

Responsible Livestock Meeting, Brasília, Brazil, 17 – 20 May 2011

Regional Perspectives

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Highlights:

I – South Asia

- Resource scarcity (especially land);
- Poverty, malnutrition;
- Specific Culture, religion and governance structure
- Growing demand / consumption of animal protein, such as milk in India;
- Poultry: increasing demand and production (strong increasing demand of beef in Pakistan)
- Small-holders based and fragmented systems; mixed systems are important;
- Technical and organizations (technical assistance inclusive) solutions needed;

II – China

- Strong growing annual production and consumption of livestock products (meat and milk)
- Resource scarcity (land, water);
- Increasing share of ruminants relative to pork in the meat sector;
- The challenge is to meet demand in relation to resource scarcity (no comparative advantage in livestock production); food safety and animal diseases are also of concern;

III – Latin America and Caribbean

- Livestock is a very important contributor to economies and societies;
- Very diverse regions;
- Low carbon emission and social inclusion main challenges;
- Poverty concentrated in rural areas;
- Poultry production and consumption is increasing;
- Big challenge: land-use change (livestock and crop expansion) – major driver of climate change;
- Better resource-use and focus on productivity are needed;

- In addition, is necessary: investments (public and private), R&D and innovation, actions on adaptation and mitigation strategies, improved and sustained governance;

IV – Brazil

- Trend is to increase production to meet domestic consumption and exports;
- General trends in production systems: decreasing pasture area, increasing bovine population (so increasing stocking rates) and improved animal performance; recently, pasture area is being replaced by crops;
- There are opportunities for increasing food demand and at the same time reduce significantly GHG emissions: for example, compared to degraded pastures CO₂-eq/kg carcass weight were projected to be reduced by around 40% when the finishing phase is held on feedlots or on integrated crop-livestock systems;
- Under way actions: more efficient systems (and animals);
- More coordinated research is needed;

V – Africa

- Livestock is very important from an economic and social perspective (livelihoods, food security and economic development); It has a potential to contribute to economic growth;
- Land is an issue (!) in relation to demand of cash crops and food, but also when it comes to social aspects;
- High diversity in region, in agricultural systems and in demands;
- Drivers: population growth, urbanization, middle class growth;
- Especially increase in demand of milk and poultry;
- Challenges: meet (national) demands, realize potentials (how?);
- Technical constraints: low genetic potential, poor nutrition, diseases, low technological innovations; low capacity to adapt to shocks, low competitive in the market;
- Public/ needed: increasing investments (public and private); human resource capacity; secure access to and linkage between research and development;
- Investing in genetics is the path to meet the divers challenges.

VI – OECD

- Challenge: More production, better environment (sustainable green growth)
- Livestock is a very specific sector (based on carbon); Very complex and divers linkages between production and environment;
- Overall footprint will increase; reduction per-capita of footprint is possible by a stronger rise of resource productivity;
- Significant impact of production in OECD countries on other countries/ economies.
- Measuring the progress: no unique quantifiable indicator – conventional economic indicators are distorted by policies, underpriced natural resources and non-internalized externalities;

- Need qualitative indicators too;
- Green Growth Strategy (to make part of regular business); Main questions;
- Which technological and practices will deliver green growth?
- Which policies and policy mixes will facilitate green growth?
- Which indicators to measure progress towards green growth?
- Food production will increase footprint and will increase pressure on natural resources;
- Converging food consumptions trends between OECD and emerging economies will have higher environmental footprints than just switching to less meat consumption in OECD countries (o not focus on one sector/commodity);
- Final thoughts: potential in increasing resource efficient use; we should see system as a whole; base activities on market signals (right incentives).

