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# Developing sustainable value chains for small-scale livestock producers and locally adapted breeds

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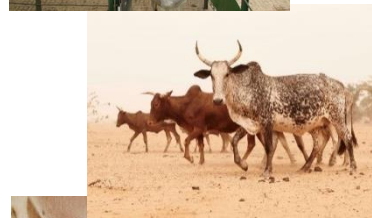
Food and Agriculture Organization of the United Nations



IMPLEMENTING THE GLOBAL PLAN OF ACTION FOR ANIMAL GENETIC RESOURCES

# The context

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- In developing (and developed) countries, small-scale livestock producers (farmers with limited resource endowments) largely rely on locally adapted breeds to produce food and a wide range of services.
- They face many challenges:
  - poor access to markets and related services
  - growing environmental constraints
  - limited capacities
- ***Reduced productivity and competitiveness***



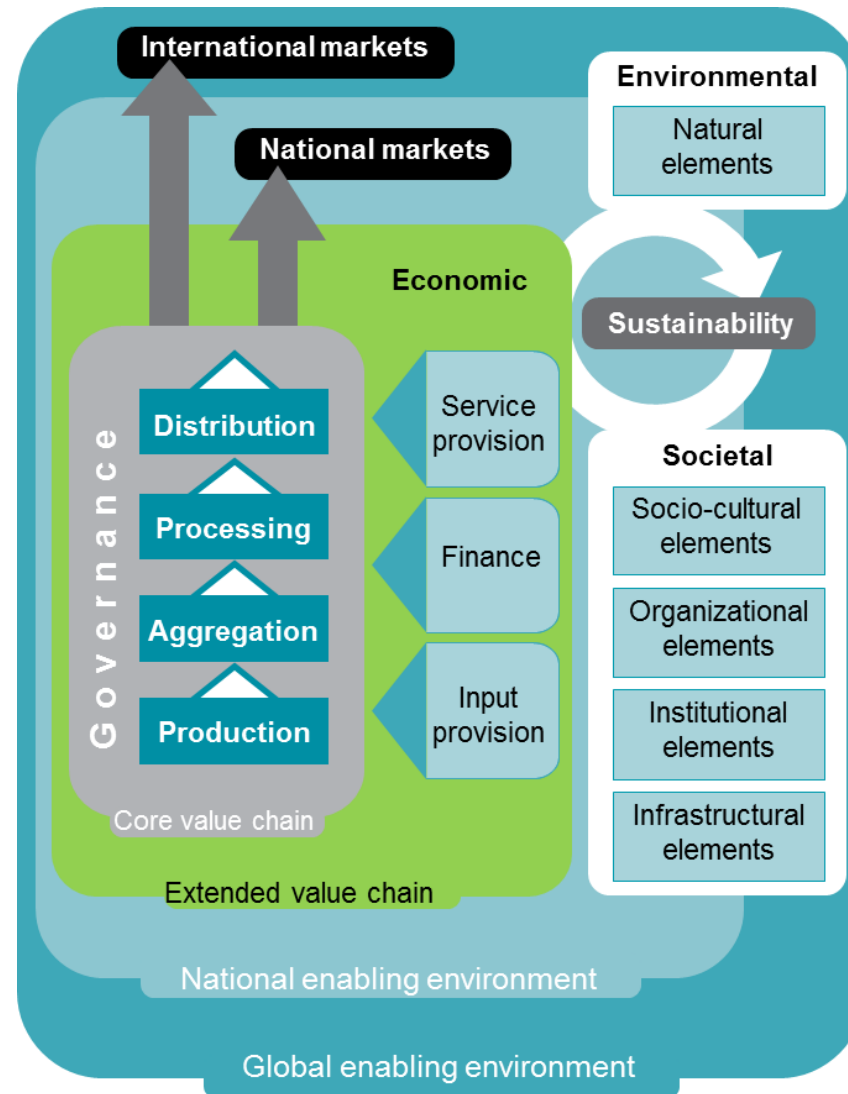
# The sustainable food value chain development (SFVCD)

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- A market-driven approach developed to provide guidance in development thinking and intervention design.
- SFVCD is driven by several principles which can be summarized as follows:
  - (i) measuring performance: considering the three dimensions of sustainability, including synergies and trade-offs;
  - (ii) understanding performance: viewing the systems as interconnected and dynamic, governance-centred, and market-driven;
  - (iii) improving performance: implementing effective interventions with a clear vision and upgrading strategy.



