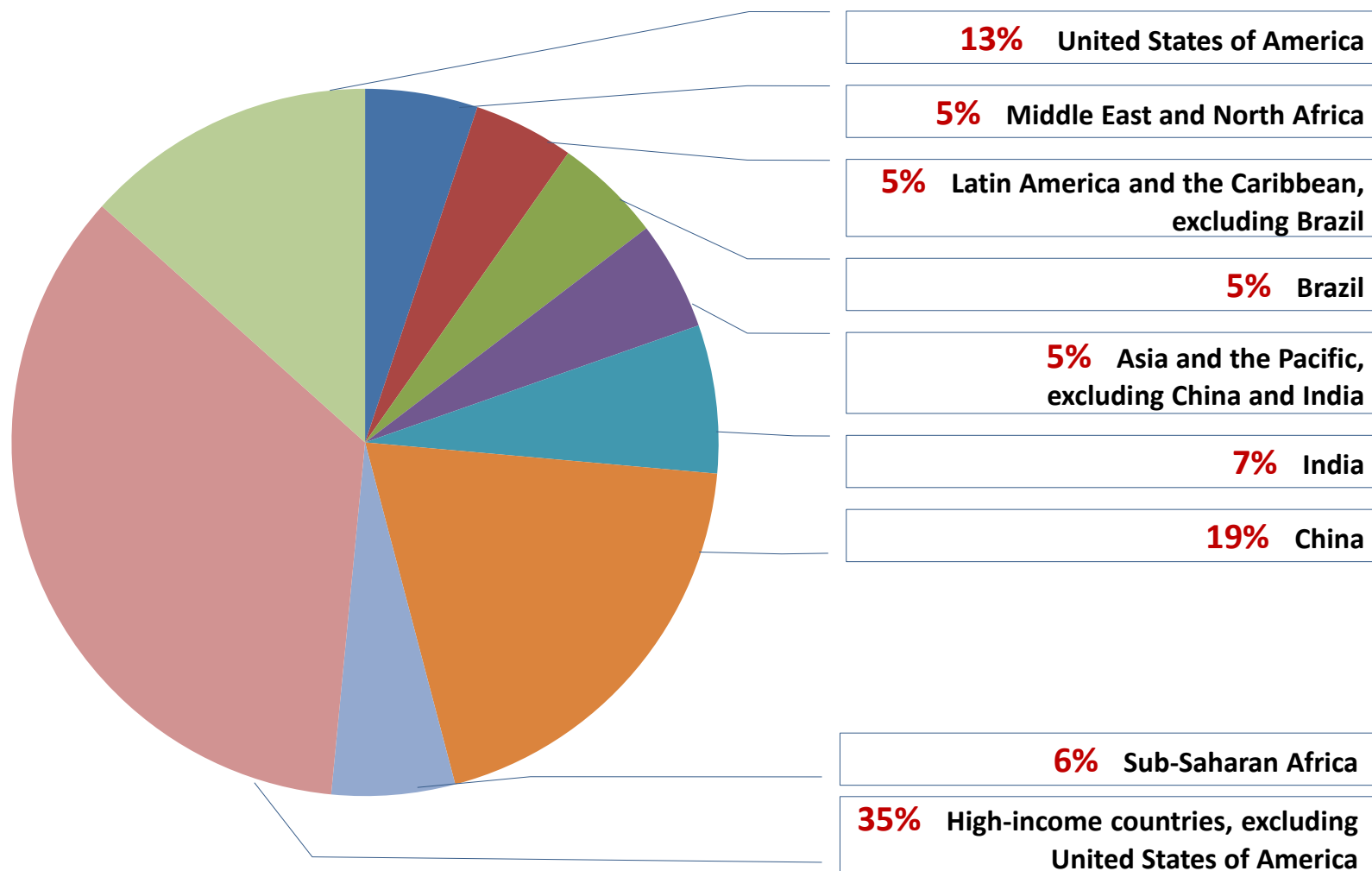
# Elements of an agricultural innovation system

- Innovation means doing things better, using knowledge.
- Agricultural innovation systems include all institutions and individuals that enable farmers to innovate.
- Overarching components:
  - enabling environment, including access to markets
  - agricultural R&D for family farms
  - inclusive agricultural advisory services



