

**The Role of Animal Agriculture
in a Sustainable 21st Century Global Food System:
A Scoping Workshop**

CHARGE TO THE WORKSHOP PARTICIPANTS

Several recent studies have concluded that livestock farming, broadly considered, is a major source of anthropogenic greenhouse gas emissions, water degradation and biodiversity loss. However, estimates of the contribution of animal farming to net greenhouse gas balance vary and depend on the different assumptions inherent in the analyses. Few comparative studies of the economic, environmental, public health and food security consequences of alternative animal production systems exist, and there are even fewer comparisons of the impacts of alternative systems to the present food system, including scenarios in which the production and consumption of meat and/or dairy products is substantially reduced. Thus, the risks and benefits of alternatives remain uncertain.

Because livestock production can contribute to climate change and may be affected by climate change policy and other environmental regulations, a rigorous, evidence-based inquiry is needed to examine the potential economic, environmental, food security, and health impacts of alternative ways to produce dietary protein. Such an inquiry might provide information to inform and shape agricultural and climate change policy.

The subject of animal agriculture is complex and animal production is deeply embedded in the agricultural economies of the United States and other industrialized countries where meat consumption has stabilized, as well as in developing countries where meat consumption is increasing with population and income, and the production of meat is expanding and in some cases, becoming more intensive.

This workshop is a preliminary exploration of the complexity of issues related to animal agriculture that are important to consider from a policy perspective and might be objectively analyzed with existing data and/or models. In planning the workshop, the Steering Committee envisioned a matrix in which different scenarios are evaluated for their environmental, economic, and other impacts.

Issues/Impacts	Different Scenarios of Production and/or Consumption			
	Key questions	Key questions	Key questions	Key questions
Environmental	“ “	“ “	“ “	“ “
Economic	“ “	“ “	“ “	“ “
Public Health	“ “	“ “	“ “	“ “
Animal Welfare/ Social concerns	“ “	“ “	“ “	“ “
Food Security	“ “	“ “	“ “	“ “

The assignment to Presenters at the scoping workshop is to address issues and impacts. Rather than argue a point of view or present solutions, the presenter should identify:

1. What do we know?
2. What do we not know?
3. What should we do to get where we need to go?
4. More...
- 5.

It is anticipated that the plenary presentations and conversations around the issues and impacts will lead to the development of a set of scenarios that will be further examined in working groups.

The workshop participants are essentially asked to fill in the cells of the matrix cells by identifying central questions that should be asked about a particular scenario relative to the issues/impacts.

Ultimately, the goal of the workshop participants is to “scope” prospective activities that would lend themselves to a more in-depth analysis by the National Research Council, BANR, Institute of Medicine, and other groups. Given the breadth of issues related to animal agriculture, several potential projects might be envisioned. The working groups are asked to define the key questions of a potential study and draw boundaries around them (for example, a boundary might be to evaluate an issue as it pertains to industrialized economies where per capita meat consumption is high separately from those countries where meat consumption is growing but still much lower).

At the end of the meeting, an informal summary of the workshop will be developed by staff, with the help of participants. The summary will serve as the basis of proposals for future NRC studies, workshops, and forums.

The Steering Committee for the Scoping Workshop on the Role of Animal Agriculture in a Sustainable 21st Century System

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