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COMMITTEE ON AGRICULTURE

Twenty-third Session

Rome, 21 - 25 May 2012

Options for Stakeholder Dialogue in Support of Sustainable Livestock Development

Executive Summary

This document describes how a request by the Committee on Agriculture, for FAO to investigate suitable options for stakeholder dialogue in support of sustainable livestock sector development, evolved into a participatory process focusing on consensus building among sector stakeholders and subsequent collective action targeting the improvement of resource use efficiency in the livestock sector to support livelihoods, long-term food security and economic growth, whilst safeguarding other environmental and public health outcomes.

The so-called "Global Agenda of Action in Support of Sustainable Livestock Sector Development", is built on the notion that demand growth for livestock products will likely continue for decades as incomes and human population continue to grow. Such demand growth will need to be accommodated within the context of a finite and sometimes dwindling natural resource base, and will be faced with the need to respond to climate change, both adapting and mitigating. For this to happen, the Global Agenda of Action proposes changes of practices through policy and institutional change, research and development, capacity building and accompanying investments that will lead to efficiency gains in natural resource use and reduced emission intensity, while providing social, economic and health benefits. The Global Agenda of Action is open to all stakeholders who agree with its objectives, its focus areas and the types of action, including information sharing, the development of metrics, resource assessment, technology exchange, capacity building, policy analysis and development, and communication and outreach. Stakeholders agree that the comparative advantage of the Global Agenda of Action lies in the strengthened partnership, interaction, and consensus actions that prevent duplication of effort and increase its influence on research and development agendas.

The Committee's guidance is sought on the appropriateness of the Global Agenda of Action in Support of Sustainable Livestock Sector Development as a catalyst for improved livestock sector performance, and on the nature and level of FAO's engagement in this multi-stakeholder initiative.

Suggested action by the Committee

The Committee is invited to:

- review the nature, broad scope and thematic focus of the Global Agenda of Action.
- review the broad lines of action envisaged under the Global Agenda of Action and to determine the level of FAO's engagement. In particular, the Committee's guidance is sought on the following issues:

a) the appropriateness of the multi-stakeholder consultation and suggested action in support of sustainable livestock sector development to catalyse an accelerated and targeted improvement of livestock sector performance and the related secretariat's suggestion to encourage member countries to collaborate with and support the Global Agenda of Action and to recognize the process as a concrete contribution to Greening the Economy with Agriculture and related intergovernmental processes (e.g. Rio+20[1]);
b) the relevance of the stakeholders' agreed thematic priorities and activities envisaged under the Global Agenda of Action;
c) the confirmation of FAO's central engagement in this multi-stakeholder initiative and to act as its secretariat if so requested, within agreed budget allocations;
d) the modality to be used by the secretariat to report on progress of the Global Agenda of Action and on any requirements for related inter-governmental action at the Committee's next session; and
e) the deferment of the Committee's decision on whether to establish a subsidiary body of COAG on livestock sector issues until that time.

Queries on the substantive content of the document may be addressed to

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[1] United Nations Conference on Sustainable Development (Rio+20)

I. Background

1. At its 22nd Session, the Committee on Agriculture (COAG) reaffirmed the crucial role of livestock in food security and livelihoods, both at global and national levels. It requested that under Strategic Objective B (Increased Sustainable Livestock Production), sector analysis and technical as well as policy and institutional support to member countries be continued. The Committee confirmed that FAO, within its capacity and mandate, is in a position to address in a balanced and holistic manner the complex, social, economic and environmental issues and trade-offs associated with the sector. The Committee agreed that FAO actively engage in consultations to continue the global dialogue with a wide range of stakeholders to sharpen the definition of the sector's objectives, with a view to identify issues for inter-governmental action. The Committee deferred further discussion on the proposal concerning the establishment of a subsidiary body or ad-hoc working group on livestock to the following session of COAG.

II. Progress to date

2. FAO consulted through a variety of fora, including two global consultations, one held in May 2011 in Brazil, and another in December 2011 in Thailand. These consultations brought together different stakeholder groups and included interested governments, branch organizations of private sector actors, civil society and non-governmental organizations, academia, research and intergovernmental organizations (FAO, World Bank, African Union). FAO had also organized meetings with various stakeholders on the development of appropriate metrics related to livestock-environment issues, on animal welfare, on livestock-gender issues, feed availability, quality and safety, and smallholder poultry production, which informed the global consultations.

3. To assist FAO in its efforts to consult with stakeholders, to explore areas of collective action and to develop suitable forms of multiple stakeholder engagement, two member countries, namely Switzerland and the Netherlands, provided support by means of a multi-donor trust fund, whilst other stakeholders contributed facilities, materials and human resources. Appendix A presents the consensus reached in the above consultations. The stakeholders involved in the consultations reached agreement on the scope and substantive issues, nature of engagement, and principal activities of collective action. They intend to embark on a "Global Agenda of Action in Support of Sustainable Livestock Sector Development", outlined in Appendix A below, starting from paragraph 7.

