

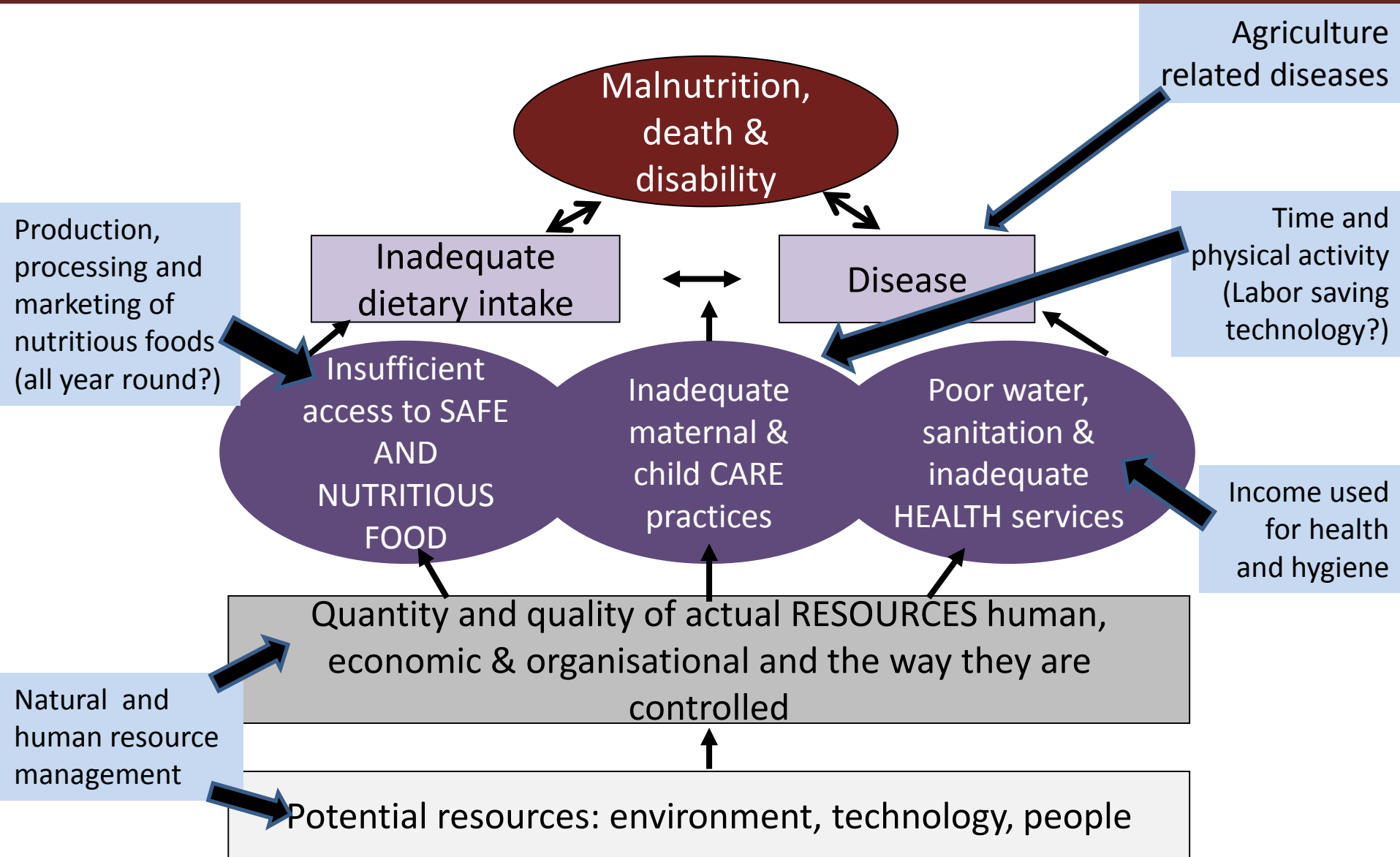
Harnessing the potential of livestock to improve nutrition of vulnerable populations: Technical guidance for program planning

Paula Dominguez-Salas

Land O'Lakes/ILRI Animal Source Foods for Nutrition Impact workshop,
Nairobi, 4 May 2017



How can livestock contribute to nutrition?



