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## COMMITTEE ON COMMODITY PROBLEMS

### INTERGOVERNMENTAL GROUP ON MEAT AND DAIRY PRODUCTS

#### Twenty-first Session

Rome, 13-16 November 2006

#### REVIEW OF SYMPOSIA RECOMMENDATIONS: PROPOSED FAO AND IGG ACTION PLAN

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## I. MARKETING AND TRADE DIMENSIONS OF AVIAN INFLUENZA PREVENTION AND CONTROL

### A. A REVIEW OF THE PRESENTATIONS (SEE AGENDA)

1. The rapid expansion of the global poultry industry has been seriously affected by the recent and continuing outbreaks of Avian Influenza (AI). Prices have fallen by half in some markets including those not having the disease. Market disruption, declining and shifting international trade flows, increased direct and indirect costs due to AI and the associated risks to human health hold important implications for the future development of this important subsector of national economies. This symposium, organized in conjunction with the 21<sup>st</sup> session of the IGG, allowed delegates and invited participants to focus on challenges facing poultry development in the context of AI outbreaks and on guidelines and principals which support stakeholders concerned with policy and strategy formulation.
2. Prevention and control of AI outbreaks require country specific measures which reflect their marketing and trade position. The price to producers and consumers is dependant on relative shifts in demand and supply which in turn reflect market structures caused in part by their net trade position. The impacts of disease outbreaks in a closed market economy differ from those in net importing or exporting countries. Production systems and marketing chains as well as preventive and control measures all affect costs and unless addressed in a comprehensive - framework with collaboration from all stakeholders, results will be less efficient. Case studies of the impact of AI on markets in Egypt and Turkey were presented which highlighted, in the context of AI disease control and prevention, the differential impacts on markets. Certainly it was clear the important role played by effective communication in addressing the impact of AI on markets.
3. While there is a growing understanding of factors contributing to many of the direct costs of an outbreak, the hidden costs including the impact on livelihoods and households, particularly of the millions of small rural village or backyard producers poor, is less well known. Poultry derived income, even if small, is crucial for some household strategies and the many women who are mainly responsible for production. The symposium was informed of the Livelihood Analyses Framework approach which is an analytical tool providing a multi-dimensional approach to the understanding of livelihoods and the understanding of required linkages within this framework. Further research is needed on the way in which households cope with AI-related livelihood issues, particularly under the sector 3 and 4 forms of production systems. More attention should be given to other AI issues relating to the smallholder sector such as marketing and trading practises, transportation and spread of infection and ways by which the contamination chain might be broken.
4. An issue which arose throughout the symposium was the need for clearly understanding public policies and private strategies, in particular the roles which public and private organizations, both national and international, should assume to mitigate the AI impact on stakeholders. The marketing chains, if well understood, serve as a useful mechanism to facilitate the potential targeting of intervention to different market participants. Attention must be given to disease prevention in the context of the role played by markets, price and economic incentives which motivate human behaviour, as well as the trade issues which motivate policy orientation. It was clearly emphasized that communication channels and messages in many cases do not adequately cover risk issues.
5. Rather than a reactive approach to address AI, which typically focus on disease control and eradication, a “Structured Risk Management Approach” (SRMA), currently utilised in Canada, was presented. This approach has the purpose of motivating desired behaviour in areas of surveillance, compliance, biosecurity and emergency response through a system of compensation throughout the entire AI chain from prevention to recovery. By engaging all

stakeholders in identification of needs and costs, agreements could be reached on cost sharing between public and private players, possibly with help from the international community. Both implicit and explicit forms of cross-compliance between indemnification and desired behaviour is needed. There are options to financing the SMRA and it was suggested that this approach could be implemented even in developing countries.

6. The symposium was informed that FAO in collaboration with the OECD is undertaking a detailed world agricultural commodity model which should assist in assessing world markets and trade impact of major animal diseases (AI, FMD and BSE). It is clear that market responses to outbreaks depend critically on such factors as type of disease, consumer responses, size of the market and trade linkages.

