

**GL-CRSP/WORLD BANK PLANNING INITIATIVE:  
“REPOSITIONING LIVESTOCK ON THE DEVELOPMENT AGENDA”**

*February 28 and 29, 2008  
World Bank Headquarters, Washington, D.C.*

**EXECUTIVE SUMMARY**

***Objective of the Initiative.*** Generating Global Public Good to Promote Pro-Poor Growth in the Livestock Sub-Sector

***Means to achieving the objective.*** The initiative, funded by a Multi-Donor Trust Fund and through partnerships with other organizations and initiatives,<sup>1</sup> was organized to (a) convene a global partnership; (b) undertake analysis of important sub-sector issues; (c) identify points and means of intervention (including public and private investment opportunities and needs); (c) identify research/knowledge gaps; and (d) mobilize resources to implement the findings at national and international levels.

***Background.*** *The World Development Report 2008 (WDR): Agriculture for Development* presents an extensive analysis of the current state of agriculture in developing countries and identifies opportunities and challenges for the future. The report makes the case that agriculture is the main vehicle for escaping poverty for over 2 billion people in many developing countries. The report also calls attention to the fact that, notwithstanding its importance, the sector attracted only 4% of donor assistance annually and of national public expenditure over the past two decades. It calls for higher investments from donors and national governments now and in the future. Although livestock contribute approximately 40% (and rising) of agriculture GDP in developing countries, the neglect of this sub-sector has been even more acute than for agriculture as a whole. This initiative is aimed at reversing the status quo by identifying opportunities as well as challenges facing the sector and providing guidance for future investments.

***Proceedings.*** General discussions on repositioning livestock on the development agenda resulted in the following main points:

- 1) Some set of catalytic activity is needed to capture attention given to agriculture for the mobilization of livestock on the agenda.
- 2) Livestock is really about people, and this needs to be stressed and marketed accurately.
- 3) Livestock is a private sector activity: How do we engage this sector?
- 4) The public sector can mobilize investment and has a major role through provision of public goods.
- 5) We must develop an outcome orientation to get the attention of policy makers.
- 6) The conference is no silver bullet but could be mobilized as a road show to generate regional support, if given a specific strategy.
- 7) The identification of success stories in the livestock sub-sector is paramount to repositioning livestock on the agenda.
- 8) The decentralized nature of donors requires taking the message directly to countries.

Based on these points, three pillars of the discussion were established as paramount:

- 1) How to use livestock as pathways out of poverty
- 2) Livestock and environment interactions

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<sup>1</sup> The Global Livestock CRSP, supported by USAID, will help finance the initiative particularly during Phase 1.

3) Health and the interface between livestock and human health.

### *Defining the Issues.*

*Zoonotic Disease.* Addressing zoonotic disease requires a three part strategy: 1) investment into improved governance and public goods; 2) investments into product standards and trade; and 3) development of a 'One Health' conceptual understanding of the disease and livelihood interface. Zoonotic disease was identified as a global public goods issue: Can Avian Influenza impact the poultry industry in a neighboring country? If so, then global intervention and taxation is necessary, and economic risk should be the impetus for intervention.

*Climate change.* Policy makers must address this issue from a poverty standpoint. What are the poverty impacts of looking at decreased GHGs among livestock and smallholder systems? Would we diminish livelihoods by offsetting emissions? Carbon credits and PES for smallholders could become more viable livelihood enhancement strategies than improved production.

*Industrial Production Systems.* The FAO publication *Livestock's Long Shadow* suggests the "intensify but do not concentrate," approach to industrialization. In this manner, there are fewer resources per unit product, and the negative externalities associated with waste and nutrient loading are minimized. Vertical integration and larger scale operations afford more control over pollution. However, this is dependent upon governance and regulation, an oversight system absent in most developing countries. Two main areas were identified for further investigation: 1) How to maximize profits over feed costs; and 2) How to ensure smallholder participation in industrial systems and make them competitive?

*Biofuels.* There is demand for further investigation into feed prices and the effect on livestock products in developing countries. Future technological advances also frame the discussion: if cellulosic conversion technologies enter the sector, there could be an increase in roughage prices in addition to feed for ruminants. How can you incorporate indigenous feeds into the livestock sector to offset the increasing cost of grains?

*Market Access.* How do smallholders access markets, and what can we do to improve market access? Infrastructure is essential to improving market access for small-holders. If the public goods are provided (roads, etc.), then private sector investments become much more effective. Market access is a complex issue driven by local specificities. There is a need to document how the private sector drives connections to market. Challenge funds are a potential way to incorporate private sector investment with public funds.

*Future of Pastoralism.* The biggest threat to pastoralists is land-use change in dry season rangelands. The cost-benefit analysis of this land-use change requires further investigation. A strong advocacy campaign to reposition pastoralists as stewards of the environment is needed to assist in the proper policy and investment support of this critical and productive livelihood strategy.

*Human Nutrition.* Human Nutrition and the livestock sector is segmented into two defining issues: 1) Over and under consumption of animal source foods and their impact; and 2) School feeding programs and other interventions that can effectively increase nutrition for vulnerable groups. How can a synthesis of existing literature on nutrition be repackaged to demonstrate an overall health impact? A paper addressing this consolidation is a good step towards that end.

*Outcomes.* A three-point objective prioritization was identified as a means to furthering the sub-sector agenda:

- 1) Optimization of the role of livestock in development
- 2) Containment of disease threat
- 3) Sustainability and preservation of natural resources in the context of climate change.

Discussion centered on holding an international conference for senior policy makers and investors to discuss issues and promote investments. Participants determined, however, that there were too many conferences already, that the process taken in planning is important for the issues to gain traction in development circles, that a strategy has to be more engaging to include the private sector, and that senior managers would not come to a 3-day conference. Therefore, conference plans were abandoned and energy concentrated instead on prioritizing key issues and concepts for the commissioning of papers and dialogue to develop a strategic direction for livestock in development.

A fundamental re-emphasis of the livestock was stressed as critical in engaging and challenging the private sector to focus on pro-poor development. Further suggestions on private sector engagement recommended bringing big business together with development concerns at the World Agricultural Forum (September 2008) and positioning livestock as a sub-session. In addition, addressing the value-added processing gap and food safety were recognized as an important private sector roles requiring greater attention.

One of the principal messages of the WDR is the role of the public sector in development. There is a need for more public investment and better funding. Questions remain, however, on the particular role of the public sector in a largely private sector activity, the justification to include it, and how to increase and enhance public investments. Discussions challenged participants to come up with 4-5 processes critical to the changing perceptions of livestock, with particular focus on intended beneficiaries for an advocacy message. It was noted that not all messages and success stories are appropriate for all stakeholders.

Through a process-oriented discussion, hypotheses were suggested as useful guides for the further development of questions investigating key issues and the circumstances surrounding those issues that are obstacles to beneficial outcomes. In a participatory exercise, the defining issues were ranked to determine a priority list for planning and action. Market access, climate change, and zoonotic disease were determined to be the highest priority topics. Copies of the completed matrix and ranking chart are attached as Appendices 4 and 5.

In general, a catalytic synergistic activity is needed to capitalize on the WDR concept note with the following caveats around how to frame key issues:

- Frame the issues in terms of people, not livestock, and relate them to broader outcome-oriented issues
- The need for stronger linkages between livestock and the private sector
- The public sector is also necessary but in what role?
- The public sector and addressing *public bads* – utilizing negative attention in the livestock sector to drive investment
- The public goods agenda and how the public supports the private sector
- The conference is not a silver bullet and requires a strategy – a road show to mobilize interests at local, national, and regional levels
- Success stories (smallholder dairy, how to eradicate disease, EWS) – and what are critical success factors?
- Operationally investors are decentralizing – how to address issues there and how to get traction?

Planning Initiative participants agreed upon a two-part strategy for advancing the sub-sector agenda: 1) the development of a donor funded advocacy strategy; and 2) the commissioning of a Summary Paper featuring the key issues in the livestock sub-sector, and synthesizing them into a working publication for dissemination to the public and layperson. The combined effort of this Summary Paper and advocacy committee will generate good media and attention on the use of livestock as a development instrument and will market the message that livestock have a significant contribution to make towards poverty alleviation and pro-poor growth.