West Africa 'Livestock and nutrition' initiative



- Growing interest on ASFs and livestock interventions (UN agencies, donors, NGOs, etc.)
 - ECHO funded initiative
- Organisation of a regional workshop on 'Livestock, livelihoods and human nutrition', for program implementers
 - Burkina, Chad, Mali, Mauritania, Niger, Senegal
- Objectives
 - **Capacity building** and sensitisation on Nutrition-sensitive agriculture and **linkages** between livestock interventions and human nutrition
 - Discuss current **barriers and challenges** identified in West Africa
 - Highlight **lessons learnt** from institutions
 - Promote **engagement** among sectors, implementing partners and with academia



Process in West Africa

Literature review

Scoping study

→ Identification of key topics for discussion and training, and relevant experiences



Workshop



Follow-up

→ Based on country action plans developed during the workshop



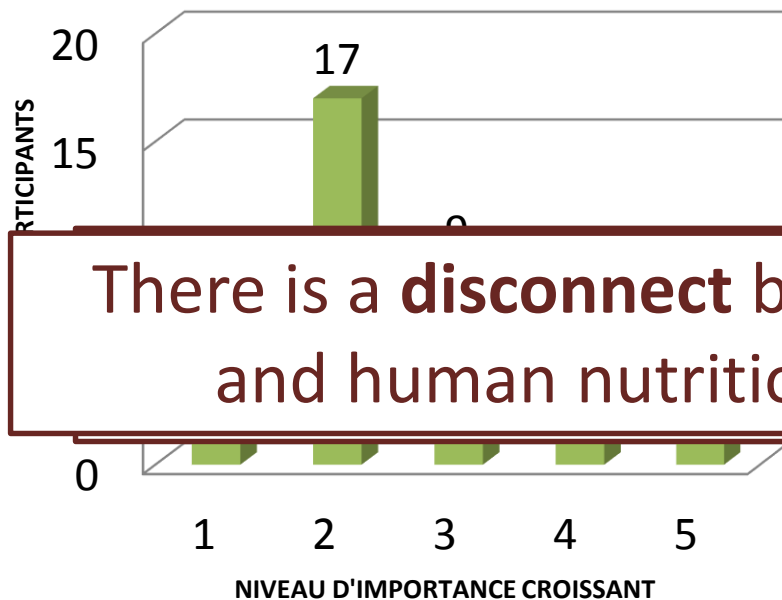
Annexe 11- Quels sont les 10 pas que vous pouvez faire pour que l'élevage soit mieux intégré aux efforts de nutrition dans vos pays? 4

BURKINA FASO	Responsabilité	Date	Commentaires, réalisations, obstacles, etc. 2
1. Réviser les stratégies nationales	FAO	2014	
2. Réviser les stratégies nationales	SNV/FAO	2014	
3. Réviser les stratégies nationales	SNV/FAO	2014	
4. Réviser les stratégies nationales	Partenaires d'adhésion	2014	

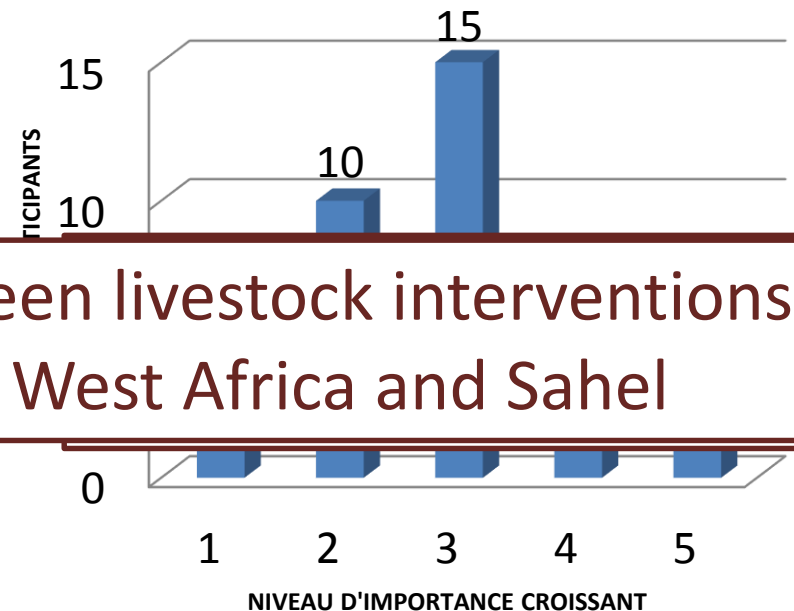
MLI	Responsabilité	Date	Commentaires, réalisations, obstacles, etc. 2
1. Réviser les stratégies nationales	FAO/MLI	2014	
2. Réviser les stratégies nationales	SNV	2014	
3. Réviser les stratégies nationales	SNV	2014	
4. Réviser les stratégies nationales	FAO	2014	

Perceptions of livestock–Nutrition linkages

Do you think that integrating nutrition into livestock interventions is perceived as a priority for the livestock sector (n=40)?



