PANEL 5: NEW APPROACHES TO 'ALTERNATIVE' AGRICULTURE IN HIGH AND LOW INCOME COUNTRIES AND THEIR ECONOMIC ASPECTS

ORGANIZER AND CHAIRPERSON

Olvar Bergland (The Agricultural University of Norway)*

PANEL DISCUSSANTS

Policy Approaches towards Alternative Agricultural Systems *Ian Hodge and Katherine Falconer (Cambridge University, UK)*

Innovations in Alternative Agriculture Policy to Capture Full Natural Resource Values *David E. Ervin and Elizabeth M. Higgins (Henry A. Wallace Institute for Alternative Agriculture, USA)*

Superlative Index Numbers as a Measure of the Productivity and Relative Efficiency of Alternative Agricultural Practices in Low Income Countries *Simeon K. Ehui (International Livestock Research Institute, Ethiopia)*

RAPPORTEUR

Latha Nagarajan (M.S. Swaminathan Research Foundation, India)

The background for the discussion was the concern that conventional agricultural production practices may not be sustainable in the long run. Alternative organization of agricultural production *may* reduce environmental impacts, enhance long-term productivity, improve product quality and improve living and working conditions.

Ian Hodge focused on three environmental issues relating to production agriculture: biodiversity, nitrate leaching and pesticide contamination. An approach based on transferable permits relating to environmental indicators could establish the necessary incentives for farmers to modify their production systems to meet regional environmental objectives. Such a permit system would be flexible.

David Ervin brought in the concept of 'whole farm planning' as a term describing planning and management systems which attempt to capture all resource relationships on the farm and all potential enterprises in a dynamic interplay. Whole farm planning is a voluntary effort which tends to have high

initial costs, but with great potential for individual adjustments and future gains. The lack of specific agricultural environmental performance standards and indicators has not permitted whole farm planning to reach its potential in achieving improved natural resource management.

Simeon Ehui argued for the use of superlative index numbers, as expressions for total factor productivity, to measure and assess agricultural productivity and the relative efficiency of the alternative farming practices. Of particular importance is the long-run sustainability and competitiveness of different farming systems. Traditional productivity measures are biased and often misleading, which can result in inappropriate policy assessments and recommendations.

The general discussion which followed brought up the concern that whole farm planning is an on-farm tool, while agriculture-related environmental problems often have off-farm effects. Ervin acknowledged that whole farm planning is not a 'global' planning tool and that there is a certain lack of feedback with respect to environmental performance. However, these concerns are not unique to whole farm planning.

The discussion brought out views on both the principles and details of regulatory policies in agriculture. The need for flexible regulatory policies was stressed. Hodge emphasized the policy trade-off between complexity and transactions costs, reminding us that improved environmental performance, not regulatory precision, is the objective. Creation of new markets as part of regulatory policies also raises concerns about how this is to be done, and by whom.

Bergland closed the panel by pointing out that the discussion about policy instruments for 'alternative' agriculture parallels the general discussion in environmental policy, and he was pleased to see that different forms of voluntary agreements are being considered. He stated that the panel discussion had fulfilled his expectations in terms of providing some ideas for what we, as policy analysts and instrument innovators, could pursue in the future.