### *Conclusions.*

- This planning initiative represents the first in a series of synergistic collaborations in response the World Bank's WDR *Agriculture for Development*.
- The initiative resulted in the successful identification and prioritization of key issues effecting the livestock and development agenda.
- There will be a movement to commission studies at the broader global level, which accentuate regional differences and put livestock on the map.
- Utilization of studies will be targeted towards the distillation of communicative messages through a Summary Paper and additional media outreach.
- There will be no conference; however, the livestock and development agenda will be advocated for at other conferences through an opportunistic and pragmatic approach, including the FAO and HPAI conferences scheduled for September and October 2008.
- A multiplicity of actions will be developed to get the agenda moving, including support of other related platforms, especially through press, media, and commissioning of papers.
- A multi-donor trust fund must be established for advocacy along with funds from the GL-CRSP and World Bank for the commissioning of papers.

## Appendix 1

### GL-CRSP/World Bank “Repositioning Livestock on the Development Agenda”

#### PARTICIPANTS

Alain Dehove	OiE
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## Appendix 2

### AGENDA

#### PLANNING MEETING

#### REPOSITIONING LIVESTOCK ON THE DEVELOPMENT AGENDA

*World Bank Headquarters, Washington, DC  
MC C1-200; February 28-29, 2008*

**Thursday, 28 February**

*0830-0830 hrs*

Breakfast

*0830-0900*

Introductions and reviewing the Agenda

*0900-1030 hrs*

*Opening Remarks by Kathy Sierra, VP, SDN Network*

REFINING THE INITIATIVE *(See Document 1, Appendix 7)*

*1030-1100 hrs*

Coffee/Tea

*1130 – 1630 hrs<sup>2</sup>*

IDENTIFYING ISSUES TO BE ADDRESSED *(See Document 2, Appendix 8)*

*1630-1800 hrs*

PLANNING FOR THE CONFERENCE *(See Document 3, Appendix 9)*

**Friday, 29 February**

*0900 – 1100 hrs*

ACTIONS BEYOND THE CONFERENCE *(See Document 4, Appendix 10)*

**1000-1230 hrs**

RECAPPING AND CLOSING

**1230 hrs**

Lunch<sup>3</sup>

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<sup>2</sup> Including 1 hr for lunch at MC-C1 Dining Room D, and 15 minutes for coffee/tea

<sup>3</sup> Lunch at MC-C1 Dining Room E

## Appendix 3

### GL-CRSP/World Bank “Repositioning Livestock on the Development Agenda” Meeting Minutes

Day One (27 Feb. 2008)

#### *Opening Remarks- Session 1:*

The meeting opened with a summary of the background for its planning and the two primary questions, *viz.*, how to jointly catalyze the agenda to attract public and private sector investments to conduct research and promote development in the livestock sector, and what are the critical issues for launching such an investment.

The meeting was divided into three distinct phases: (1) defining critical issues and addressing them through the commission of papers for a conference. Papers would be commissioned for the benefit of knowledge, understanding, and sharing, not just from an analytical perspective but also through implementation; (2) planning a conference to present the papers; and (3) outreach. Participants were asked how to get traction for investments on the papers’ analyses at the country level. One way would be to establish a multi-donor trust fund that created an enabling environment to help support the marginal cost of implementation and action.

Following the discussion of the 3-phase program the group was asked if the conference was a strategic way of addressing the issues at hand. Several concerns were raised:

- It might be more practical to raise the issues and agenda in the State of Food and Agriculture Report (SOFA), which is to be released in 2009;
- The conference may be overly ambitious;
- Perhaps this agenda should be synchronized with other conferences already planned for the summer, and
- The process is more important than just the conference. The process itself should be participatory and engaging, and result in a series of conclusions about what is now different in the livestock sector for development.
- It is important for message not be a “silo”:
  - Livestock is intrinsic part of solution, therefore must be explicit part of agenda;
  - Participants can be those who make decisions as well as those whose daily business is livestock such guest speakers farming community, community leaders; and
  - There is a risk of being locked into the silo – look at expectations of society (cheap, safe, quality, good nutrition, protection of public health and natural resources) so it is important to re-emphasize global public/private goods and bads – restrict the agenda to the big picture.

It was suggested that a better option would be holding a series of regional meetings with specific themes, which would identify best practices, and opportunities that would demonstrate into what funds should be invested. A larger conference would serve to focus WB on livestock but regional conferences would lead to action work. The conference could be used to take the opportunity to find out what really turns people on and build from there.

The group then discussed the concept note (CN) that had been drafted for the meeting. It was noted that the CN did not include global governance (how to engage governments to promote investments in Ag and livestock), yet was paramount in the WDR. The client side required strengthening, regional demand required attention perhaps through PRSPs, and that a quick fix for the conference could be participation in the World Agriculture Forum meeting in Kampala, Uganda, a meeting with potential for convening agri-business and the development agenda.

Another point was the issue of media attention and whether development country media groups had the capacity to report on livestock issues, as well as the bigger issue of what audience should be targeted for country level action and change. Development reporting workshops were suggested as a vehicle to address outreach and promotion of livestock issues.

Packaging the agenda was highlighted because the issues should be clustered in an appealing way, including how to include livestock in the same association with more attractive and attention grabbing sectors of health, nutrition, vet medicine, etc. The compilation of an advocacy package to market livestock as a tool for development portfolios was suggested with discussions centering on this.

Building on the concept of identifying livestock as a positive vehicle for development, the group shared some success stories and identified 11 case examples: 1) eradication of rinderpest and other diseases; 2) tremendous growth in the livestock sector in Latin America and Southeast Asia; 3) drought preparation; 4) micronutrients and positive impact of livestock products on nutrition; 5) contribution of animal source foods to cognitive growth and function in children; 6) non-equilibrium range science and management implications (risk management); 7) emergency relief programs (destocking) etc.; 8) importance of community engagement; 9) commodity trade (ex. Namibian beef) and scaling up enterprises; 10) genetic resource development and production improvements (could be a negative due to climate change and loss of diversity); and 11) reversing the view of pastoralists as a tragedy of the commons to pastoralists as stewards of the landscape.

A less thought of suggestion was made that a list also be compiled of the negatives surrounding the livestock sector such as HPAI and the “Long Shadow” which have a greater potential to attract investments. The point was made that public sector acts on negatives and private sector acts on positives.

The strength of the classic argument that agriculture is an engine of growth is much more difficult to use now than it was 30 years ago. Currently, the focus should be placed on agriculture as a vehicle for poverty reduction. In addition, of transparency in the development sector was raised as an issue. Heifer International was cited as not serving its interests through its confidential cost figures. Releasing the cost data for livestock as a pro-poor tool would strengthen the case for use of livestock in future interventions.

The discussion pursued the roles of the public and private sectors in development referencing the WDR as attributing a much greater role through governance to the public sector as there is a current overemphasis on the benefits of private investment and goods. There is still a particular role for public goods and public goods often enhance the investment of private funds. More attention needs to be given to defining the role of the public sector, the justification of its investments in development, and how to strengthen public support of agriculture and livestock.

With regard to repositioning livestock on the development agenda, the importance of the contributions of developing countries should be emphasized along with the warning of the image that development assistance is used often to protect the wealthy from the actions of the poor. There is a need to emphasize the successes and combat the common misconception that investment in livestock always fails.

A wrap-up of the first session elucidated the following:

- 1) Some set of catalytic activity is needed to capture attention given to agriculture for the mobilization of livestock on the agenda;
- 2) The concept note structure was regarded as adequate, although some issues need attention and the conference agenda adapted accordingly;
- 3) Livestock is really about people, and this needs to be stressed and marketed accurately;

- 4) Livestock is a private sector activity: How do we engage this sector?;
- 5) Public sector involvement is essential, can mobilize investment, and has a major role through provision of public goods;
- 6) Must develop an outcome orientation to get attention of policy makers;
- 7) Issues should be framed here as hypotheses;
- 8) The conference is no silver bullet, but could be a road show to mobilize regional support like the WDR, but requires a specific strategy;
- 9) Identification of success stories is paramount to repositioning livestock on the agenda; and
- 10) Decentralized nature of donors requires taking the message to countries.