# The sustainable food value chain framework



# Development of specific guidelines focusing on small-scale livestock producers

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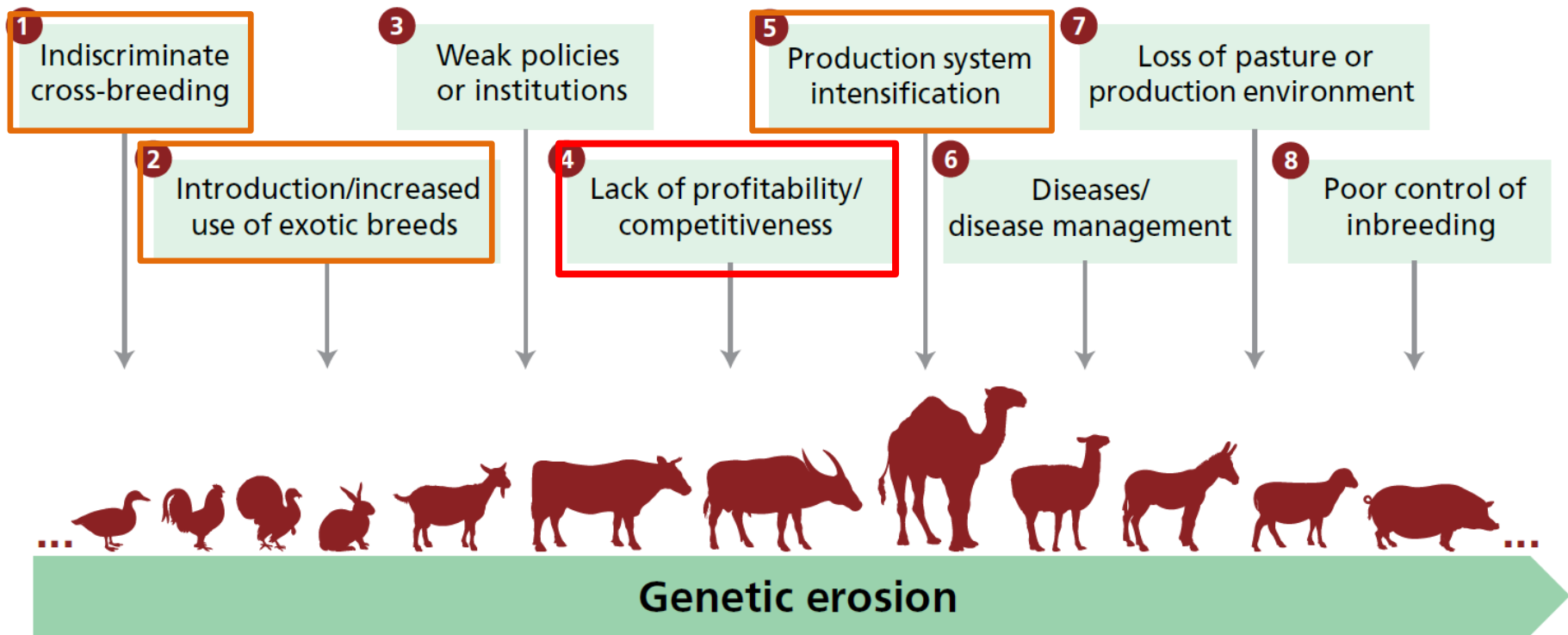
## Three key objectives considered

- (i) reducing rural poverty in general, with a specific reference to small-scale livestock producers;
- (ii) increasing the sustainability and resilience of small-scale producers in a changing environment; and
- (iii) empowering small-scale livestock producers inclusively, both in economic and political terms.

