

Dear Colleagues

I am writing to you as members of the interim preparatory committee of the “sustainable livestock” agenda of action and in preparation of the meeting/teleconference on 20 October. I would like to briefly look back at the process so far and then share some thoughts with you that may be helpful as we prepare for the Phuket meeting and subsequent developments. Much of that is based on further discussions I had with many of you, and I hope I can represent the general idea.

In Brasilia, there was a basic endorsement of the notion that livestock sector development and related resource issues need to be urgently and comprehensively addressed. In so doing, some form of agreed collective action at the international level might be useful. We agreed on the nature of such action (multi-stakeholder, open, consensual). There was a consensus that efficiency of natural resource use in livestock production and related sectors is a key concept in accommodating livestock sector growth in the context of growing resource scarcity and environmental concerns. We also concurred on the principal pathways or functions (i.e. analysis, information, capacity building, piloting and advocacy) by which this agenda of seeks to accelerate the move towards sustainable livestock and to add value to existing efforts.

There is more detail in the *Brasilia Consensus* (you may want to check again the leaflet and meeting report) but these are the building blocks. So what are the expectations for the Phuket meeting? In Brasilia, we discussed the need to develop a concrete roadmap that will serve as a guide towards the launch of this agenda in 2012. Such a roadmap will need to have the following elements:

- ⦿ Thematic areas will need to be identified, boundaries be drawn and broad objectives be set.
- ⦿ Stakeholders need to indicate their intentions as to what they will contribute, collectively and separately.
- ⦿ The rules of engagement need to be discussed, a suitable management form chosen, and an effective form of oversight agreed.
- ⦿ The next preparatory steps towards the formal “launch” of the agenda of action need to be agreed.

Much obviously depends on the answers to the first question, i.e. the shape of the programmatic areas or themes; it makes little sense to discuss stakeholder action or management and oversight instruments in the absence of clearly defined thematic focus. The interim preparatory committee is therefore encouraged to prepare itself for the discussion of thematic priority proposals to be discussed at the Phuket meeting. This makes it easier to develop options for stakeholder actions and forms of management and oversight.

The discussion of thematic focus areas will need to be rooted in a shared understanding of what this agenda of action is about. The Brasilia meeting was characterized by a sense of realism that strong growth in demand for livestock products will inevitably continue but also by a sense of serious concern and urgency, that such sector expansion needs to occur with growing resource scarcities in mind, and that the sector therefore needs to accelerate its move towards higher efficiency of the use of natural resources, like land, water, nutrients, and with lower emission and pollution intensities. So, yes, there will be growth, but that growth needs to be green. It’s Green Livestock or Green Livestock Growth that we are after. Obviously, stakeholders differ in the importance they attach to “green” as opposed to “growth” but the caption can accommodate both priorities.

The Brasilia meeting acknowledged that for improved sustainability the consumption side is inevitably part of the equation as well, but it also noted that the currently participating stakeholder group would not have the necessary authority and comparative advantage to factor these dimensions into the agenda at this time.

The agenda of action for a sustainable livestock sector as broadly defined above would have to carefully consider the requirements for any thematic focus area to qualify. Again, we can get important clues from the Brasilia meeting: any proposition needs to be technically sound and scientifically defensible; it needs to be politically balanced and regionally diversified so as to create a “big tent”; it needs to add value to existing efforts; and it needs to be results-oriented and effective.

Three broad thematic focus areas come to mind. While they can be taken in isolation, they may be more effective when combined. The first one, “closing the efficiency gap” proposes that environmental gains from bringing a large number of inefficient producers to an acceptable level are much larger than edging up the performance of good producers to ever higher levels of excellence. The second one, “restoring value to grasslands”, focuses on the largest potential for a positive externality that the livestock sector has to offer, that is the capacity of grasslands to provide environmental services in the form of carbon sequestration, biodiversity protection and water provision and quality, which, once valued and priced, can dramatically lift resource resilience and productivity, as well as income and livelihoods. The third encourages the need to recover and recycle energy and nutrients from waste, leading to “zero discharge” in the long term for large scale confined livestock operations.

Closing the efficiency gap. The basic idea goes back to the “yield gap” used in crop science that describes the difference between the actually attained yield and the potentially attainable yield in a given location. This concept is used to quantify the additional supply that could become available if production methods were upgraded to a level currently reached under good management. Obviously, yield gaps are important indicators for people concerned with issues of food and agriculture. We currently observe that, as a result of persistently high food prices and globalised trade, yield growth has been highest with previously large yield gaps. (Russia, Eastern Europe, parts of the South American Cone, parts of sub-Saharan Africa). These same areas have also undergone accelerated technological and structural change, and this process is expected to continue for as long prices remain high. During the rapid catch-up process, existing technology has widely spread, often helped by infrastructure development and credit. However, yield gaps do not automatically address themselves such as in areas with poor market development and deficient infrastructure.

“Yield” is an expression of agricultural productivity, and increases in agricultural productivity are often the result of an intensification process. Productivity describes the technical efficiency of a production process, involving a combination of man-made inputs (technology, capital, labour) and natural resource inputs (and inputs derived from natural resources, such as fertilizer). The agenda of action is more concerned with the latter, knowing that the supply of natural resources will likely be more constrained than that of man-made inputs, and that therefore we encourage more use of the former and less of the latter. We also know that natural resource inputs and environmental impacts are often not adequately priced and can escape conventional productivity analysis.