The solution was to refine the concept note, find links to SOFA and the Agriculture Forum, etc.

Three pillars of the discussion were agreed upon: 1) How to use livestock as pathways out of poverty; 2) Livestock and environment interactions; 3) Health and the interface between livestock and human health (One Health concept).

One question remained: why policy makers are not using knowledge and how to close this gap (eg. pastoralist policies in Eastern Africa, where is the legislation, what are the steps to influencing governance?). In response it was offered that the emphasis needs to be placed first on public goods then on people. Work must be focused on interventions resulting from public goods investment.

*Note: During this discussion, Kathy Sierra, Vice President of the World Bank's Group for Sustainable Development, addressed the panel on the role of livestock within greater World Bank policy and initiative planning. (See Podcast Volume 2, Episode 1 in Appendix 3).*

### *Session 2: Defining the Issues*

**Zoonotic Disease.** The discussion on zoonotic disease began with a power point presentation featuring several main points and considerations on the topic including: 1) missing farm level focus; 2) public goods issue; 3) governance issue; 4) distinction between endemic and emerging infectious disease in approach and investment justification; and 5) cost-benefit analysis of globalized meat markets. The question was then asked, are national and regional markets cost effective when accounting for product standard improvements?

Discussion expanded on the cost benefit topic with reference to DFID's spending on improved product standards (\$12 billion on FMD and \$1.2 billion on HPAI in the UK), and international donor spending on AI (\$2 billion). This posed the question: is avian influenza a Y2K problem, or is the risk too high to ignore?

The discussion then proceeded to the farm level and livelihood arena with a question about new schemes to involve public/private partnerships to drive livelihood enhancement. Trading was mentioned as an option, using 3<sup>rd</sup> party certification and mimicking the horticulture industries successes. Challenge funds (to build development into supply chains) were suggested also as they are presently not used in the livestock sector.

Two sectors were identified as issues in zoonotic disease: 1) production (including genetics), health, and nutrition; and 2) processing, with emphasis on yield and quality. Using a health approach in the livestock sector would more rapidly induce improvements in both, given further investigation into the institutional framework. Botswana's disease eradication program could be a success story although the cost could be cited as a large negative (people throwing goats over the fence into South Africa to avoid vaccination!). Meeting global production standards is very costly and complex but question remains, what is the best way to build capacity, policy, and achieve change?

In response to that question it was noted that perhaps livestock is not the point of entry into the debate. Avian flu is where the action and investment is; perhaps for visibility we should take advantage of the media and popular attention to support the livestock agenda. Again, AI as Y2K is mentioned as a good point for strengthening this view. However, there is donor fatigue on AI and trade is the main focus, not livestock health. However, it was stressed that it is not livestock but external and related sectors that demand donor attention, such as deforestation. There appeared to be a lot of disagreement from the panel.

Trade was prioritized as higher on the agenda than zoonotic disease, and capacity strengthening was stressed as an immediate need in order for smallholders to meet international standards and take advantage of demand. This spurred a resumption of the discussion on public goods whereby the standardization issue was separated into two components: 1) what is the public goods dimension, and how to bring a One Health concept to fruition; and 2) how to link smallholders to markets?

The need for three components was stressed: 1) governance and public goods; 2) standards and trade; and 3) One Health. There is agreement here, especially among the World Bank team. HPAI was positioned as zoonotic disease issue that was a global public goods issue in light of such questions as could it wipe out the poultry industry in a neighboring country and, if so, then global intervention and taxation is necessary. This economic risk should be the impetus for intervention.

On a tangent, the issue of standardization brought up another dimension in capacity strengthening and product standards: social standards. Wal-Mart's recent decision to market and stock socially and environmentally sound livestock products was touted as another obstacle to overcome for smallholders but this led to discussion on how to certify and meet these standards and the impact on the poor.

The session on zoonotics was concluded by one somewhat humorous statement, "We need more green meat."

Main questions resulting from the discussion:

- What is the impact of climate change on zoonotic disease distribution?
- Is AI a Y2K phenomenon?
- Why isn't zoonotic disease prevention and intervention knowledge being implemented?
- What is the greater public goods dimension (ie. Impact of ZD at various scales and the cost to society exogenous to a breakout)?
- What are the hotspots, and how do you identify and respond to them in terms of prevention?
- How to address global governance and public health (why aren't current implementation schemes functioning)?
- How to develop the One Health approach to function for smallholders and the livestock sector?

**Climate Change.** The main issues were introduced in a power point presentation. In addressing climate change for intervention, a dichotomy developed between Adaptation and Mitigation.

CC discussion was stimulated by the statement that it may be easier to convince donors to pay for mitigation efforts (restoration of pasture, reforestation, biodiversity conservation, etc.) than for adaptation programs. There was insistence that we must prepare for post-Kyoto with positive mitigation efforts.

A reference to the “carbon hoof print” as a means to document impact from livestock development initiatives raised several questions. What is the carbon equation for smallholder systems? What about water? Catchment systems are also important to climate change and should not be ignored in favor of carbon.

The FAO report *Livestock's Long Shadow* was referenced as “an inconvenient truth,” motivating activists and lobbyists against the livestock sector, and strengthening the demand for an advocacy campaign to reposition livestock on the agenda. However, there is need to look at this issue from a poverty standpoint. What are the poverty impacts of looking at decreased GHGs among livestock and smallholder systems? Would we diminish livelihoods by offsetting emissions? The session ended with a suggestion that carbon credits and PES for smallholders could be better for livelihoods than simply production as usual.

Main questions:

- How to build capacity to respond to change?
- What is the impact of climate change on disease distribution?
- How to cope with increasing vulnerability of systems? Of people?
- What are the climate change induced effects on livestock (disease dynamics, feed availability, genetic portfolio, water, etc.), and how do we address them through interventions?

Participation in post Kyoto instruments:

- How do we develop mechanisms to allow smallholders to receive PES?
- How to reduce transaction costs of carbon schemes and enhance the enabling environment for smallholder participation in carbon markets?

**Industrial Production and Environmental Impact.** The issues surrounding the livestock sector and its environmental impact, and the role of intensifying production and industrial systems in this impact were highlighted in *The Long Shadow*. The discussion should be framed with a pro-poor focus because this is not about livestock but about people. How can we make production systems environmentally sound? The example of intensified production systems in Thailand that utilize cassava chips in feeding programs was given. This decreases the cost of feeding by 2/3 compared to grain.

One suggestion from the Long Shadow frames the industrial system debate, that is, “intensify but do not concentrate.” In this manner, less resources per unit product are achieved through intensification, yet the negative externalities associated with waste and nutrient loading are minimized. Vertical integration and larger scale operations afford more control over pollution. However, this is dependent upon governance and regulation, an oversight system absent in most developing countries.

After more deliberation on the problems of integrating smallholders into industrial systems and the ensuing problems, two main areas were suggested for further exploration: 1) how to maximize profits over feed costs; and 2) how to ensure smallholder participation in industrial systems and make them competitive?

Dairy was referenced as an example ideally suited to smallholders thanks to the decentralized and cooperative structure. This sector could be used as a successful case study.

The issue of urban agriculture and livestock production systems were cited as the expanding role of urban and peri-urban slums and livestock production. So far, only the Belgians are investing in these systems and the potential threats (zoonotic disease, etc.) that ensue.

The discussion reverted back to dairy industrialization as a successful integration of industrial dairy production systems in California and China, postulating a new hypothesis: to what extent does the citrus industry drive dairy industrialization?

Also, the effects of externalities on costs entered the discussion. How to position differing farm scales at the same level (i.e., level the playing field and make smallholder systems equally competitive to larger systems with greater externalities)?

Main questions:

- How to accommodate the smallholder in industrializing systems?
- What other sectors may offer examples on how to incorporate smallholders into industrializing systems?
- How to maintain genetic diversity?
- How to regulate intensifying systems?
- What is driving intensification?
- What forces influence the transition between extensive and intensive systems?
- What is the role of commercializing local feeds to meet the needs of industrial systems in increasing smallholder incomes?