7. The OIE informed the Group of the ongoing work on training, support to development of new scientific information and work associated with WTO compliance and with mediation of disputes. The organization actively collaborates with FAO, WHO and regional organizations on animal health issues. AI is receiving considerable attention following the outbreaks although work in this area has been ongoing for some time. Of particular concern is the lack of understanding in some countries of what OIE can offer relating to AI. Hence, priority attention is being given to training.

8. The poultry breeding industry is a segment of the poultry sector in which production systems 1 and 2 practise a high level of biosecurity as infection could have huge implications for the financing and reputation of major companies. It also poses considerable risk for disease transmission. While it is possible to control security in vertically integrated and many firms in system 3, there are always risks caused by transportation systems, movement of product and contamination of facilities. Risk of disease is higher in systems 2 and 3 and more assessment of risk is needed in these areas.

9. A final technical session of symposium provided examples of the efforts by WHO, FAO and UNICEF to support actions by governments and the private sector through communication campaigns to extend PR through various media which counteracts some of the negative concerns and fears of consumers. Examples were provided of how such activities can have a very positive impact on restoring consumption.

## **B. A SUMMARY OF THE DISCUSSION AND THE EMERGENCE OF CERTAIN THEMES**

10. It is revealed that the impact at AI is linked to the chronology of disease effects:

- the initial market shock (mainly driven by consumer fears);
- the effect of control measures imposed by governments (market restrictions, movement control, depopulation);
- the recovery process (which may take place at different speeds in different parts of the poultry sector).

11. HPNAI outbreaks (the ones that cause major market effects) are occurring in the context of an already volatile poultry market. International effects have been quite substantial in terms of prices, volumes and shifts in location. Consumption impacts can be strong. At national level there are different impacts in different types of markets (as described in Prof Upton's framework and illustrated by country case studies, examples highlighted from interventions from the floor) depending on the extent to which a country is closed, importing or exporting and has or has not experienced an HPAI outbreak.

12. Within countries there are differences in impact according to the production sector (1-4) and at different points in market chains. Losses and benefits may be differently distributed. Both of these points make the case for disease control strategies that are fine-tuned to knowledge of the poultry sector. For example:

- in sectors 1-2, the primary concern is for rapid recovery of lost markets which may hinge on international trade agreements. With sufficient information and renewed market access these sectors can be very resilient. However, they are not immune to shock - several quite large producers have gone bankrupt;
- sector 3 is dependent on markets that may be subject to shocks and closure and vulnerable as it depends on loans;
- in sector 4, poultry have multiple uses. This sector has lack of access to information, is vulnerable to loss of assets and income for even short periods, and tends to recover slowly. Although not connected as strongly to formal markets as sector 3, severe depopulation of movement controls affect restocking.

13. All elements of disease control process play a part in market effect – culling, compensation, movement control, market closures and progressive withdrawal of measures. The impact of these on markets is not fully understood.

14. There has been a strong private sector effort. “AI has united the poultry industry”. HPAI control is widely agreed to be an international public good, largely because of its actual and potential impact on human health. Given the connectivity of the global poultry sector (changes in Thailand are felt in Brazil) perhaps it is also in “international private good”. It was suggested that international agencies do more to assist the private sectors in different countries to learn from each others experience – perhaps as much in sharing thinking processes as in sharing processes.

15. There is a need to continue work with governments and their private sectors to fine-tune disease control strategies and promote forward planning. Targeted interventions would take account market impacts in different types of national market and different sectors. The existence of regulations for zones and compartments offers the possibility to be creative, although in practice it has been hard to establish free compartments in countries that already have NAI (discussion of the OIE paper highlights some steps being taken to address this). The compensation process still needs more attention and the Symposium participants indicated that FAO should continue to work on this kind of analysis. Considerable attention was focused on the topic of compensation and private indemnity. However, it was recognised that compensation does not compensate for all economic losses. It is important that any analysis undertaken by international organisations translate into policy and strategy changes in animal health control.