***How can this approach be used to add value to locally adapted breeds?***



# Main threats to locally adapted breeds **directly** or **indirectly** related to their limited value added



Source: FAO (2014)



# Recommendations for the marketing of locally adapted breeds from various reports

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## **Mathias et al. (2010) 8 cases (Africa, Asia, South Africa)**

- *Use existing resources.*
- *Identify a suitable entry point.*
- *Start small.*
- *Do the research.*
- *Identify special characteristics of the breed.*
- *Find a viable business model. (equitable benefit sharing)*
- *Focus on quality.*
- *Build capacity.*
- *Do not depend too much on outsiders.*
- *Ensure long-term demand.*
- *Do not put all your eggs in one basket.*

## **FAO (2012) 8 cases (North Africa & Europe)**

- *A breed targeted for value addition should have unique or specific attributes.*
- *The safety, quality and uniformity of the product over time play an essential role in value addition.*
- *Symbolic elements, such as the environment and traditions should be considered.*
- *Commitment of all the stakeholders to the product and the adherence of producers to the process should be considered.*
- *The training of farmers is essential.*
- *Sharing of benefits from value addition across the sector.*
- *It is necessary to have a corporate policy that frames the steps.*

## **VARAPE (2014) 13 cases (France)**

- *building a network involving all relevant stakeholders (farmers, processors, retailers, etc.);*
- *ensuring long-term coordination of the network;*
- *sharing a common vision and common objectives;*
- *highlighting links to history and culture;*
- *developing products and markets in a way that is consistent with the production capacity of the livestock keepers involved;*
- *establishing adequate quality indicators or labels;*
- *identifying relevant economic and technical indicators; and*
- *maintaining links with partners*

# Work on the quality

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# Build a dynamic network with commitment and adhesion of stakeholders

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# Consider production capacity in relation to the market

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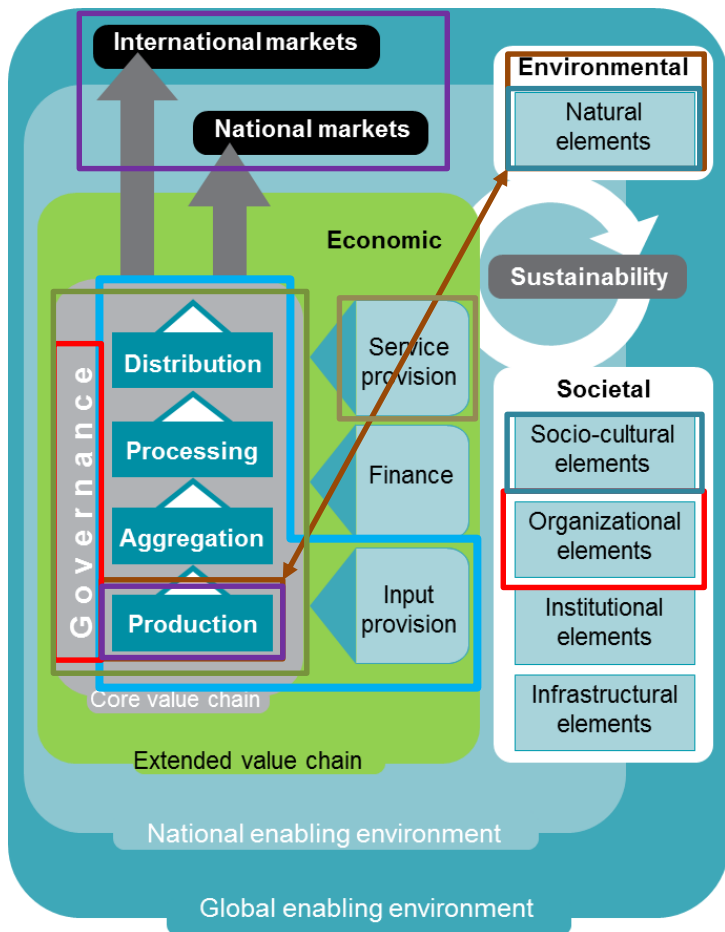
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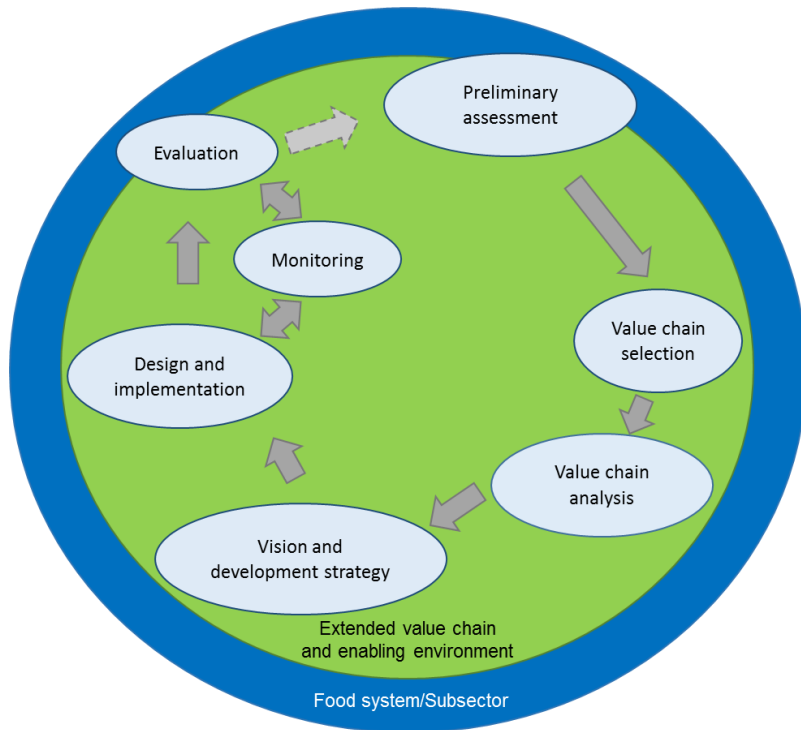
# Recommendations in relation to the SFVCD framework