**Biofuels.** The panel began with a discussion on shifting production and land-use trends. The greater production of corn in the US influences greater production of soy in Brazil at the expense of livestock production, yet the demand for meat continues to push livestock production, and cattlemen begin to move deeper into marginal lands, with the effect of increasing deforestation. This led to asking what is the shadow price for land for livestock production due to increased cropping, followed by further discussion on the influence of biofuel production on the cost of feed. Increasing feed costs have pushed poultry production costs upwards, influencing export costs. The panel agrees that due to biofuels, the main question becomes: How can we bring indigenous feeds into the livestock sector?

Addressing the potential for smallholder entrance into the biofuel market, it was stated that processing and infrastructure is the major issue. Smallholder production of biofuels is compromised in viability due to technological constraints and access to capital.

The panel agreed that there is demand for further investigation into feed prices and the effect on livestock products in developing countries. Future technological advances also frame the discussion: if cellulosic conversion technologies enter the sector, there could be an increase in roughage prices in addition to feed for ruminants.

Main question:

- How to bring indigenous feeds into the livestock sector to offset the increasing cost of grains?

**Market Access.** An introduction in the issue of market access for smallholders was structured into three sections: 1) Infrastructure constraints; 2) Information; and 3) Standards and quality control.

The discussion began with the question: How do smallholders access markets and what can we do to improve market access? The issue of infrastructure comes to the fore, along with the re-emergence of the need for linkages between public and private sectors. If the public goods are provided (roads, etc.), then private sector investments become much more effective.

The importance of local and national markets compared to international markets is deserving of attention: we cannot divorce production from marketing for true impact. Linking consumer and taste with marketing is also critical with repercussions for local and niche marketing of livestock products, and the growing demand for quality. Market access is a complex issue, driven by local specificities.

On the issue of market information, research into market access was considered critical to obtaining investment. Cell phone based systems of market information have a very high return, reminiscent of the infrastructure investment of landlines in Senegal and its impact on agricultural marketing. The panel agreed, however, that information isn't everything. However, it was suggested that an information system without a way to engage it is just entertainment.

The panel agreed that there is a need to document how the private sector drives connections to market and followed with discussion on the role of private vs. public investments and effectiveness. Another reference was made to the use of challenge funds as a way to drive the private sector with public funds.

As an example illustrating the beneficial linkages of public and private investments in marketing is the World Bank and Nestle collaboration in Columbia. The World Bank invested in a road while Nestle simultaneously supported investments in smallholder dairy production and marketing to great success. Leadership was discussed also as equally important along with infrastructure. Capacity strengthening is critical to success.

Main questions:

- What is the cost-benefit analysis of meeting livestock production standards at the local, national, regional, and international levels, and what are the comparative advantages therein?
- How to successfully link investments between the public and private sectors for pro-poor growth?
- What is the cost benefit of conforming to traditional market standards and technologies vs. creating new market standards through private partnerships?
- What are successful approaches from other sectors (horticulture, etc.), and how can these be incorporated into the livestock sector?
- What local specificities and conditions complicate overall market models?
- What success stories demonstrate how private sector investments and involvement impact market access for smallholders?
- How do we increase investments of the private sector with public funds?
- Can we integrate existing studies to demonstrate stronger linkages between market access and infrastructure?
- How are various groups utilizing market information and market systems for tangible results?

**Future of Pastoralism.** An introduction of the issues confronting pastoralists such as increasing vulnerability, risk management, market access, etc. prefaced the discussion. Capacity strengthening is a component that is crucial for success, but often is absent from the development community's programming and assessment process.

One approach to the issue was offered as a three-part framework: 1) resilience of the pastoral production system as a means to cope with increasing vulnerability; 2) productivity constraints in the nature of primary production systems; and 3) the need to identify other income sources: diversification, out-migration, PES, insurance, etc. An example is the points made in *The Long Shadow*, which calls pastoralists "stewards of the landscape."

The importance of markets that assist in income and livelihood coping strategies was listed as an important step in the advancement of pastoral livelihoods. However, the cost of these markets (health care, education, etc.) is indeed high due to the sparse demographic density of these populations. A possible way to rectify these high costs is by marketing the benefit of land stewardship attributed to pastoralists by marketing it as a global public good. What is the impact of this stewardship on biodiversity, carbon sequestration, ecosystem services, etc?

Another hypothesis was developed following the discussion of enhancing productivity. Pastoral systems are disequilibrium environments. Stocking rates are very important to range management. How do insurance and feed credit systems alter the management practices demonstrated as sustainable? Vouchers and feed credit schemes in drought require investigation and proper rangeland monitoring.

The biggest threat to pastoralists is land-use change in dry season rangelands and further investigation is required into the cost-benefit analysis of this practice.

In conclusion, the panel agreed that a strong advocacy campaign to reposition pastoralists as stewards of the environment is needed to assist in the proper policy and investment support of this critical and productive livelihood strategy.

Main questions:

- How can we re-market pastoralists as saviors instead of scourges of the earth?
- What are the knowledge gaps in the current understanding of pastoralists?
- What is the impact of current pastoral livelihood enhancement programs?
- Is the Tragedy of the Commons a thing of the past?
- What is the impact of land-use change on drylands?
- What is the cost-benefit analysis of pastoral grazing versus cropping systems?

**Human Nutrition.** Two fundamental issues in the human nutrition and livestock sector interface are: the contribution of animal source foods to improved human cognitive function and health, and the impacts of under and over consumption of livestock products.

The discussion began by highlighting World Bank Economic Sector Work (ESW) on nutrition: 1) there is no definite link between agricultural investment and nutrition; 2) there is a definite link between increasing income and enhanced nutrition; 3) access to animal source foods is driven by income; and 4) the question: How to facilitate intake of ASF independent of income?

School feeding programs were presented as an option. How do these programs fit into this focus? How to link local food and livestock production with these subsidies and programs? In addition, the importance of linking nutritional outcomes to agricultural interventions was highlighted, noting some market participation may actually reduce nutrition, as households move onto different consumption patterns, trading livestock products for grains. The point was made that this topic must incorporate livestock products and ASF into a broader portfolio characterized by diversity of diet. One way would be by expanding the agenda beyond school feeding programs and children, to include women, especially those who are anemic or HIV infected, and to other vulnerable groups.

Added to this point was market connectivity and diminished diets referenced in studies showing that settled pastoralist populations become nutritionally worse-off due to the dietary tradeoff between livestock products and grains. Expanding on this tradeoff, the group noted that a greater holistic accounting is necessary to demonstrate the life-cycle tradeoffs. Are grains ecologically less beneficial when cooking fuel is taken into account (deforestation links, etc...)?

Two issues began to emerge throughout the discussion: 1) over- and under-consumption of animal source foods and their impact; and 2) school feeding programs and other interventions that can effectively increase nutrition for vulnerable groups. It is also mentioned that these issues highlight UN Millennium Development Goals 1 and 4.

The links between capacity building and nutrition were noted several times. The Gates Foundation is incorporating nutrition into all projects, however, there was no follow-up explanation about how the impact is being measured and how they are managed to incorporate this focus.

The panel discussed how a synthesis of existing literature on nutrition could be repackaged to demonstrate an overall health impact (physical, behavioral, social and economic, i.e., the impact on leadership, and a paper addressing this consolidation would be a good step towards that end.

Main questions:

- What is the impact of over/under consumption of ASF globally?
- What types of interventions (food based, agricultural, school feeding programs, gender-based, prenatal care, etc.) demonstrate impact for vulnerable groups?
- What effect do these interventions have on leadership?
- Are these interventions cost-effective?
- What is the cost-benefit analysis of these interventions?

### *Conclusions and Wrap-up Day 1*

The second day began with a discussion on the feasibility and importance of the conference followed by a discussion on the most practical and effective means of disseminating the results of such a conference to the development community. A summary the two-days wrapped up the planning meeting.

Additional issues the panel would like to see included in the concept note that were not addressed were given. One was the importance of extension services in the livestock for development portfolio, and another was the impact of genetic modification and artificial insemination (biogenetics) and evidence of failures and successes. This is followed by a discussion on the success and failures of artificial insemination programs and an agreement that genetics is the more appropriate topic. Participants agreed that what types of genetics are appropriate for what climatic conditions, how can these genetic lines be sustained, and approaches to preservation in the advent of intensifying production systems were important topics for discussion.