Additional details:

I – South Asia

- Afghanistan, Pakistan, India, Bangladesh, ...
- Each country in the region has its own peculiarities that needed to be considering in designing future priorities in the sector;
- Rapid process of urbanization, but still a large proportion of the population is rural;
- Still a low per-capita income and higher poverty incidence;
- However, economic growth (but with increasing inequalities), urbanization (and population increase) points out for huge increase in demand; here is important to stress that demand will be influenced by cultural and religious preferences;
- Nutrition debate is of growing importance and is part of the policy debate; there are complex interactions (social hierarchies, government structures, ..) that influence possible futures;
- A livestock revolution is occurring: rapidly increase in meat consumption (1970 – 2007), especially in East Asia and to a lesser extent in Southeast Asia. Meat consumption in South Asia is still low and with no significant change in the last four decades (varied from approximately 4.5 to 6 kg per-capita/year in the period); beef share is decreasing and poultry share is increasing;
- Pakistan, by far and large, is the major consumer;
- For milk there is a different picture: South Asia presented a huge increase in consumption; East and Southeast regions presented moderate increase in consumption; again, Pakistan is the major consumer in the region;
- Approximately 65 percent of milk is produced in small farms with less than 2 hectares of land and 5 or less cows (or buffaloes); smallholder-oriented production systems;
- Cattle population is decreasing mainly due to resource constraints, with goat population presenting a significant increase;
- Production systems: predominance of smallholders; integration of crops and livestock but under significant pressure; poor availability and growing scarcity of feed and fodder, continuing high prevalence of diseases, high emissions per unit of (milk) product);
- Marketing and institutional environment: poor market access and service support; high transactions costs along the value chain; predominance of public sector in service delivery but governments under significant fiscal pressures; continuing skepticism on the ability of private sector to deliver on social objectives; livestock producers not an organized political lobby; vocal and active civil society;
- Global agenda: focus on win-win strategies, but there will be trade-offs, invest in improving information and knowledge base but avoid active advocacy, networking and partnering with local institutions to support knowledge transfer, search and discovery.

II – China

- 1.3 billion people;
- largest meat producer in the world;
- 79.25 mt (1/3 world meat output);
- pork – 58 mt (52% of the world); mutton – 4.7 mt (35% of the world); egg – 27.65 mt (45% of the world); poultry – 10.7 mt (14% of the world); beef – 7.2 mt (11.6% of the world);
- high meat and egg per-capita consumption; low milk per-capita consumption;
- livestock: approximately 1/3 of the agricultural output (value terms);
- on average, 40% of farmers' cash income comes from their animal production;
- challenges: population growth, income growth, urbanization; widespread presence of production-limiting and trade-preventing diseases; public concerns on food safety;
- no comparative advantage in livestock production: lack of land, no feed surpluses, lack of water and it is a net importer in the world markets (dairy and most breeding stock);
- policy options: structural change vision; scaling-up (improving resource use efficiency, preventing water pollution), vertical integration (commercialization and dominance of supermarkets); technological change (high costs); geographic shifts;
- high expectations of global AOA;

III – Latin America and Caribbean

- LA: high economic growth in the last years;
- Not so depending on the US economy, but with increasingly trade with China; trade with EU is important;
- Substantial differences in the region. Mercosul (and in some cases Mexico) is the major player in the livestock sector;
- 60% of the poverty in rural areas;
- 33% of the population is poor (52.5 million undernourished);
- big problem: high percentage of the undernourished are children under 5 years old (around 20% to 25% on average);
- GDP in agriculture, 45% is from the livestock sector (62% cattle, 24% poultry, 7% pork);
- This contribution, however, is unequal;
- Beef trade evolution is faster than production growth rates;
- Poultry consumption is increasing very fast;
- increase public and private investments;
- increase investments in climate change adaptation;
- increase Official Assistance to Development (AOD), for Climate Change Adaptation and Mitigation;
- improve governance;
- improve policy framework for sustainable livestock development;
- improve institutional framework and capacity-building;

- improve livestock production efficiency;
- develop climate change adaptation and mitigation strategies;
- LAC is facing challenges but moving in the right direction towards a sustainable development of the livestock sector; it is necessary move toward a responsible livestock agenda;

IV – Brazil

(only highlights)