16. There continues to be a need to learn about the interactions between the biology of virus and the actions of people. Different sectors contribute in different ways to introduction and spread of virus but there are still gaps in knowledge of the causes and effects. A targeted approach to disease control would look jointly at epidemiological risk reduction and distribution of economic effects. It was recognized that FAO has the unique capability positioned to exploit multidisciplinary capability in this analysis.

17. There is value in examining all points on a market chain that constitute a potential risk – but this may require various organisations to be forthcoming with information (breeding stock case study was an interesting example). Linkages with other organisations to share information and data would be an important element in this type of analysis.

18. More understanding is needed to identify how the provision of information “motivates desired behaviour?” (Burden and De Balough presentations). It was recognised that sectors 1-2, 3 and 4 may need different media and approaches – and in some cases information dissemination in local languages. It appears that appropriate information delivered through a trusted medium can

reduce market impacts (probably not the initial shock), with the question of trust very different in different cultures, countries and sectors. Enhancing communications processes was recognized as important, particularly in collaboration with private sector. It was emphasized that rapid response and control provides a strong signal to restore consumer confidence (actions speak louder than words).

19. Regional linkages were mentioned in the comments from Kenya. Regional markets are interdependent in both formal and informal elements – including the illegal markets that are very hard to monitor. What is needed individually and collectively to strengthen the activities in regional economic groupings to reduce their collective market impacts and their costs of control. It was recognized that more regional meetings are needed, well co-ordinated, and preceded by regional market analysis.

20. It is important to help individual countries understand and interpret OIE terrestrial code.

21. When devising control strategies it is important to think forward beyond the outbreak to restoration of markets and rehabilitation of the sector – how will the benefits be distributed? UN Knowledge network has just been initiated on socio-economic impacts of HPAI control, hosted by FAO. A wide membership would be welcome, delegates are requested to indicate interest to the Secretariat.

### **C. RECOMMENDATIONS TO THE IGG**

22. The Secretariat, in collaboration with the ECTAD sub-group on the socio-economic impact of avian influenza, should:

1. enhance North-South linkages between private sectors, building on and sharing the lessons learned on how to effectively respond to AI outbreaks, in particular with mechanisms to strengthen private sector regulations which mitigate against disease spread;
2. continue work on compensation, ensuring that analysis translates into capacity building and policy change. Within this regard, investigate the possibility of assisting developing countries (specifically working with the private sector) to use risk assurance schemes as a means to provide compensation;
3. recognise, within the context of AI, the need for a balance between veterinary interventions with market realities. Analysis should be undertaken on appropriate approaches to disease control, balancing epidemiological risk reduction and distribution of economic effects;
4. in the context of the transboundary nature of AI, regional capacity building should be initiated to understand how to reduce the collective impact market in the context of the costs and management of disease control. Activities should focus on harmonising policy interventions, looking the risk of transboundary trade in poultry and products, and strengthening links between private sector;
5. acknowledge the financial support of many donors in providing financial support in the organization of this Symposium.

**An FAO Symposium:**  
**Markets and Trade Dimensions of Avian Influenza Prevention and Control**  
*Tuesday, 14 November 2006*

Shaping the landscape of global livestock industry are the escalating and pervasive outbreaks of animal diseases. In a context of steadily rising demand for locally produced and imported livestock products, these outbreaks are posing considerable challenges and imposing costs on livestock producers, industries, and policy makers around the globe. While the short term costs of animal disease outbreaks are shown to be considerable, they also hold long term implications for trading patterns, policy formulation, industry investment and sector development.

It is clear that the costs of disease outbreaks and economic implications for an industry transcend the actual costs of controlling the disease. This is true in developed countries, where despite the availability of government's means to compensate a given sector, market shocks induce costly ripple effects throughout the industry and economy. It is even more true in developing countries where control measures need to be assessed in terms of the impact on industries and market participants, in particular small producers who are at risk from livelihoods shocks. The choices of policy intervention and control measures can have differential impacts on markets, trade, and different sub-groups of the sector. Increasingly, and very acutely in the case of avian influenza which has implications for human health, policy makers are faced with the difficult question of how the livestock sector should be structured and how markets should evolve to limit the damaging impact of animal disease outbreaks.