4. FAO's involvement in the Global Agenda of Action would not only assist the Organization in the fulfilment of its mandate through increased collaboration among its technical departments, the consolidation of its comparative advantages, and service functions, but also through (i) the development of effective mechanisms to build coalitions and dialogue with sector stakeholders which are currently only loosely involved with FAO processes; (ii) the sharing and brokering of knowledge, and piloting novel approaches with these stakeholders; and (iii) informing, guiding and enriching FAO's inter-governmental processes on livestock sector development. The direct linkages envisaged by the Global Agenda of Action to regional and country programming through the coordination of coherent stakeholder action at the decentralized level are examples of how to anchor FAO's normative functions to field work. Further, important interfaces with FAO's other major programmes in the livestock sector, notably the One Health Initiative and the Global Plan of Action for Animal Genetic Resources as well as FAO's work related to crop-livestock interaction and gender, should be further developed and capitalized upon.

III. Guidance Sought

5. Based on the description below, COAG is invited to review the nature, broad scope and thematic focus of the Global Agenda of Action. Further, COAG is invited to review the broad lines of action envisaged under the Agenda and to determine the level of FAO's engagement. It is to be noted that the work of the Global Agenda is not dependent on FAO's involvement, even though FAO has been instrumental in its development so far, in the form of coordination, technical support and the provision of a convening platform.

6. In particular, the Committee's guidance is sought on the following issues:

a) the appropriateness of the multi-stakeholder consultation and suggested action in support of sustainable livestock sector development to catalyse an accelerated and targeted improvement of livestock sector performance and the related secretariat's suggestion to encourage member countries to collaborate with and support the Global Agenda of Action and to recognize the process as a concrete contribution to Greening the Economy with Agriculture and related intergovernmental processes (e.g. Rio+20);
b) the relevance of the stakeholders' agreed thematic priorities and activities envisaged under the Global Agenda of Action;
c) the confirmation of FAO's central engagement in this multi-stakeholder initiative and to act as its secretariat if so requested, within agreed budget allocations;
d) the modality to be used by the secretariat to report on progress of the Global Agenda of Action and on any requirements for related inter-governmental action at the Committee's next session; and
e) the deferment of the Committee's decision on whether to establish a subsidiary body of COAG on livestock sector issues until that time.

APPENDIX A – THE GLOBAL AGENDA OF ACTION IN SUPPORT OF SUSTAINABLE LIVESTOCK SECTOR DEVELOPMENT

7. The following text summarizes the Global Agenda of Action in Support of Sustainable Livestock Sector Development. The Agenda is expected to be launched before the end of 2012.

8. Stakeholders have converged on the notion that demand growth for livestock products will likely continue to be strong for decades to come as human population and incomes continue to grow. Such demand growth will need to be accommodated within the context of a finite and sometimes dwindling natural resource base, and will be faced with the need to respond to climate change, both adapting and mitigating. Such growth also represents an opportunity for social and economic development from which many countries want to benefit. In addition, livestock provide numerous opportunities for enhanced food security and livelihood support that need to be exploited. Livestock also have an important cultural dimension that needs to be considered. Further, the public health risks and benefits of livestock sector development need to be recognized and addressed.

9. Stakeholders have agreed that comprehensive and urgent action is required to enable the livestock sector to meet a variety of economic, social, environmental and health objectives and have decided to develop a Global Agenda of Action in Support of Sustainable Livestock Sector Development. Such a Global Agenda of Action is suggested to address the natural resource challenges of the global livestock sector and aim at improving the efficiency of their use. Land, water and nutrients were identified as the initial primary focus.

10. Stakeholders have identified livestock sector resource use as a key concern to be addressed comprehensively and with urgency. Livestock compete with other food and non-food uses of land, water, and soil nutrients. Livestock are an important land user, directly as pastures and indirectly through their demand for feed produced on arable land. Livestock are an important component in water cycles, affecting water availability through their impact on vegetation and soil cover, and through water use for feed crop irrigation, drinking and servicing. They also affect water quality and play an important role in global and local nutrient (nitrogen, phosphorous, and others) balances through waste and feed crop management. Livestock affect biodiversity, mostly through habitat alteration. Livestock are an important source of climate gas emissions, in the form of methane from ruminants and animal waste, nitrous oxides from feed production and animal manure, and carbon dioxide through livestock-related land use and land use change. Livestock systems, especially extensive land-based production systems, are also particularly affected by climate change.