V – Africa

- Livestock 35% Ag. GDP;
- 70% rural poor;
- a lot of livelihoods services;
- Livestock very important in dry areas (no other alternative);
- Small-holding dominant;
- High diversity in cropping systems;
- Population is increasing, as well as urbanization;
- AFDB: not significant change in income classes;
- With few exceptions no significant change in the demand for beef, mutton and milk (but with regional differences);
- Poultry has a little increase in demand;
- Increasing the contributions of imports for meat, milk;
- Increasing the size of herd not productivity (explains 96% of beef, 82% milk);
- Challenges: demands, realize potentials (how?);
- Technical constraints: low genetic potential, poor nutrition, diseases, low technological innovations; low capacity to adapt to shocks, low competitive in the market;
- Public: low investments (public and private); low human resource capacity; weak linkage between research and development;
- Weak and emerging institutions;
- Inadequate policy, strategy and framework;
- Specific need (production);
- Expansion of agricultural area, for biofuel inclusive;
- 14% of land protected;
- climate change may change the geography of disease incidence;
- social issues: ownership pattern change; pastoral area (conflict); disorganization; social unrest and migration to cities; outflux (people and livestock) from drylands;
- responses: increase investments; remove most binding constraints (strengthen extension service, secure access to livelihoods/animal health services, involve private sector services, biotechnology, improve inputs);

- food safety and quality;
- low-trade (WTO-SPS); lack of standards necessary to facilitate trade;
- commodity-based approach;
- public health (government services, partnership with private sector);
- secure access to land ("tragedy of the commons);
- pastoral mobility;
- animal genetic resources;
- reduce vulnerability and increase food security;
- livestock – livelihoods 300 million people;
- improved governance;
- debate:
- role of platform: created by partners for advocacy on livestock development; evidence for advocacy and coordination (donors and partners); a second based on animal health (transboundary animal disease);
- small genetic base: can increase production without solving this; should be done step by step; some characteristics must be preserved (adaptability; find this balance); capacity has not been met: feed and disease are major constraints; move on production systems; looking for adapted genes; cross-breeding after a good job on adapted breeds; otherwise the genetic resource base may be lost;

VI – OECD

- OECD background: 34 member countries (most industrialized), foster global economic growth, sustainable development, support not always is provided in the most efficient way, address common policy issues based in analysis and comparative statistics;
- Priorities must be approved by the member countries;
- More production, better environment;
- Growth with less pressure in natural resources;
- Overall footprint will eventually increase; reduce per-capita footprint if resource productivity rises faster than population;
- Right incentives and disincentives;
- Biofuels mandates put pressure on land-use and food price volatility and raise issues regarding food security;
- 1 t C reduced by mandates cost 30 times the price in the market;
- complex and diverse linkages between livestock production and environmental impacts;
- source of income and nutrition in developing countries;
- developed 80 kg/person; developing 35 kg/person; 2019: similar absolute increase;
- environmental concerns; eutrophication, reducing N inputs (fertilizer and manures) but big countries such as the US and Canada increased; on average quite stable;
- some countries are already increasing ag. production with lower emissions;

- green growth strategy (GGS) in agriculture: maximizing growth (well-being) and development while avoiding unsustainable pressures on natural resources (quantity and quality);
- which technological and practices will deliver green growth?
- Which policies and policy mixes will facilitate green growth?
- Which indicators to measure progress towards green growth?
- Increasing productivity: R&D and innovation;
- Common sense (no data validating or model): projected that green growth will increase GDP in the long-run, in spite of a decrease in the short-run (compared to business as usual);
- Measuring the progress: no unique quantifiable indicator – conventional economic indicators are distorted by policies, underpriced natural resources and non-internalized externalities;
- Need qualitative indicators too;
- Policies: right incentives (producers and consumers), targeted payments, investment subsidies, regulations R&D, certification and labeling (environmental footprints), carbon price, carbon potential of pastures;
- Final thoughts: food production will increase footprint and will increase pressure on natural resources;
- Converging food consumptions trends between OECD and emerging economies will have higher environmental footprints than just switching to less meat consumption in OECD countries (do not focus on one sector/commodity), right incentives (financial viability), or disincentives (regulations/penalties);
- Technical and economic linkages: analysis of impact on the environment, policies, regulations on the economics
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- Commentary: biofuel issues should consider different potentials of the different countries;
- Measuring environmental outcomes; small % of the PSE to ag. sector goes to environmental issues;
- Reduction on meat consumption x impact on GHG emissions;
- Indicators are needed; need to know where are we going otherwise, what is the point?
- R&D: impacts of different types of ag. policies; US\$ govt. to farming – farmers get only US\$ 0.25; the other US\$ 0.75 goes to other agents in the sector (better as welfare payment);
