Livestock Production
Global and Regional Perspectives

Dr. Sonevilay Nampanya
Livestock Development Officer, Regional Office for Asia and the Pacific
Food and Agriculture Organization of the United Nations (FAO)
Ulaanbaatar, 07 Oct 2021
We will be looking at....

- Food security
- Current state of livestock production
- Challenges – climate change and TADs
- Opportunities
- Final thoughts
FAO’s Mandate

- Improve nutrition - food security
- Increase agricultural productivity and growth
- Raise the standard of living in rural populations
- Contribute to global economic development
Help eliminate hunger, food insecurity and malnutrition

Enable inclusive and efficient agricultural and food systems

Reduce rural poverty

Make agriculture, forestry and fisheries more productive and sustainable

Increase the resilience of livelihoods to threats and crises
Food Security...

Stunting Vs Type 2 diabetes

Exists when populations have access on an ongoing basis to sufficient, safe & nutritious food to meet their dietary needs & food preferences for an active & healthy life. (FAO)
The current food security status

**MON** – Stunting - 10.8% Vs over weight – 10.5%

**Laos** – Stunting - 43.8% Vs over weight – 2%

Source: FAO, 2017 The State of Food Security and Nutrition in the World
Role of livestock and food security

Food-Nutrition:
Meat, milk and eggs provide more than protein. They also provide essential micronutrients that are less available in plant-based foods. This makes livestock-derived foods highly valued in poor households subsisting almost wholly on high-carbohydrate starchy foods, and particularly valuable for infants in their first 1,000 days of life, from conception to 2 years old.

Livestock production helps make optimal use of all the planet’s biomass, exploiting its full ecological potential and supporting a circular, regenerative food production system where nothing is wasted. While livestock production inherently produces greenhouse gases, there are major opportunities to mitigate such emissions.

Livelihoods:
One billion people are involved in livestock value chains globally, with more than half of these dependent on livestock for their livelihoods. Most livestock-dependent people live in developing countries and farm or herd cattle and other ruminants. Globally, livestock contribute an average of 40% to agricultural GDP, with this percentage rising fast in developing countries.

Livestock enhance human health in developing countries by providing nourishing foods, which are the foundation of good health and help the body protect itself against, and recover from, disease. In addition, farm animals give people viable ways to make a living, which allow them to make better dietary and health choices and to pay for good medical care.

Source: ILRI 2018, White_Paper_Livestock_Emerging Economies
Global meat production

Source: FAO 2018, World livestock, meat production in 2015-17
Increase in meat consumption

‘Livestock revolution‘ = increasing demand for animal protein

Growth rate: 3.1% & 3.0% pa

Total meat consumption kg per capita pa:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>China:</td>
<td>43</td>
<td>58</td>
<td>73</td>
</tr>
<tr>
<td>SE Asia:</td>
<td>18</td>
<td>26</td>
<td>30+?</td>
</tr>
</tbody>
</table>
Increase in meat consumption (cont)

Source: ILRI 2018, White_Paper_Livestock_Emerging Economies
What that means to smallholder farmers....

This offers trade opportunities for smallholders to

- Increase livestock income through improving livestock productivity & trade (livestock holders to livestock producers ???)

- Contributing to alleviate rural poverty

- Improve regional food security
This offers trade opportunities for livestock producers to

- Establish and develop livestock sector (pigs and poultry in Thailand, Vietnam & China as example) for domestic and international market

- Industrialised livestock production:
  - Confinement feeding of animals
  - Separation of feed and livestock production
  - Specialization (breeding, fattening etc)
  - Large size and emergence of big companies
  - Close vertical linkages with buyers
Challenges

• Land resources: 7%; degradation, ownership
• Water resource constraints
• Phosphorus & Energy peaked
• Climate change variability & shocks
• Waste, Loss of biodiversity
• International trade risks: welfare, AMR, emerging and reemerging diseases (FMD, COVID-19)
FMD is a disease of poverty in developing countries = failure of food security system and Trade! HPAI, PPRS, PPR, ASF to be considered??
Declining in young people participating in agriculture and livestock
- Climate Smart Livestock (more productive, less prone to disease, more resilience, and reduce GHGs)

- Improved animal feeding and feeding management, breeding & genetics

- The use of technology and innovation to improve livestock health and production

- Reduce the use of antimicrobials and enhance animal production and health

- Improve quality assurance and traceability system
Livestock and livestock development in Asia provide a key role in addressing food security and poverty reduction, also supply increasing meat demand in other regions.

Multiple interventions and approaches for improving health & production & trade development (farm management, quality assurance and traceability, livestock identification system, processing etc)
Livestock farmers cannot only produce quantity livestock products (meat, eggs, milks etc) but they have to ensure that they produce quality and safe livestock products to the region demand and beyond. Farm to plate approach:

- Good livestock husbandry practices including animal welfare
- Good processing livestock products (farm to consumers-slaughter houses, traceability, livestock identification, quality assurance etc)
- Nutritious and safe livestock products
- Reasonable and fair price to all stakeholders in the market chain: producers, businesses and consumers
- Mitigate / reduce impact of climate change.

**Sustainable Livestock Production = Food Security and Healthy & Well-beings Asia**