11. Stakeholders have agreed on some key considerations that bring livestock sector resource use into focus: i) animal food chains, in particular when using feed from crop land, are inherently less efficient than vegetal food chains; ii) extensive livestock production often takes place in remote areas complicating the regulation and use of natural resources when traditional access mechanisms break down; iii) intensive livestock production is often detached from its supporting land base, which allows clustering and geographic concentration with consequent risks of environmental pollution. These characteristics express themselves in livestock-specific resource use challenges.

12. The Agenda would be open to all stakeholders who agree with its objectives, its focus areas and the types of action, including information sharing, the development of appropriate metrics, resource assessment, technology exchange, capacity building, policy analysis and development, and communication and outreach. Stakeholders involved in the consultations have emphasized the added value of multiple stakeholder collaboration in bringing about practice change that will lead to efficiency gains in natural resource use, while also providing social, economic and health benefits.

13. Stakeholders have agreed on natural resource use efficiency in the livestock sector, covering all production systems and entire value chains, as the thematic focus of the agenda. Natural resource use efficiency is defined as the amount of land, water, nutrients, energy and other resources required for the production of a given livestock product; this also involves greenhouse gas emission intensity, i.e. the amount of climate gases emitted per unit of output. Initially, the Agenda would address three focus areas, namely “closing the efficiency gap”, “restoring value to grassland”, and “towards zero

discharge". The relative emphasis and the approaches for each focus area will vary from region to region.

a) The focus area *Closing the efficiency gap* proposes that large gains in resource use efficiency can be made by extending existing knowledge to close the gap between attainable efficiency rates and those actually achieved. While the technological frontier will continue to expand towards attainable efficiency gains at the top margin, many producers continue to apply practices that are often vastly inefficient. Similarly, losses and waste along the food chain can be substantially reduced. The agenda is therefore to focus on commodity chains and production systems where the efficiency gap is large and where upgrading of technologies is both technically feasible and economically viable. Integrating viable small-scale production into value chains, and the disseminating of scale-neutral technologies could deliver additional social benefits. Public-private partnerships and cooperatives, among others, are expected to play a central role in the transfer and adaptation of technology.

b) The focus area *Restoring value to grasslands* proposes that the widespread neglect of grazing land constitutes a missed opportunity. Such neglect expresses itself in a high incidence of poverty in many marginal areas, but also in low productivity of land and livestock, and widespread degradation of land, water and biodiversity resources. Grazing land, if appropriately managed and enabled by institutional and policy change, could provide large and numerous resource benefits in the form of carbon sequestration, protection and provision of water services, and biodiversity protection at local to global scales. Carbon finance and other forms of payment for environmental services could equally be key in connecting people and production systems to opportunities to raise productivity and enhance livelihoods. Institutional change, including new REDD[2]-type financing mechanisms specifically tailored to grasslands, could be the key to unlocking this potential.

c) The focus area *Towards zero discharge* aims at recycling and recovering nutrients and energy contained in animal manure, particularly from intensive and confined livestock operation. Nutrients and energy are only partially converted by the animal, and between 50 and 90 percent of the nutrients, and about 30 percent of the energy are excreted and often lost to the environment, leading to nutrient overloads and greenhouse gas emissions. Recycled nutrients help integrate the crop and livestock components of agriculture, raise soil fertility and plant productivity and substitute for mineral fertilizer. Recovered energy reduces greenhouse gas emissions and substitutes for fossil fuel. Central lines of action are suggested to be spatial planning to create opportunities for the application of animal waste on crops, and strengthened public policies and incentive structures.

14. For the purpose of charting a trajectory of change towards enhanced sustainability, inputs to livestock production can be conveniently grouped into natural resource inputs and human-made inputs. Human-made inputs comprise labour, capital, infrastructure and above all, knowledge and technology. Natural resource inputs comprise land, water, air, nutrients, energy and biodiversity. Sustainability can be enhanced by substituting human-made inputs for natural resource inputs, thereby using less natural resources for a given amount or value of outputs. As a result, livestock production becomes more knowledge-intensive, and less natural resource-intensive.

15. Transforming knowledge into practices that improve the efficiency of natural resource use is the underpinning principle of the Agenda of Action. This can be facilitated by an enhanced flow of knowledge across countries and stakeholders but critically depends on an alignment of incentives where efficiency gains and resource stewardship are rewarded, and wasteful practices discouraged.

16. Because the efficiency of livestock production has only recently come into focus, it is neither well described nor well known. This limits the understanding of the long run potential to reduce sector resource requirements via efficiency improvements. It also curtails our ability to identify geographic

[2] Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD)

areas, production and supply systems, and steps in the supply chain that have the highest potential for improvement. It also hampers the design of specific improvements, and the assessment of costs and benefits of their introduction. In this respect, understanding of natural resource use in livestock production needs to be improved. Currently, informed debates about livestock and natural resource use are hampered by the use of different measures and different methodologies. While the analysis of productivity measures is critical to making livestock production profitable, efficiency issues have only recently attracted attention. Stakeholders involved in the consultations agreed that the *development of broadly accepted indicators or measures* ("metrics and methodologies") of resource use efficiency will allow for more coherent assessments, analyses and comparison, to inform debates and decision making on how best research and development could target resource use efficiency.