### *Day Two*

#### *Opening Remarks/Session 1:*

The session began with a discussion of the objectives of the conference and the question about what do we want to achieve? Participants listed the following issues as requiring greater attention and definition:

- Poverty reduction and the appropriate use of livestock as a tool
- What is the probability of success?
- Adopting the IFPRI approach “2020 Reasoning”

- Softening the blow of livestock: redefining or transforming the perceptions of livestock as a development instrument
- Focusing greater attention on the poverty agenda vs. livestock agenda
- Outreach to a different group of decision makers (climate change professionals, public health professionals, etc.)
- Who do we intend to influence (engaging other stakeholders to achieve real impact, ex: Minister's of Finance, Agriculture, Regional Banks, etc.)?
- Redefinition of the objective: need to put a real issue and solution to the fore.
- Process definition: the need for more active engagement in the process utilizing new tools (blogs, etc.) to stimulate bonding prior to any event
- Need a better understanding of what is stimulating donor lending, and how to market livestock to donors
- Any conference should involve both Agri-business professionals and local producers to stimulate discussion and relevance

Following the discussion of these points, the 3-point prioritization for FAO was given: 1) optimization of the role of livestock in development; 2) containment of disease threat; and 3) sustainability and preservation of natural resources in the context of climate change. An FAO conference will be convened in September 2008 entitled "How to feed the world in 2050," and an additional conference entitled "Beyond HPAI" is scheduled for October 2008.

The initial intent was to refocus the Bank on livestock. Regional action meetings to engage and disseminate knowledge from the initiative to local and regional stakeholders were mentioned and after some deliberation, a proposed shift was discussed from that of a conference to a more opportunistic focus, such as taking findings from commissioned papers on the road to local and regional levels, as well as to the FAO and HPAI conferences already convened. It was agreed by the group that this would be a more pragmatic approach to forward the agenda in the allotted time and that a conference could be overly ambitious.

Following agreement on this new approach, a discussion ensued about adapting the previous day's agenda to the new "road show" concept. Two questions were proposed, how to take this approach forward and how to get traction in stakeholder countries. It was agreed that a market driven approach, influencing regional banks and other financial bodies to spur investment in livestock was the primary step to forwarding the greater agenda.

The concept of a "Challenge Dialogue" as an alternative to the conference was introduced as an approach that was developed to involve multiple stakeholders to collaborate on a policy and concept driven exchange to produce a workbook furthering a proposed agenda. The workbook is then used to engage heavy-weight players in the issues and potential solutions. Some interest was taken in this approach, though no decisions or motions made in its favor.

Regarding the commissioning of papers, it was decided that papers should be more of a forum for discussion than an analysis. Paper outcomes must be informative, and involve a "wiki" type collaborative effort, reminiscent of Carlos' suggested "challenge dialogue."

### *Session 2:*

Due to the issues and challenges brought up it was considered wise to abandon the conference idea, and concentrate instead on prioritizing key issues and concepts for the commissioning of papers and dialogue to develop a strategic direction for livestock in development. Emphasizing participation in other planned conferences was considered as critical to furthering the livestock agenda and influencing key players in the development community. The participants then ranked the key issues

from the previous day in order to determine a priority list for planning and action. A copy of the completed matrix is attached as Appendix 3.

Following the matrix exercise, discussion ensued on the development of an advocacy strategy for the livestock sector based on the prioritized issues. It was decided that 1) an advocacy strategy with funding is critical; and 2) a summary paper from a reputable source (WB, FAO, etc.) featuring the key issues and hot topics in livestock and synthesizing them into a working publication for dissemination to the public and lay-man, is the appropriate tool to further the agenda from this planning session.

In order to complete this Summary Paper, it was agreed that papers should be commissioned, however, they must be commissioned for the sole purpose of incorporation into the Summary document. The combined effort of this Summary Paper and advocacy committee is to generate good media and attention to the use of livestock as a development instrument, and to market the message that livestock have a significant contribution to make towards poverty alleviation and pro-poor growth.

It was agreed that this work would require a significant budget, as marketing will be cost-intensive. Incorporating this agenda into the post-Kyoto discussion was agreed as a key issue, along with the incorporation of the message and energy into similar platforms (ALIVE, LEAD, GLCRSP, etc.) to make greater impact.

*Planning Initiative Conclusions:*

- This planning initiative represents the first in a series of synergistic collaborations in response the World Bank's WDR
- The initiative resulting in the successful identification and prioritization of key issues effecting the livestock and development agenda
- There will be a movement to commission studies at the broad global level, which accentuate regional differences, and put livestock on the map
- Utilization of studies will be targeted towards the distillation of communicative messages through a Summary Paper and additional media outreach
- There will be no conference, however, the livestock and development agenda will be advocated for at other conferences through an opportunistic and pragmatic approach, including the FAO and HPAI conferences scheduled for September and October 2008
- A multiplicity of actions will be developed to get the agenda moving, including support of other related platforms, especially through press, media, papers, etc.
- A multi-donor trust fund must be established for advocacy, along with funds from the GLCRSP and World Bank for the commissioning of papers
- Assisting and supporting without supplementing core related activates of other interest groups is a means to further the agenda

Following these points, the panel was thanked for their participation, and the meeting adjourned.

## Appendix 4 Ranking Exercise Matrix

TOPIC		IPG	LPG	PRIV	H	M	L
<b>ZOONOTIC DISEASE</b>							
	Global governance of animal health system: improving the mechanism for animal health						
	<ul style="list-style-type: none"> <li>Known issues not being implemented, Why?</li> </ul>						
	<ul style="list-style-type: none"> <li>Is what we have suited to the future?</li> </ul>						
	Refining the “One Health” system and improving the interoperability of human and animal health system						
<b>CLIMATE CHANGE</b>							
	Mitigation, predictions as opportunities, coping with vulnerability						
	Effects of climate change on livestock						
<b>INDUSTRIAL PRODUCTION</b>							
	<i>Smallholder Participation (how to accommodate, make competitive)</i>						
	<ul style="list-style-type: none"> <li>Implications of environment</li> </ul>						
	<ul style="list-style-type: none"> <li>Scale, what is driving intensification?</li> </ul>						
	<ul style="list-style-type: none"> <li>Commercialization of indigenous feeds to meet needs of industrial systems, access to feeds</li> </ul>						
	<ul style="list-style-type: none"> <li>Genetic diversity</li> </ul>						
	<ul style="list-style-type: none"> <li>Comparison with other systems (horticulture)</li> </ul>						
	<ul style="list-style-type: none"> <li>Capacity strengthening</li> </ul>						
<b>MARKET ACCESS</b>							
	<i>Market Standards</i>						
	<ul style="list-style-type: none"> <li>Investigating cost benefit analysis of meeting livestock product standards at local, national, regional, international markets and the comparative advantage               <ul style="list-style-type: none"> <li>Social and biological standards</li> <li>Sanitary and phytosanitary</li> </ul> </li> </ul>						
	<ul style="list-style-type: none"> <li>Investigating cost benefits and technologies of old systems vs. new systems</li> </ul>						
	<ul style="list-style-type: none"> <li>Interlinkage between public and private good. Challenging the private sector to help meet these standards</li> </ul>						
	<ul style="list-style-type: none"> <li>Analysis of other sectors (horticulture)</li> </ul>						
<b>HUMAN NUTRITION</b>							
	<ul style="list-style-type: none"> <li>Development of interventions that have an impact on all vulnerable group</li> <li>Impact of over/under consumption (negative attention to ASF in developed countries)</li> </ul>						
<b>PASTORALISM</b>							
	<ul style="list-style-type: none"> <li>Pastoralists as stewards of the land</li> <li>Knowledge gaps and impacts (IEWS, safety nets, insurance, food aid, etc.)</li> <li>Tragedy of the Commons: Is it in the past?</li> </ul>						

	Impact of land use changes					
<b>BIOFUELS</b>						
	<i>Feed prices</i>					
<b>APPROPRIATE GENETICS</b>						

## Appendix 5

### Ranking Exercise Results

Topics	Rank
Market Access	1
Climate Change	2
Zoonotic Disease	3
Human Nutrition	4
Pastoralism	5
Industrial Production	6
Biofuel	7
Appropriate Genetics	8

## Appendix 6



### GL-CRSP Podcasts

The GL-CRSP is proud to announce the arrival of 9 new additions to the GL-CRSP Podcast series, featuring audio podcasts of discussions from "*Repositioning Livestock in the Development Agenda*," a two-day livestock initiative planning meeting hosted by the GL-CRSP and World Bank on February 28 and 29<sup>th</sup> in Washington D.C. The following Podcasts are available for download at the GL-CRSP web site: <http://glcrsp.ucdavis.edu/podcasts>.