Do you think nutrition experts perceive livestock interventions and ASF consumption as a priority to tackle malnutrition (n=39)?



There is a **disconnect** between livestock interventions and human nutrition in West Africa and Sahel

HARNESSING THE POTENTIAL OF LIVESTOCK TO IMPROVE NUTRITION OF VULNERABLE POPULATIONS -Technical guidance for program planning-



Paula Dominguez-Salas (RVC/ILRI) & Domitille Kauffmann (FAO)

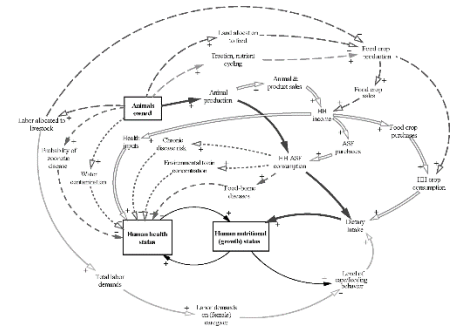
General considerations for program design I

- Assessing the local nutritional context
- Explicit nutrition-related **objectives** and **activities**
- A nutrition-sensitive household targeting strategy
- Targeting women for livestock activities

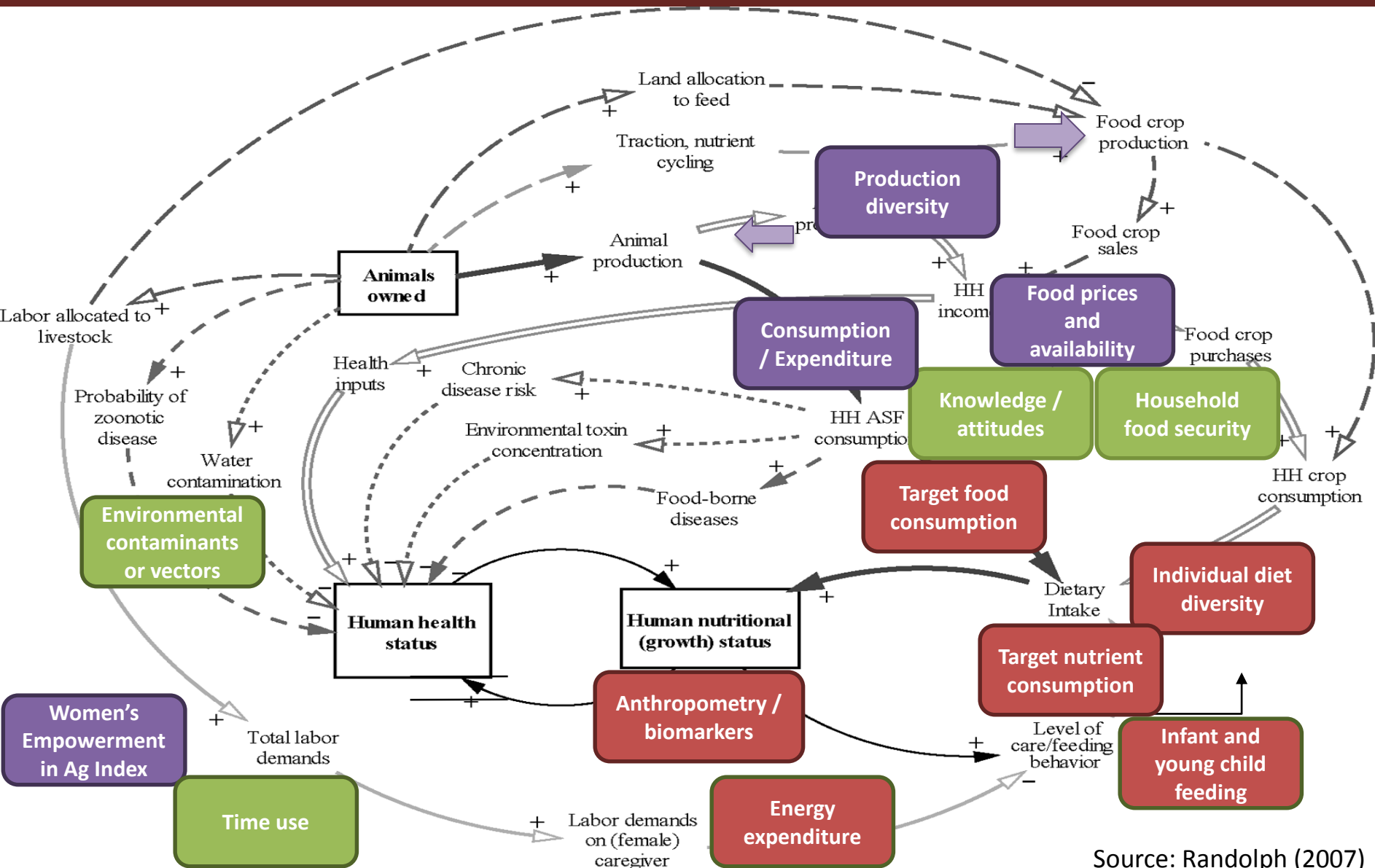


General considerations for program design II

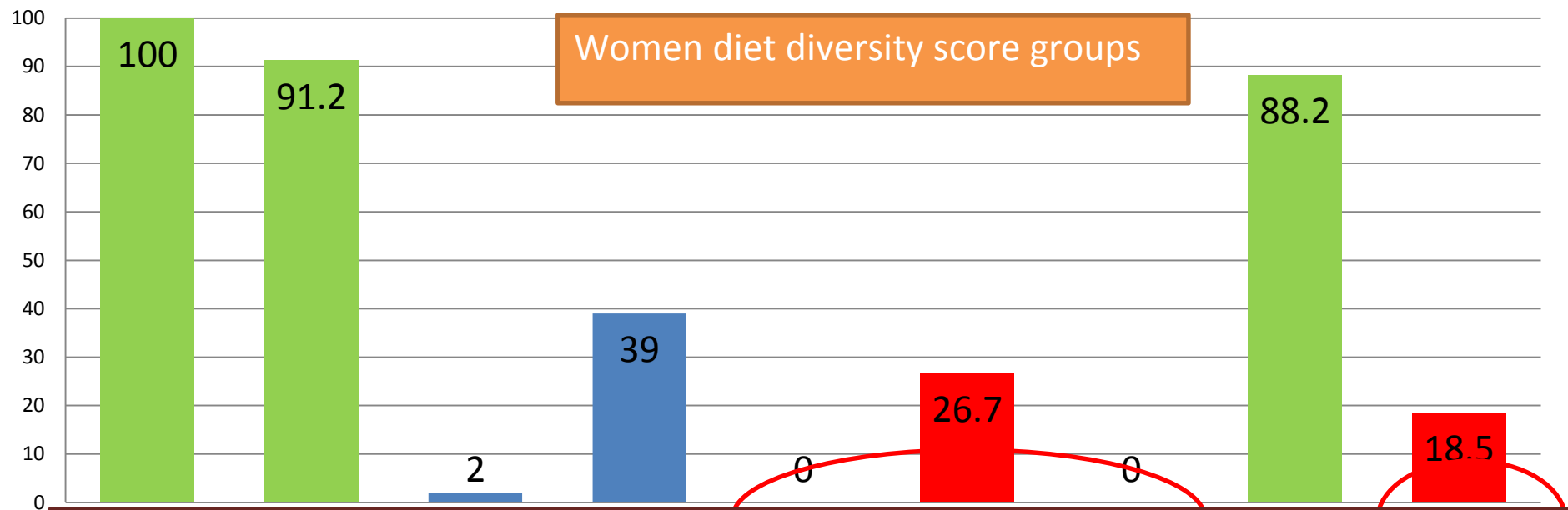
- Understanding the 'livestock to nutrition' impact pathways
- Nutrition-related indicators
- Do no harm principle



Examples of indicators



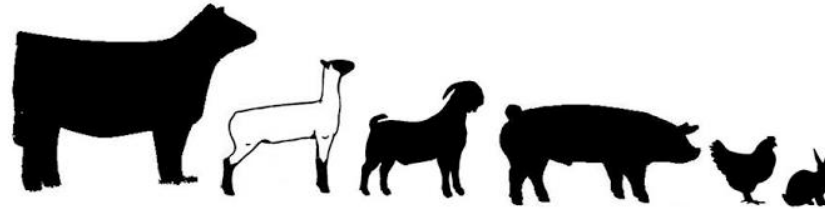
Example of indicator (women diet diversity score) Baseline for livestock project



“Using this indicator allows measuring direct impact of livestock intervention on ASF consumption (milk, meat,...), both in quantity and quality and that we realized how important it is to incorporate well defined measurable nutrition objectives from the early design of the intervention.” M. Chapon, AVSF