Through a mixture of presentations and dialogue, the symposium responds to increasing concern about the socio-economic impact of animal disease in the context of market shocks and policy formulation. The ultimate objective of the symposium is to inform FAO delegates and invited participants on guidelines and principals which support policy makers in understanding:

- The role of market and trade in determining the direct and indirect costs of animal disease outbreaks.
- The economic and social implications of various policy responses in the context of production systems, linkages to markets, and magnitude of disease outbreaks.
- Appropriate policy and institutional measures to put in place which minimize the economic costs of animal disease.
- The role of public/private sector linkages in mitigating AI-induced market shocks.
- Lessons learned from different country specific control mechanisms.
- Appropriate international policies and their role in maintaining market opportunities in the context of AI outbreaks.
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**AGENDA**

08:00 - 09:00 Registration

09:00 - 09:15 Opening, Review of the Objectives of the Symposium

09:15 - 11:00 Market Impact of Avian Influenza: Theory and Practise

- Impact of AI on global markets: an overview, Nancy Morgan, FAO
- A framework for identifying market and trade impacts of HPAI and its control: theory and empirical findings, Martin Upton, Reading University

- How do markets respond to disease outbreaks? The differential impact on market participants. Case study presentations (Egypt and Turkey)
- The hidden costs: impact on livelihoods and households, John Curry, FAO
  - Smallholder perspectives: comments by Frands Dolberg

11:00 - 11:30 Break

11:30 - 11:45 HPAI: importance of the crisis, challenges in prevention and control and FAO's Response" - J Domenech, J Lubroth, V Martin, FAO, Animal Health Service

11:45 - 12:45 Policy responses

- Policy choices and institutional options: how do they affect disease costs. Jonathan Rushton, FAO
- Public/Private Sector Linkages: Issues in maintaining markets for large and small poultry operations. What are the trade-offs? Robert Burden, Serecon Consulting Company, Canada

12:45 - 14:15 Lunch Break

14:15 - 15:15 International Trade Dimensions of Animal Disease Control:

- Impact of animal disease on international markets, Merritt Cluff, FAO
- The risk of AI transmission through breeding stock, Alan Emsley, USA
- What are the policies needed to minimize market disruption, Sarah Kahn, Head of International Trade Department, OIE
- Discussion

15:15 - 15:45 Effective Communication: A tool for minimizing disruptive market impacts. Katalin DeBalogh , FAO, Animal Health Service

15:45 - 17:30 "Best Market Practises in Mitigating Market and Trade Impacts of Animal Disease".

- Perspective of Panel of Experts (5-10 minutes each)
  - Robert Burden, Serecon Consulting Company, Canada
  - Alan Emsley, USA
  - Sarah Kahn, Head of International Trade Department, OIE
  - Frands Dolberg, University of Aarhus, Denmark
  - Jim Sumner, President of the International Poultry Council
- Discussion

Summary and Recommendations, Anni Mcleod, FAO coordinator of the ECTAD Socio-Economics Group and Senior Officer, Livestock Policy, AGA



## **II. DAIRY VALUE CHAINS AND COMPARATIVE MARKETING SYSTEMS**

### **A. MOTIVATION FOR THE SYMPOSIUM**

23. The symposium was undertaken as increasingly, policy questions are being examined in the context of industry value chains. Value chains, defined in terms of the value adding links existing from the production of raw commodities through to their final demand/consumption, have been evolving significantly over time, and at different speeds by country and by commodity. The value chains of developed countries have become much more integrated with the service sector and the demands of a high income and highly urbanized workforce, providing product variety and highly differentiated products. In developing countries, whose industries have a more local scope and lower income consumers, the value chain is often much simpler. However, in the context of globalization, there are increasing pressures across countries, driven by forces such as increased information, advancing technology, foreign investment, and trade, to effect change in domestic value chains. In agriculture and food, public intervention, or the lack of it, has often influenced the nature and performance of value chains.