- *Work on the quality*
- *Build on specific characteristics of the breed*
- *Build a dynamic network with commitment and adhesion of stakeholders*
- *Capacity building and training of farmers*
- *Equitable benefit sharing along the chain*
- *Consider production capacity in relation to the market*
- *Valorize links with environment and culture*



# The Value Chain (VC) development cycle



- A dynamic process with different steps
- Usable in a linear manner or not
- Usable in combination with other tools





# First steps: assessment and analysis of the value chain

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- Initial assessment of the food system and enabling environment (area, commodities, partners...) relating to the breed
- Selection of the most relevant value chain (product, market...)
- Value chain mapping and analysis: provide a diagnosis allowing to measure and understand VC performance in terms of incentives and capacities, governance, economics, and sustainability.





# First steps: assessment and analysis of the value chain

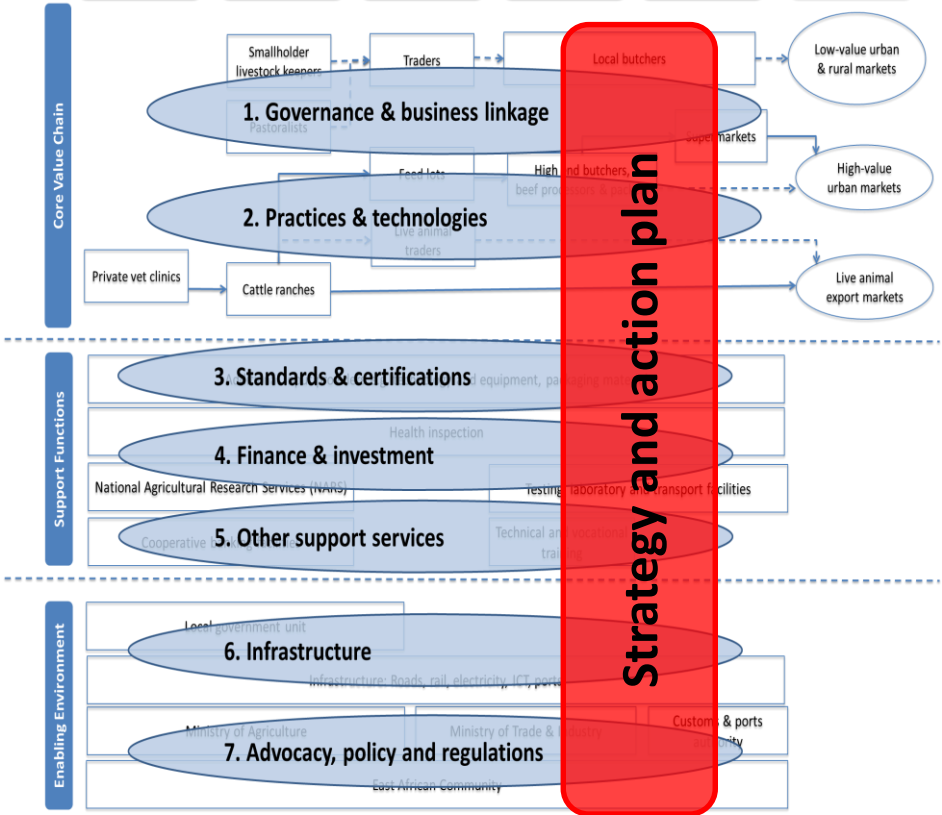
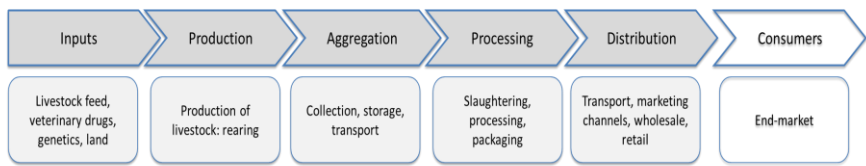
*Example of SWOT analysis of the most important driving factors for conservation and development strategies of 13 European local cattle breeds (Martin-Collado et al., 2013)*