Specific considerations related to livestock production

- Choices of species



- Seasonal variations in livestock production

- Animal health interventions

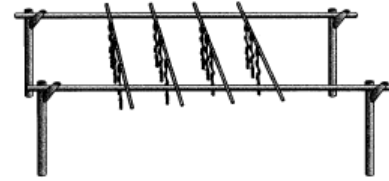


Specific considerations related to the livestock value chains

- Business approach
- Value chain analysis
- Use of livestock by-products
- Preservation and processing techniques



Traditional preservation and processing techniques



Method	Description
Drying	Partial/total elimination of water contained in fresh meat, combining temperature, humidity and ventilation, to preserve meat throughout the year. The meat can be consumed raw or rehydrated and cooked in stews.
Smoking	Direct/indirect exposure to smoke from certain plant- or wood-burning, delaying ASF degradation and giving attractive taste. The meat must be finely sliced to ensure uniform smoking. The phenolic components prevents insects.
Salting	Salt (possibly with spices) addition, frequently combined with drying, cooking or smoking. Two types: dry salting (meat, either in a block or in fine slices, is rubbed with a dry salt mixture) or wet salting (meat is marinated within water with the salt mixture, i.e. brining, during a variable length of time).
Fermentation processes	Preparation of sour milk, promoting growth of lactic acid-fermenting bacteria. These bacteria convert sugars in lactic acid, which in turn decrease pH and produce antibiotic components, thus preventing the development of other undesirable bacteria. In addition, fermentation improves the organoleptic characteristics of the product and increases the digestibility of the milk. The addition of fermented bacteria is often preceded by heat treatment.
Other	Butter- and cheese-making; pasteurised, condensed or powder milk; home-preparation of canned meat, etc.

Nutrition education and behaviour change communication

- Nutritional value of ASF
- Lift taboos and diversify ASF consumption
- Food hygiene and safety at household level
- Broader target of nutrition education
- From producers to consumers



Key messages

- There is not a “fit all sizes” solution and design has to be context-specific.
- Improvements in nutrition via livestock are neither automatic, nor quick or easy, but it is a good opportunity
- Nutrition built in since the design stage.
- It can be tackled at different levels/scales
- Need to assess impact and compile/disseminate good practices/lessons learnt
- Need to strengthen links between researchers/practitioners to build the needed evidence for scaling up
- Need to promote dialogue between sector experts and organisations -> delivery platforms



Some useful resources in AgriNut

- LSHTM online module on agriculture, nutrition and health: <http://www.lshtm.ac.uk/study/freeonlinecourses/agriculture/index.html>
- USAID online course on nutrition-sensitive agricultural programming: <http://agrilinks.org/training/nutrition-sensitive-agriculture>
- FAO Capacity development modules on:
 - ‘Agreeing on the causes of malnutrition for joint Action’ (www.fao.org/elearning/#/elc/en/course/ACMJA)
 - ‘Food systems and nutrition’ (www.fao.org/elearning/#/elc/en/course/NFSLBC)
- FAO Compendium of indicators for nutrition-sensitive indicators. www.fao.org/3/a-i6275e.pdf
- Designing Nutrition-sensitive Agriculture Investments: Checklist and Guidance for Programme Formulation. www.fao.org/3/a-i5107e.pdf
- Field exchange special on ‘Nutrition-sensitive programmes’ (www.enonline.net)
- ILRI Manual on ‘Gender and Agriculture’ : <http://livelihoods-gender.ilri.org/2013/08/03/closing-the-gender-gap/>
- ‘Milk matters’ documents (Sadler K. et al)
- Academy Annual Conference → IMMANA/LCIRAH & A4NH

better lives through livestock

ilri.org

ILRI thanks all donors and organizations who globally supported its work through their contributions to the **CGIAR system**

Patron: Professor Peter C Doherty AC, FAA, FRS

Animal scientist, Nobel Prize Laureate for Physiology or Medicine–1996

Box 30709, Nairobi 00100 Kenya
Phone +254 20 422 3000
Fax +254 20 422 3001
Email ilri-kenya@cgiar.org

ilri.org
better lives through livestock
ILRI is a CGIAR research centre

Box 5689, Addis Ababa, Ethiopia
Phone +251 11 617 2000
Fax +251 11 667 6923
Email ilri-ethiopia@cgiar.org

ILRI has offices in East Africa • South Asia • Southeast and East Asia • Southern Africa • West Africa



This presentation is licensed for use under the Creative Commons Attribution 4.0 International Licence.