24. The dairy industry is a global industry and while it is largely stagnant in volume terms in most developed countries, it is expanding rapidly in many developing countries, particularly in Asia and Latin America. However, its development status varies significantly. In most of the developed world, and in certain regions such as Latin America and South Asia, the dairy sector is an important sector of the agricultural economy, and milk and milk products are supplied by traditional or non-commercial markets that predominantly serve fresh milk to local markets.

25. One of the key features of the dairy sector has been the development of marketing systems that involve various degrees of government intervention. These have evolved in ways often quite unique to the dairy sector, owing to the nature of milk as a perishable commodity with high transportation costs, and significant market power of milk processors whose economies of size have increasingly reduced their number, and widened their scope. Government legislation may vary in degree, from simply enabling milk pooling, to permitting producer cooperatives or associations to collect and sell milk and milk products cooperatively, to full national management of milk supply through quota systems, and finally to state intervention buying and selling of milk products to support prices, including the disposal of products on external markets with the use of export subsidies. Such legislation sets up corresponding marketing systems to suit national economic and social contexts, and may have a major bearing on the industry.

### **B. OVERVIEW OF THE PRESENTATIONS**

26. The symposium was informed that in one were to consider the dairy industry to consist of four different types of production systems, some distinguishing features might be found. Highly structured sectors having long established and robust legal and regulatory systems tend to protect their industry using various government regulations. Other countries are less protected having more liberal regimes and there are a few countries that might be considered as being fully deregulated, but there is some evidence this can have a destabilizing influence on the sector. In several countries it would appear that the competitiveness of processors is increasingly influencing the pricing of raw milk. In the developing countries informal and traditional marketing structures prevail having there own often very simplified marketing structure and the marketing system can be less relevant than other social and livelihood factors.

27. The symposium was informed of some preliminary analyses of marketing systems, prices and income shares along the value chain undertaken by the IFCN. These illustrate the price impact of border controls, farm organization, and on shares of consumer prices going to various segments of the chain. The issue of what constitutes a "fair price" at the different levels remains open and requires further consideration.

28. When considering marketing systems and growth, a comparative study in selected countries in North, South and Central America, was presented to the symposium. It concluded that milk production and trade are changing in structure and continue to be important factors in regional and small farm development. Structures tended to relate to the range of products produced, the nature of farming systems and other factors. One conclusion reached was that when milk price is a “dependent” factor, the trade balance and degree of government regulation were important factors determining its level. The study also showed that higher regulation was associated with lower growth; however, there also seemed to be a trade off between growth and stability.

29. A review of some informal and traditional dairy markets in developing countries has highlighted the important role they have which is demand driven. They can facilitate growth in the industry and provide alternatives particularly in remote areas. To fully contribute to the dairy development will require that they address some of the quality and efficiency problems presently encountered.

### C. KEY CONCLUSIONS

30. The symposium addressed the theme “Do Marketing Systems Matter?”. This theme was addressed by all participants, and the question was answered with a strongly positive reply: they matter a lot. However, the symposium noted they are in process of significant change, with particularly strong pressures at either end of the regulation/government intervention continuum.

31. It was noted that marketing systems need to be managed if they are to succeed, and how they are managed is extremely important for those in the chain.

32. Data indicators on how marketing systems of various countries compare are difficult to construct for many reasons. Some data suggest that higher state intervention does increase the producers share of the consumer dollar. However, the same data show that higher regulated prices do not necessarily lead to higher producer well being, relative to labour activity in the local economy.

33. Study of countries of the Americas revealed that higher state of coordinated intervention was negatively correlated with industry growth and other indicators of industry conduct and performance, such as competitiveness and industry concentration. The information underscored the notion that high levels of state intervention in marketing systems may have distortion effects on the sector which inhibit its development.

34. The symposium noted the polar nature of dairy industry development, and in particular the continuing important presence of the traditional/informal sector. This sector is important to livelihoods of poor producers, and importantly to the well being of poor consumers. It is important that this sector adapt in the face of ongoing pressures created by urbanization and the demand for quality and safety, with policies that educate and train producers and processors, providing also information they need to improve their ability to compete in the changing market place.