17. Stakeholders agreed that detailed *assessments of resource use at global to local scales*, considering species, commodities and modes of production, taking into account different features of the production environment (economic, climate, ecology), will not only improve the understanding of resource use issues, but also help identify suitable entry points for resource use improvements, and will guide research and development of management approaches and technology use. Importantly, such assessment will help the priority setting and targeting of global, regional and national policies, strategies, and investments.

18. The rapid implementation of efficiency–enhancing measures is currently hampered by insufficient human capacity to address resource use issues. This is partly explained by the novelty of some analytical tools applied to livestock systems (e.g. life cycle analysis) and by the fact that livestock-resource use issues have only recently come into focus. Enhanced capacities are thus required to create appropriate knowledge about livestock resource use issues, and to understand the ways in which technology and policy solutions can be developed and adapted to local conditions. Hence, stakeholders agreed that *capacity building is required for technology, institutional and policy development* in support of improved natural resource use efficiency, and that such capacity building needs to be broad-based and across stakeholder groups.

19. Initial analysis points to the large potential of conventional, productivity enhancing technology (such as in genetics, feeding, animal health, animal husbandry and management) in reducing resource requirements per unit of output. More targeted, resource efficiency enhancing technology also holds the prospect of significant social and economic benefits. Stakeholders therefore agreed to *collaborate on technology exchange* and to create the conditions that accelerate the development and use of efficiency-enhancing practices. Stakeholders agreed that public-private partnerships could be a particularly appropriate mechanism for facilitating technology exchange, and intend to create and develop these partnerships, with a particular view to close the efficiency gaps identified.

20. The increasing monetization of environmental services and the increasing obligation to reduce pollution are some other recent global "game changers" that open up new possibilities. A number of novel policy tools, including carbon finance and payment schemes for other environmental services, and spatial and zoning policies, could significantly alter sets of incentives for different livestock production systems, and provide pathways for sustainable sector growth. Methodologies and approaches need to be tested so as to provide a "proof of concept" of approaches that can then be up-scaled. Stakeholders agreed to *pilot novel approaches*, designed to respond to new challenges and opportunities with technological, institutional or policy innovation. Stakeholders also agreed that investment activities by multilateral finance institutions, such as the World Bank, regional development banks and the Global Environment Facility, can benefit from the inclusion of resource efficiency considerations in livestock sector development.

21. Stakeholders agreed that an increased and accelerated flow of information across countries and stakeholder groups can enable learning and change of practices, can aid more informed decision-making and be the basis for constructive dialogue and concerted action. This will also include advocacy for sustainable livestock policies and practices, and outreach. Related information and communication is suggested to be bundled into a *knowledge hub*.

22. As outlined above, the Agenda is concerned with channelling knowledge to target areas, and to modify the sets of incentives so as to enable change of practice. Such change of practice is required to accelerate sustainable growth in the livestock sector. In pursuing this direction of change, both collective and independent action will be pursued and stakeholders will bring to bear their relative strengths. Collective action includes:

a) the development of broadly accepted measures ("metrics") of resource use efficiency and supporting methodologies;
b) local to global resource use assessments and perspective studies;
c) support to capacity building for technology, institutional and policy development;
d) support to technology exchange, making use of public-private partnerships;
e) piloting of novel approaches in order to provide "proof of concept" and support to investments;
f) sharing of information, broad stakeholder communication and outreach.

23. Notwithstanding the diverse range of perceptions and roles, what increasingly unifies countries and sector stakeholders is the growing global nature of markets and value chains with the concomitant unification of sector norms, standards, and certification. Therefore, the challenge of accommodating growing demand for livestock products into a context of growing local and global scarcities can only be effectively tackled through the concerted action of relevant stakeholders.

24. Stakeholders agreed that the comparative advantage of the Global Agenda of Action lies in the strengthened partnership, interaction, dialogue and learning among diverse actors catalyzing knowledge flows and consensus action towards improved natural resource use efficiency focusing on all relevant animal product value chains. They understand the potential of cohesive action facilitated through the Global Agenda of Action in preventing duplication of efforts, in presenting coherence in best use of scarce resources, and in creating increased awareness for agenda setting related to research and development. The stakeholders noted that work on sustainable and healthy diets may be a complementary entry point towards overall agricultural and food system sustainability. Stakeholders also noted other national and international efforts to address the issues of sustainability in the livestock sector, such as the Global Research Alliance on Agricultural Greenhouse Gases and work undertaken by the Consultative Group on International Agricultural Research; complementarities with these efforts are suggested to be systematically exploited by the Global Agenda of Action.