#### **GL-CRSP Podcast Volume 6: Kathy Sierra, VP for Sustainable Development at the World Bank, and Director Chair of CGIAR, the Consultative Group for International Agricultural Research**

- Global Livestock CRSP Podcast Vol 6: Kathy Sierra, Vice President for Sustainable Development at the World Bank, and Director Chair of CGIAR, the Consultative Group for International Agricultural Research, addresses the panel at the planning meeting "*Repositioning Livestock in the Development Agenda*," on the role of livestock in the World Bank's recent Agriculture for Development Report, as well as the new initiatives at the World Bank and CGIAR focused on mitigating the ecological footprint of livestock with a pro-poor focus, redirecting agricultural and livestock research on climate change from the global and regional levels to the farm level, and livestock's contribution to increasing food prices.

#### **GL-CRSP Podcast Volume 7 Part 1: Emerging Infectious and Zoonotic Diseases.**

- Global Livestock CRSP Podcast Vol 7 Part 1: A panel discussion at the GL-CRSP and World Bank's "*Repositioning Livestock in the Development Agenda*," planning meeting discuss the issue of Emerging Infectious and Zoonotic Diseases within the greater context of agriculture and livestock development initiatives.

#### **GL-CRSP Podcast Volume 7 Part 2: Emerging Infectious and Zoonotic Diseases.**

- Global Livestock CRSP Podcast Vol 7 Part 2: A panel discussion at the GL-CRSP and World Bank's "*Repositioning Livestock in the Development Agenda*," planning meeting continues the discussion on the issue of Emerging Infectious

and Zoonotic Diseases within the greater context of agriculture and livestock development initiatives, with particular focus on livestock marketing and quality control in the face of increasing global demand for meat products, and defining the role of the greater public good in development and disease prevention.

### **GL-CRSP Podcast Volume 8: Climate Change and the Livestock Sector**

- Global Livestock CRSP Podcast Vol 8: Climate Change and the Livestock Sector. A panel discussion at the GL-CRSP and World Bank's "*Repositioning Livestock in the Development Agenda*," planning meeting discusses climate change and its impact on the livestock sector, with particular focus on the questions: How are particular regions and sectors in the livestock arena going to be effected by climate change, and what is the role of developing countries in the carbon equation?

### **GL-CRSP Podcast Volume 9: Industrial Production**

- Global Livestock CRSP Podcast Vol 9: Industrial Production Systems and the livestock sector: addressing the Long Shadow. A panel discussion at the GL-CRSP and World Bank's "*Repositioning Livestock in the Development Agenda*," planning meeting discusses the role of industrial production systems as a tool for livestock development initiatives. Specific emphasis is given to smallholder participation the industrial systems, the rising cost of feed, and the ecological footprint of intensified systems.

### **GL-CRSP Podcast Volume 10: Biofuel and implications for the livestock sector**

- Global Livestock CRSP Podcast Vol 10: Biofuel and its implications for the livestock sector. A panel discussion at the GL-CRSP and World Bank's "*Repositioning Livestock in the Development Agenda*," planning meeting discusses the effects and implications of a growing biofuel industry on the livestock sector, with particular emphasis on the rising cost of feed, the opportunities for smallholder participation in the biofuel sector, and possible intervention opportunities to address evolving challenges.

### **GL-CRSP Podcast Volume 11: Market Access**

- Global Livestock CRSP Podcast Vol 11: Market Access. A panel discussion at the GL-CRSP and World Bank's "*Repositioning Livestock in the Development Agenda*," planning meeting discusses the opportunities and challenges surrounding the enhancement of market access for smallholders in the livestock sector. How do various groups utilize market information and information systems? What are the roles for public investment and the private sector in improving market access? How can smallholders adapt to meet global product standards and take advantage of increasing livestock product demand?

### **GL-CRSP Podcast Volume 12: The Future of Pastoralism**

- Global Livestock CRSP Podcast Vol 12: The Future of Pastoralism. A panel discussion at the GL-CRSP and World Bank's "*Repositioning Livestock in the*

*Development Agenda*,” planning meeting discusses the future of pastoralism. Are pastoralists the scourge or saviors of the earth? Is the Tragedy of the Commons a thing of the past? How is land-use change impacting pastoral livelihoods? Where are the knowledge gaps in current understanding of these marginalized groups, and what is the most effective way to enhance pastoral livelihoods?

### **GL-CRSP Podcast Volume 13: Animal Source Foods and Human Nutrition**

- Global Livestock CRSP Podcast Vol 13: Animal Source Foods and Human Nutrition. A panel discussion at the GL-CRSP and World Bank’s *“Repositioning Livestock in the Development Agenda,”* planning meeting discusses the role of over and under-consumption of Animal Source Foods in human nutrition, citing the benefits of ASF in improving children’s cognitive function and prenatal health, as well as the potential for enhanced leadership and human capacity development from a diet rich in micro-nutrients.

## Appendix 7

### ***DOCUMENT 1: REFINING THE INITIATIVE***

#### **LIVESTOCK INITIATIVE PLANNING MEETING**

#### **REPOSITIONING LIVESTOCK ON THE DEVELOPMENT AGENDA**

##### ***Objective of the Initiative***

Generating Global Public Good to Promote Pro-Poor Growth in the Livestock Sub-Sector

##### ***Means to achieving the objective***

The initiative, funded by a Multi-Donor Trust Fund and through partnerships with other organizations and initiatives,<sup>4</sup> is organized to (a) convene a global partnership (b) undertake analysis of important sub-sector issues (c) identify points and means of intervention (including public and private investment opportunities and needs), (c) identify research/knowledge gaps, and (d) mobilize resource to implement the findings at national and international levels.

##### ***Background***

The World Development Report 2008: Agriculture for Development presents an extensive analysis of the current state of agriculture in developing countries, and identified opportunities and challenges for the future. The report makes the case that in many developing countries and for over 2 billion people, agriculture is the main vehicle for escaping poverty. The report also called attention to the fact that, notwithstanding its importance, the sector attracted only 4% of donor assistance annually and of national public expenditure over the past two decades or so. It called for higher investments from donors and national governments now and in the future. Although livestock contribute approximately 40% of agriculture GDP (and rising) in developing countries, the neglect of this sub-sector had been even more acute than for agriculture as a whole. This initiative is aimed at reversing the status quo by identifying opportunities as well as challenges facing the sector and providing guidance for future investments.

Current characteristics of the livestock sub-sector include:

- An estimated 1.3 billion poor people in rural households depend on livestock for their livelihood. Livestock are the main source of protein and micro-nutrients for most of the 830 million food insecure people.
- Livestock are often the only assets of the poor and thus their only hedge against shocks such as family emergencies, crop failure and droughts.
- Population growth and increasing income are promoting rapid expansion of demand for livestock products. This demand pull is stimulating expansion of production of livestock products by 3- 5 % annually, but this growth is often not pro-poor.
- The conventional wisdom has been that market forces will drive and govern the sector. However, there is now clear evidence that those forces alone do not maximize poverty reduction as a public good while externalities which generate 'public bad', such as disease risk to both livestock and humans and environmental degradation, go largely unmitigated.
- Despite their importance in economic, social and cultural terms the development agenda pays very little attention to livestock.

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<sup>4</sup> The Global Livestock CRSP, supported by USAID, will help finance the initiative particularly during Phase 1.