The basic rationale is hence that closing a big efficiency gap with existing technology brings larger environmental gains than incremental advances at the technological frontier – that is if you aim for global impact. Is this a valid proposition?

The first thing we would need to do is to improve our understanding of what how resource efficiency expresses itself in different contexts and how it can be defined and measured. Livestock systems can then be compared in resource efficiency terms, allowing us to identify and target areas of high return.

Restoring value to grasslands starts from the premise that the world’s grasslands (3.5 billion hectares, equivalent to 26% of global terrestrial surface) are a vast but much neglected resource. Collectively, the world’s grasslands constitute a potentially large, but mostly untapped, positive

externality. They represent the largest potential terrestrial carbon sink and could be harnessed for much improved biodiversity protection and water services. Yet, large parts of grasslands are poorly managed. In some land abundant regions, pasture expansion is often still more profitable than pasture intensification. In marginal areas of Africa, the Near East and Asia, poor management results from poorly defined access to grazing, complicated by widespread poverty and competition for land. Both social and environmental emergencies result. Climate finance, both for mitigation and adaptation, could be a catalyst for ending the neglect of the grasslands, eventually leading to a better appreciation of the multiple benefits of good management.

Grassland degradation is a source of CO<sub>2</sub> emissions and biodiversity loss. It also reduces long term productivity and economic returns, and compromises the capacity of land users to adapt to climate change. Grassland restoration and enhancement has the potential to address each of these issues and thus deliver a combination of mitigation, adaptation and producer livelihood benefits.

Interventions to enhance soil carbon stocks generally improve soil moisture and nutrient retention in soils which can increase primary productivity, net economic returns and resilience to climate change. Greater sequestered carbon can have co-benefits for water resource management and biodiversity conservation. Around 1.5 GtCO<sub>2</sub>-eq or 84% of the livestock sectors' technical mitigation potential is estimated to come from grazing land management measures that boost soil carbon stocks (IPCC 2007). The biophysical potential for soil carbon sequestration in grasslands is generally higher in the presence of moderate to heavy grassland degradation and sufficiently moist climatic conditions. Regions with the greatest total sequestration potentials include East Africa, South America, East and Central Asia.

Investments in soil carbon sequestration can be partially or completely remunerated through the creation and sale of carbon credits to carbon markets. This can help to diversify, augment and stabilize grazers incomes. However, several constraints must first be addressed before carbon credits can be generated, marketed and sold. Foremost, practical methods to measure sequestered carbon, which are affordable, but also sufficiently accurate for carbon markets, need to be developed. Marketing soil carbon from pastures (for mitigation) and directing adaptation finance to grasslands will be other challenges.

My proposal is that the agenda/initiative helps to restore value to grasslands, encouraging good management the uptake of soil carbon enhancing activities through climate finance, emulating in parts the UN-REDD programme (Reducing Emissions from Deforestation and forest Degradation).

Towards zero discharge. Current release of livestock waste is a large negative externality of the livestock sector. Large amounts of organic matter, nutrients and other pollutants contained in animal waste into the environment, particularly surface and ground water, and disrupt ecosystems. Anywhere between 50 to 90 percent of the nutrients contained in feed are not transformed into livestock products but turn up in waste, most of which can be recycled under good management. About 20 to 30 percent of the dietary energy contained in feed is not digested by animals, most of which can be recovered in the form of biogas.

Recycling livestock manure is particularly difficult when confined livestock production is concentrated in certain locations, limiting the opportunities to apply manure to crop land. Such concentration occurs because costs can be reduced by locating close to consuming centers and supplies of feed, but also within the operating area of a diverse support industry. Most countries have experienced such geographic clustering, and struggle to manage the environmental consequences.

A zero discharge programme would need to be driven by the private sector through voluntary commitments, enabled through supporting policies. Technical options exist to recover nutrients and

energy from waste. Policies, within the context of regional planning, need to ensure that livestock densities within any particular area are kept within the absorptive capacity of land in its immediacy. We need to better understand the reasons for industry agglomeration, and the policy tools to better balance geographic distribution. Technical guidelines need to be developed, technologies be transferred and capacities developed.

In addition to the above, there have been discussions about the need for a programme with a strong economic and social objectives, one that would focus on the role of livestock as a growth engine in rural economies, based on the notion that agricultural and rural growth has a higher potential than growth in other sectors to ameliorate incomes of poor and food-insecure people. This may be another option, or, alternatively, the incorporation of these social and economic aspect within the three suggested thematic areas, that the group may want to consider.

Here are my questions to you:

Shall we feed the Phuket meeting with some proposal for thematic areas, and which? Any of the above?

Can we design the meeting agenda to accommodate accordingly? Is it advisable to prepare notes on stakeholder action and governance form with these or similar programmes in mind? And thinking ahead, what do we want the “launch” to be? The start of a programme, a declaration of joint intentions, something else?

As said this an attempt to prepare a fertile ground for discussion.

I look forward to your reactions.

Kind Regards, Henning