# Agricultural R&D is crucial countries

## Geographic distribution of public expenditure on agricultural R&D, 2009



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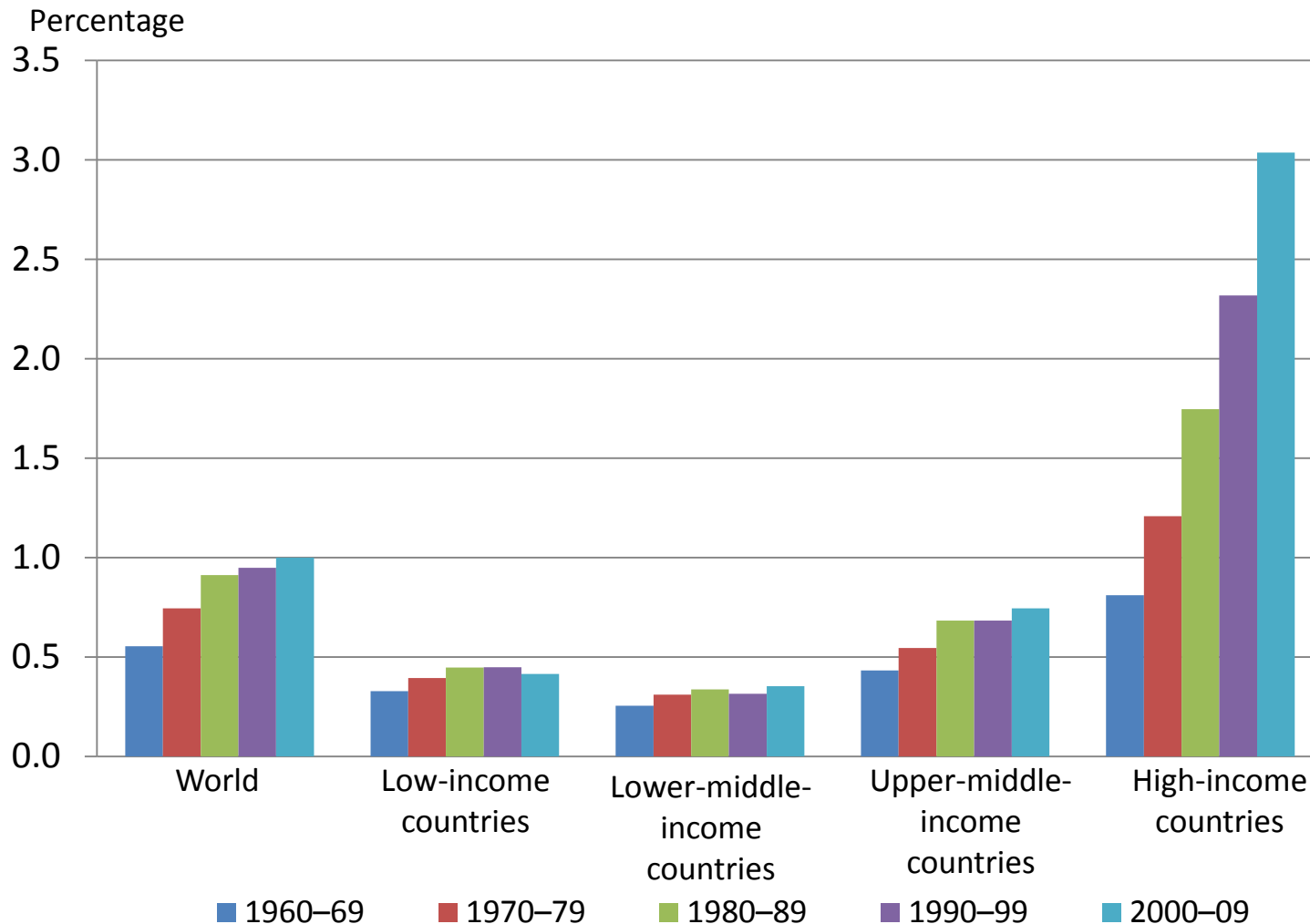
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# R&D intensity is lowest where needed most