### ***Emerging issues***

The sector faces many challenges which mitigate more extensive use of livestock resources as a means of poverty reduction and as engines of growth and development. Among these the most urgent are:

- About 70% of the emerging human diseases have their origins in animals and are zoonotic. Diseases such as Highly Pathogenic Avian Influenza (HPIA) pose severe threats to livestock and human health. Control strategies often favor large over small scale producers. In the case of HPIA some countries are attempting to prohibit backyard poultry keeping, others could follow, with very severe negative consequences for the poor. New disease prevention and control strategies, including biosecurity, are needed for both large and small scale producers to protect livestock and human health, and to enable both local and international trade.
- Although global circulation models predict that climate change will affect many aspects of livestock production, for example pathogen and disease dynamics, feed and water availability etc., local/regional effects are not yet well known nor understood. The unpredictability increases the risk for those least able to buffer themselves from change; the poor. A focus on how livestock can be a means of buffering risk will require knowledge of how to deal with unpredictable events such as pandemic disease and severe weather events, while managing the natural resource base.
- Livestock are both a part of the problem and the solution to environmental degradation and climate change. They contribute to the production of greenhouse gases, and if not well managed, to land degradation, water pollution and destruction of plant biodiversity as well. With improved management these negative effects could be ameliorated. Grazing systems, for example, could contribute significantly to environmental services. The intensity and variety of environmental effects varies with degree of economic development, especially with regard to climate change. In this regard, it is important that the impact in developing countries be adequately characterized to ensure that investments in livestock are appropriately addressed.
- Industrial production systems (factory farming) for pig and poultry are rapidly expanding in developing countries with very negative environmental consequences. In developed countries, this system of production has resulted in severe nutrient loading, soil and water pollution and considerable production of greenhouse gases. These consequences should be avoided in developing countries by designing and implementing appropriate policies and technological interventions. Competition for land and water resources between crop farmers and pastoralists, and between wildlife and livestock lead to conflicts and environmental degradation, particularly in fragile ecologies. These issues need to be addressed as they will intensify as human, livestock and wildlife populations expand on a fixed or shrinking land base.
- Expansion of biofuels production (ethanol from corn for example), has already had a significant impact on feed and food prices. Continued expansion, as is projected will likely drive food and feed prices higher and higher. In the longer term, development of cellulosic enzymes for ethanol production may create opportunities for developing countries. But they face both challenges as well as opportunities as a result of these trends. While demand for cereal for fuel production would adversely affect food security, and animal feed availability, higher export grain and livestock product prices from the developed countries could render production of these commodities in developing countries more competitive. These issues need careful analysis so that developing countries could effectively position themselves to recapture local markets and participate in international ones.
- Although local and global markets for livestock and livestock products have been expanding rapidly, many developing countries and their small holders have not been able to participate fully in them. Review of the obstacles to market access for countries with a comparative advantage in livestock production is required. For example, Africa's vast rangelands and potential for more intensive production are currently grossly underutilized. Greater effort is needed to promote the participation of resource poor farmers by creating access, organizing them, improving their

competitiveness and helping them to meet higher food safety standard. Significant lessons of successful interventions from the horticulture sector can be applied to the aquaculture and livestock sub-sectors. Niche livestock market development, such as fair-trade, organic or environment friendly products may have some development potential as well.

- Pastoralism is no longer seen as a tragedy of the commons. It is increasingly recognized as virtually the only viable production system for arid and semi-arid lands where erratic rainfall makes crop production is too risky. These dryland areas are however vulnerable to climate change and in need of effective adaptation strategies. Pastoralist peoples are some of the most marginalized and vulnerable in the world after decades of neglect or unsupportive policy. Addressing the needs of these vulnerable peoples, often living in fragile states and environments, is a complex but urgent task.
- Animal source foods play a vital role in nutritional security of rural as well as urban people. The cereal diets which the poor consume are usually deficient in essential micronutrients. Utilization of such diets is drastically improved with even small amounts of animal protein. Research has shown that including small amounts of animal source food significantly improves cognitive and physical capacity of children. As income increase diets diversify and more animal source foods are consumed. The overall impact of increasing the cognitive function of children on their lifetime contribution to society is immense. On the other hand, some segments of developing countries also suffer from over-consumption of animal source foods and evince the same health problems as many in developed countries. Both cases require attention.

### ***Action Plan***

The initiative will be implemented in three phases: Phase 1 -Analytical (year 1); Phase 2 -Implementation (Years 2-4); and Phase 3 -Review (year 4). The main elements of the project are as follows:

#### ***Phase 1: Analytical***

- Creation of a Steering Group (SG) drawn from the development community (relevant international agencies, academia, development banks, donors, NGOs). The role of the SG is to identify the most important issues which should be addressed to generate international public good to: (a) ensure more effective use of livestock as pathways out of poverty, and (b) mitigate negative environmental effects, and threats to animal and human disease emergence and spread.
- Based on the deliberations the SG, expert panels will be commissioned to study and report on the most important issues facing the livestock sub-sector (some of which were identified above). These reports will: (a) present the analysis (b) identify appropriate intervention points/options and (c) identify research/knowledge gaps.
- Presentation of the findings of the expert panels at an international conference of high level decision makers and development leaders drawn from developing countries, international organizations, the bilateral and multilateral donor community, including the Regional Development Banks, IFAD, World Bank and NGOs.
- Publish the expert panel reports and a synthesis of the conference as an issue and options guidance document (Directions in Development) for use by developing countries and their development partners, including the regional development Banks and the World Bank.
- Develop a suitable dissemination plan and an implementation strategy to guide activities in Phase 2.

#### ***Phase 2: Implementation***

- During this phase the results from the analytical phase will be disseminated more broadly, and implementation at the country level will be facilitated. The initiative will not fund development projects but will help to create the enabling environment to do so, and will help mobilize resources

to fund research and development projects in selected countries<sup>5</sup> particularly in Africa. Work at the national level will include: (a) supporting country level analysis to facilitate the inclusion of the livestock agenda in costed PRSPs; (b) adaptation of intervention points/options from the analytical phase to local opportunities and conditions; (c) facilitate policy formulation and promote increased investment from national treasuries; (d) assist with project formulation and convening of investors such as World Bank, the Regional Development Banks, Bilateral donors and the private sector.

- Implementation at the national, regional and international levels will build on or complement work being done by partners such as the Global Donor Platform, the CGIAR, LEAD<sup>6</sup> and the CRSPs for example. In Africa, the ALive platform will be an important vehicle to promote action at the continental level. Activities at the international level will also include, for example, facilitating inclusion of the livestock environmental agenda into that of Climate Change, perhaps into the successor protocol for Kyoto by building on the next phase of LEAD or its successor initiative.
- Research/knowledge gap filling will be an important component of this phase by channeling outstanding issues to the agendas of existing research organizations such as the CGIAR and developed and developing country universities, or to commission additional work where the need is urgent and create a bottle neck to implementation, or fall outside the mandates of partner organizations. Furthermore, the outputs of phase one could contribute to FAO flagship publication “The State of Food and Agriculture 2009” for which livestock as the theme is being considered.

### ***Phase 3: Review/Evaluation***

- Activities during this phase will include pursuing issues of efficiency and effectiveness of the project and evaluating its impact.
- Efforts will also be made to identify lessons learned and good practice that could be adopted and applied broadly within the livestock development community globally.
- The project which was initiated as a catalyst to overcome the history of neglect of the livestock sub-sector will seek to main stream its activities through out its life. However, additional efforts will be made during this phase to identify opportunities to complete this process.

### ***Outputs/outcome:***

- ‘State-of-the-art’ reports on livestock issues to support the work of policy makers and development practitioners.
- A synthesis report --Directions in Livestock Development-- to guide future investments by bilateral and multilateral donors in the livestock sub-sector.
- Numerous PRSPs that include livestock among the development options.
- Increased attention and investment by national governments and the development community to livestock research and development issues.
- Success stories and good practices documented and being used.

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<sup>5</sup> Countries where livestock are important to the livelihood strategy of significant numbers of the poor.