35. It was noted that future pressures for change are many, in particular due to technology and economic factors. Of critical importance for the global dairy industry is the outcome of multilateral negotiations which will likely have the impact of increasing the role of the private sector in managing national and global supplies of milk products, with the role of public intervention declining, albeit over a longer period of time.

36. The symposium examined several key questions including:

1. How can/should developed countries maintain regulated dairy marketing systems in the context of more open global trade? It was concluded that with trade liberalization,

adjustment would be necessary, but would take time and likely use trade instruments such as the Sensitive Products concept to adjust market access gradually.

2. How far into the dairy marketing chain should producer cooperatives/associations go and how can this be determined? It was concluded that they could go very far, and as long as they continue to add value.
3. What is the future policy context for traditional/informal markets? It was concluded that these markets must adapt or perish. Adjustment cannot be overnight, and draconian policy should be avoided. However, measures to safeguard consumers are important. Education and training will help in the adjustment process.

### **An FAO Symposium:**

#### **The Dairy Value Chain and Comparative Marketing Systems**

*Wednesday, 15 November 2006*

The dairy industry is present in most all countries of the world with varying importance in terms of its role in producer livelihoods and in food consumption. Globally there appears to be considerable potential for growth as incomes grow, populations urbanize, and as technology spreads to facilitate new product development and shelf life.

In developing countries dairy is a growing industry, and in many cases strongly so. In many of these countries, milk is largely marketed through the informal sector. In some countries, cooperatives also play an important role. In developed countries, where the dairy industry is highly organized and integrated with processing and retailing activity, the industry is often marked by a high degree of protection. At the same time, increasing trade, and in particular trade agreements both regional and multi-lateral have the prospect of impinging on national milk marketing systems.

Marketing systems are determined by extensive legislation, and affect players throughout the supply chain. This Symposium would examine various marketing systems and their impact on the dairy value chain. The main questions to be addressed are: "How do alternative marketing systems affect the performance of the dairy value chain, and for whom?", "How far into the marketing chain should producers venture?" Which systems will work best in the evolving trade policy environment?

The objective of the symposium is ultimately to focus on dairy policy, and how it may best serve the industry in the future. Presentations by key industry experts will cover key fields of interest. A wrap-up panel/discussion will attempt to provide conclusions/recommendations.

Proceedings/papers from this Symposium will be published by FAO if appropriate financing is found.

### **AGENDA**

Wednesday, 15 November

09:00 - 09:15    Opening, Review of the Objectives of the Symposium

09:15 - 10:30    The Dairy Value Chain and Comparative Marketing Systems: An Overview  
(Philippe Jachnik – ATLA)

Discussion

Break

- 11:00 - 11:45 Marketing Systems, Prices and Income Shares along the Value Chain  
(Torsten Hemme – IFCN)
- 11:45-12:30 Marketing Systems and Growth: A comparative analysis  
(Alejandro Galetto – Sancor)
- 12:30 – 14:00 Lunch
- 14:00-14:45 Marketing Systems and Development: The role and future of informal dairy markets in Developing Countries.  
(Steve Staal – ILRI)
- 14:45-15:30: What is the future for dairy policy? - pressures and opportunities  
(FAO –Tony Bennett, Merritt Cluff, and Carlos DaSilva, )

Break

- 16:00-16:45 Panel - Do marketing systems matter?

Moderator : Carlos DaSilva - FAO

Sally Bulatao – National Dairy Authority of the Philippines

Lusato Kurwijila - Sokoine University

Zipporah Kiruthu – Kenya

Richard Tudor Price - Canada

Dr. Zhang - LEI/ China

This panel will address specific questions to be determined. Theme will be “Do marketing systems matter? “ with questions such as “What works best and for whom?”

- 16:45-17:30 Facilitated discussion - some recommendations for policy development

Attempt will be made to address the following questions:

- 1) How can/ should developed countries maintain regulated dairy marketing systems in the context of more open global trade?

- 2) How far into the dairy marketing chain should producer cooperatives/ associations go and how can this be determined?
  
- 3) What should be the policy context for informal markets?