## Agricultural research intensity, averages by decade and income group



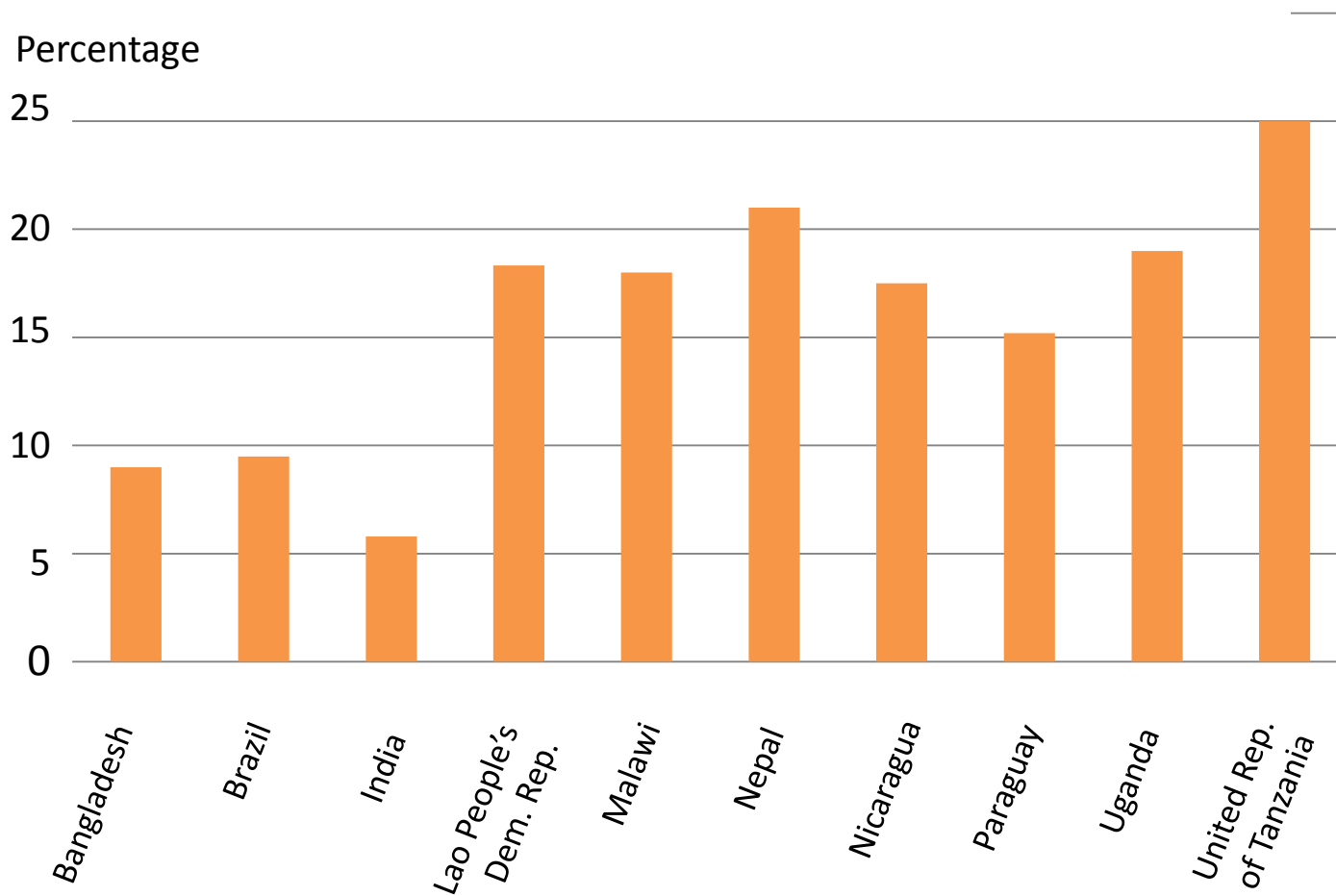
# Making agricultural R&D more effective

- Focus public R&D on public goods
- Maximize international and regional spillovers
- Use formal research to complement farmer-led innovation
- Include farmers in priority-setting to meet the needs of family farms.



# Agricultural extension is also a priority area

Shares of farms accessing information through agricultural extension, selected countries most recent years



# Extension and rural advisory services for family farms

- Changes in RAS - more pluralistic, but still clear role for government
- Create conditions for private delivery of advisory services
- Direct provision of RAS with public goods characteristics: sustainability, crop and livestock diseases, poverty alleviation and food security
- A key concern: making services available for small family farms, especially in remote areas.



# Capacity to innovate at different levels

## Capacity development in different dimensions

The enabling environment dimension is the broad social system in which organizations and individuals function

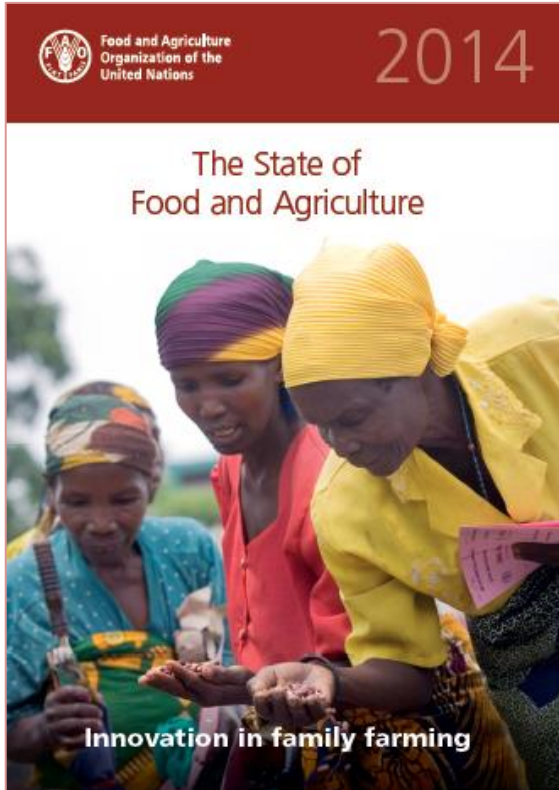
The organizational dimension refers to all public, private and civil society organizations

The individual dimension relates to all individuals in organizations and communities





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# The State of Food and Agriculture 2014 Innovation in family farming

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