<sup>6</sup> Livestock , Environment and Development (LEAD) initiative hosted by FAO

## Appendix 8

### DOCUMENT 2: ISSUES TO BE ADDRESSED DURING THE ANALYTICAL PHASE

#### *LIVESTOCK INITIATIVE PLANNING MEETING*

#### REPOSITIONING LIVESTOCK ON THE DEVELOPMENT AGENDA

#### *ANALYTICAL PHASE*

Based on your knowledge of the analytical needs of the sector, and of existing and or ongoing work in the research and development community (in the North and South), Members are asked to agree on: (a) the most important issues (challenges and opportunities) that this initiative should address through commissioned papers, (b) which institutions or individuals are best placed to undertake the agreed work, and (c) conceptual guidance.

#### *Issues to be Addressed*

The following issues are presented only as a starting point for the discussion of the Steering Group. Members are asked to add or delete from this list and translate these or other broad issues into manageable topics for commissioned papers.

- About 70% of the emerging human diseases have their origins in animals and are zoonotic. Diseases such as Highly Pathogenic Avian Influenza (HPIA) pose severe threats to livestock and human health. Control strategies often favor large over small scale producers. In the case of HPIA some countries are attempting to prohibit backyard poultry keeping, others could follow, with very severe negative consequences for the poor. New disease prevention and control strategies, including biosecurity, are needed for both large and small scale producers to protect livestock and human health, and to enable both local and international trade.
- Although global circulation models predict that climate change will affect many aspects of livestock production, for example pathogen and disease dynamics, feed and water availability etc., local/regional effects are not yet well known nor understood. The unpredictability increases the risk for those least able to buffer themselves from change; the poor. A focus on how livestock can be a means of buffering risk will require knowledge of how to deal with unpredictable events such as pandemic disease and severe weather events, while managing the natural resource base.
- Livestock are both a part of the problem and the solution to environmental degradation and climate change. They contribute to the production of greenhouse gases, and if not well managed, to land degradation, water pollution and destruction of plant biodiversity as well. With improved management these negative effects could be ameliorated. Grazing systems, for example, could contribute significantly to environmental services. The intensity and variety of environmental effects varies with degree of economic development, especially with regard to climate change. In this regard, it is important that the impact in developing countries be adequately characterized to ensure that investments in livestock is appropriately addressed.
- Industrial production systems (factory farming) for pig and poultry are rapidly expanding in developing countries with very negative environmental consequences. In developed countries, this system of production has resulted in severe nutrient loading, soil and water pollution and considerable production of greenhouse gases. These consequences should be avoided in developing countries by designing and implementing appropriate policies and technological interventions. Competition for land and water resources between crop farmers and pastoralists, and between wildlife and livestock lead to conflicts and environmental degradation, particularly in fragile ecologies. These issues need to be addressed as they will intensify as human, livestock and wildlife populations expand on a fixed or shrinking land base.

- Expansion of biofuels production (ethanol from corn for example), has already had a significant impact on feed and food prices. Continued expansion, as is projected will likely drive food and feed prices higher and higher. In the longer term, development of cellulosic enzymes for ethanol production may create opportunities for developing countries. But they face both challenges as well as opportunities as a result of these trends. While demand for cereal for fuel production would adversely affect food security, and animal feed availability, higher export grain and livestock product prices from the developed countries could render production of these commodities in developing countries more competitive. These issues need careful analysis so that developing countries could effectively position themselves to recapture local markets and participate in international ones.
- Although local and global markets for livestock and livestock products have been expanding rapidly, many developing countries and their small holders have not been able to participate fully in them. Review of the obstacles to market access for countries with a comparative advantage in livestock production is required. For example, Africa's vast rangelands and potential for more intensive production are currently grossly underutilized. Greater effort is needed to promote the participation of resource poor farmers by creating access, organizing them, improving their competitiveness and helping them to meet higher food safety standards. Significant lessons of successful interventions from the horticulture sector can be applied to the aquaculture and livestock sub-sectors. Niche livestock market development, such as fair-trade, organic or environment friendly products may have some development potential as well.
- Pastoralism is no longer seen as a tragedy of the commons. It is increasingly recognized as virtually the only viable production system for arid and semi-arid lands where erratic rainfall makes crop production too risky. These dryland areas are however vulnerable to climate change and in need of effective adaptation strategies. Pastoralist peoples are some of the most marginalized and vulnerable in the world after decades of neglect or unsupportive policy. Addressing the needs of these vulnerable peoples, often living in fragile states and environments, is a complex but urgent task.
- Animal source foods play a vital role in nutritional security of rural as well as urban people. The cereal diets which the poor consume are usually deficient in essential micronutrients. Utilization of such diets is drastically improved with even small amounts of animal protein. Research has shown that including small amounts of animal source food significantly improves cognitive and physical capacity of children. As income increases diets diversify and more animal source foods are consumed. The overall impact of increasing the cognitive function of children on their lifetime contribution to society is immense. On the other hand, some segments of developing countries also suffer from over-consumption of animal source foods and evince the same health problems as many in developed countries. Both cases require attention.

### **Nature and Scope**

Papers should be global in scope but include regional specificity where applicable. Each paper will be structured to address at least three dimensions on the issue: (a) the analysis, (b) intervention options, and (c) knowledge gaps.

## Appendix 9

### AGENDA ITEM 3: THE CONFERENCE

#### REPOSITIONING LIVESTOCK ON THE DEVELOPMENT AGENDA

##### *CONVENING AN INTERNATIONAL CONFERENCE*

**Purpose**

Disseminate and discuss the work undertaken during the analytical phase of the initiative, and to advocate the role of livestock in poverty reduction and development in the developing regions of the world.

**Time:**

September 15-18, 2008

**Place:**

World Bank Headquarters, Washington DC, USA.

**Target Audience:**

High level policy makers and managers, development practitioners from Donor Agencies, the Regional Development Banks, the World Bank, International Research and Development organizations, the Private Sector and NGOs. Approximately 250-300 people attending by invitation only.

**Preparations:**

- Based on the decisions reached under Agenda Item 2, requisite papers commissioned by end of March 2008. Peer reviewers identified and retained by this time as well.
- Conference prospectus to include the purpose, nature and scope and agenda prepared by March 2008.
- List of invitees drawn up and invitations extended by the Vice President –Sustainable Development Network, by end of April 2008.
- Draft papers completed and reviewed by end on June 2008.
- Final Draft accepted and edited by mid July 2008.
- Steering Group meets by end of July 2008.
- Papers printed by end of August 2008.

## Appendix 10

### DOCUMENT 4: STEPS BEYOND THE CONFERENCE

#### REPOSITIONING LIVESTOCK ON THE DEVELOPMENT AGENDA

A number of valuable products and deliberations will ensue from the conference. However, in and of themselves, the products and deliberations are not adequate to produce the initiative's desired outcome. As a follow-up to the conference, the following steps are proposed.

#### **1. Dissemination of the findings (mainly actionable points) to a wider audience for effective buy-in and implementation:**

##### *In the World Bank and Regional Banks*

- Country Management Units
- Country Teams
- TTLs
- WBI

##### *In client countries (SG)*

- Requisite ministries possibly through subregional ministerial conferences/dialogue,
- Regional economic bodies -COMESA, ECOWAS, NEPAD, Alive etc)

##### *Other targets*

- Universities/academia
- Multilateral and bilateral donor agencies (IFAD, DfID, USAID, Regional development banks, Gates Foundation, Rockefeller Foundation)
- UN organization (WHO, UNEP, UNDP, UNFCCC)
- Research (CGIAR, national, regional and subregional research organizations)-??
- CDC- *Joyce*
- NGOs (Heifer International, International Partners for Sustainable Development, GALVmed, others)
- Private sector?

#### **2. Advocacy**

- In the bank, where plausible to incorporate or raise the profile of livestock issues in poverty reduction strategy papers (PRSPs<sup>7</sup>), country economic memoranda (CEMs), country environmental analyses (CEAs) etc.
- Same for assistance strategies for the other bilateral and multilateral donors
- Advocate for inclusion of the livestock subsector in climate change negotiations (post Kyoto)

#### **3. Advisory work (think tank through TF activities)**

- Policy analysis and formulation
  - Project design and formulation
  - Backstopping investment projects ("on-call list")
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