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li><i>High farmer interest on their breed conservation</i></li> <li><i>High cultural value</i></li> <li><i>Efficient breeders' association</i></li> <li><i>Robustness</i></li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li><i>Low production</i></li> <li><i>Small population and effective population sizes</i></li> <li><i>Low collaboration among farmers</i></li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li><i>Increase of landscape management demand</i></li> <li><i>Demand of 'special' activities for tourism</i></li> <li><i>New possibilities for added value products and functions</i></li> </ul>	<p><b>Threats</b></p>

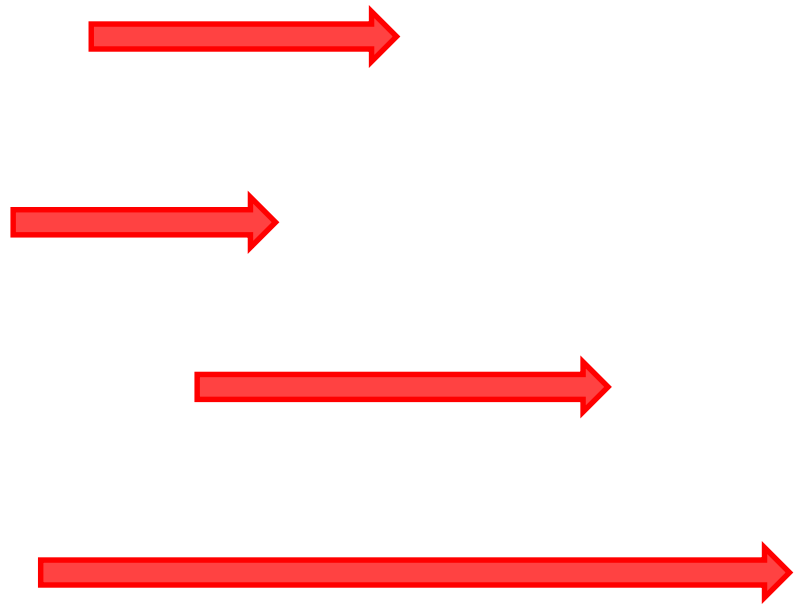


# From vision and development strategy to interventions

- Need to find an agreement on a common vision, articulated with a development strategy and action plan



## Interventions





# From vision and development strategy to interventions

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## *Examples of interventions:*

- *Develop partnerships with new distribution actors (functional or market upgrading)*
- *Develop agreement and contractualization among actors of the value chain*
- *Adopt practices improving quality (product upgrading)*
- *Adopt a certification or labelling scheme*
- *Develop training services*
- *Finance and develop a processing unit*
- *Assist the development of legal framework supporting ecosystem services provided by livestock*
- *...*





# Importance of continuous evaluation and monitoring

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- Need to consider a value chain and its environment as dynamic and susceptible to change
- Need to ensure long-term sustainability of the VC
- Importance to track in a continuous manner the performance and effectiveness of the actions implemented, with adequate indicators.

## *Examples of indicators of breed sustainability*

- *Hiemstra et al. (2010) proposed indicators related to farmers opinion as indicators of breed (self) sustainability*
- *Early warning risk status indicators (Verrier et al. 2015)*



# Conclusion

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- Opportunities for improvement of breed value-added can be investigated through VC approach, especially considering high value added products and niche markets.

## Major challenges for VC considering locally adapted breeds

- Governance and commitment of stakeholders
- Differentiation on products quality
- Fitting production with demand





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Thank you for your attention



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