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**SUBSIDIARY BODY REPORTS
COMMERCIAL AGRICULTURAL QUALITY STANDARDS**

Requirements for transition countries to export meat products to the European Union

Report by the secretariat¹

Summary

The Committee on Trade during its first session held on 21 to 23 June 2006 decided to “develop and support capacity-building activities and partnerships” (ECE/TRADE/C/2006/18 - Decision 5(vi)). Following this decision, a consultant elaborated a report on “Requirements for transition countries to export meat products to the European Union”. The document describes how those countries could strengthen their institutional and technical infrastructure by implementing internationally accepted agricultural quality processes and standards, and by establishing related systems of conformity assessment to facilitate exports of meat products.

The Specialized Section on Standardization of Meat, a subsidiary body of the Committee on Trade, discussed the report at its sixteenth session (see document ECE/TRADE/C/WP.7/GE.11/2007/6). The Specialized Section noted that the present document would serve as a basis for capacity-building activities in the Central Asian region.

The Committee on Trade is invited to take note of this document and to discuss and decide on appropriate means to implement capacity-building measures in Central Asia.

¹ This document was submitted late for document processing as clearances from relevant parties were received late.

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ABBREVIATIONS

ADNS	Animal Disease Notification System
AH	Animal Health
AW	Animal Welfare
BIP	Border Inspection Post
CBC	Capacity Building Component
CEO	Chief Executive Officer
CVO	Chief Veterinary Officer
DRSU	Drug and Residue Surveillance Unit
EHO	Environmental Health Officer
EMO	Export Meat Order
EU	European Union
FAO	Food and Agriculture Organization
FH	Food Hygiene
FVO	Food and Veterinary Office
GDP	Gross Domestic Product

GHP	Good Hygienic Practices
GIS	Geographical information system
GLP	Good Laboratory Practices
GMP	Good Manufacturing Procedures
HACCP	Hazard Analysis and Critical Control Points
HRD	Human Resources Development
I&R	Animal Identification and Registration
ICAR	International Committee for Animal Recording
MoA	Ministry of Agriculture
MOH	Ministry of Health
MSQA	Meat Safety Quality Assurance
MT	Metric Ton (1000 kg)
NGO	Non-Governmental Organization
OIE	World Organisation for Animal Health
PIC	Property Identification Code
PISG	Provisional Institutions of Self Government
QMS	Quality Management System
RD	Rural Development
SC	Steering Committee
SOP	Standard Operational Procedures
SPS	Sanitary and Phytosanitary
SWOT	Strengths, Weakness, Opportunities and Threats
TADinfo	Transboundary Animal Disease Information System (FAO)
TAIEX	Technical Assistance and Information Exchange (EU)
TOR	Terms of Reference
TRACES	Trade Control and Expert System
UN	United Nations
UNECE	United Nations Economic Commission for Europe
VBI	Veterinary Border Inspection
VMP	Veterinary Medicinal Products
VPH	Veterinary Public Health
WB	World Bank
WFP	World Food Programme
WHO	World Health Organization
WTO	World Trade Organization

I. INTRODUCTION

1. In many transition countries the agricultural sector is an important part of the economy. However, these countries often lack experience in implementing international agricultural quality standards and sanitary regulations. To export their produce, this places them at a competitive disadvantage because compliance with these standards and regulations is a condition for access to developed economy markets.
2. To increase exports of meat and meat products, transition countries need to have an adequate infrastructure for supplying and slaughtering livestock and for processing, storing and transporting meat products. They also have to comply with veterinary and sanitary rules and regulations of the importing countries, particularly in the EU and the US.
3. The purpose of this document is to propose how these countries could strengthen their institutional and technical infrastructure by implementing internationally accepted agricultural quality processes and standards, and by establishing systems of conformity assessment (importing countries normally require certificates of conformity for applicable standards from the exporting country).
4. The World Trade Organization (WTO) Agriculture Agreement - which was signed as part of the Uruguay Round Agreements in Marrakech in 1994 - was a significant step towards integrating the agricultural sector into the rules of a multilateral trade system. The agreement included specific commitments by WTO Member Governments to reduce tariff and non-tariff protection, as well as subsidies to production and exports accorded to agricultural products. The implementation of these commitments began in 1995 and was phased over a period of six years (ten years for developing countries). Negotiations for continuing the reform process started one year before the end of the implementation period, and the talks have now been incorporated into the negotiating agenda of the Doha Round.
5. The Food and Agriculture Organization (FAO), being a source of knowledge and information especially for the developing countries, and the WTO have created the Codex Alimentarius Commission (CAC) to develop food standards. National and international regulatory bodies such as the European Union (EU) use these standards to create a free market between Member States.
6. UNECE has contributed to international trade by creating standards to allow a common trading language and to define the commercial quality for foodstuffs.
7. Exporting meat to the EU is only possible after fulfilling certain conditions. Once these conditions have been implemented, it is easy to fulfil additional conditions when necessary, to be able to export to other countries. EU legislation presents a clear package of legislation, including the needed institutional and technical infrastructure to enable export to the EU. Because of this and the possibility of receiving financial support to establish the necessary infrastructure, this report recommends implementing the EU legislation to develop a profitable meat industry, exporting to the EU and other countries.

8. This report covers all aspects for the profitable export of meat. In chapter 1, background information can be found on the countries in Central Asia. In chapter 2, we highlight the importance of a National Agriculture Policy (NAP) to enable an integrated approach for developing the sector. Chapter 3 presents the livestock sector, and chapter 4 outlines the operation of the meat sectors, the standards and the necessary infrastructure to successfully export meat. Chapter 5 presents the regulations and standards for meat production. In chapter 6 we give all legal, institutional and technical aspects for exporting meat to the EU. Chapter 7 details how to import meat to the EU and demonstrates the potential segments for import from the transition countries. Once aware of what is necessary to export meat to the EU, a work plan of the supply chain should be prepared. In chapter 8, the establishment of a supply chain is described and in chapter 9, a general action plan is presented. Finally, a bibliography can be found in chapter 10.

9. This report is intended for discussion by countries located in Central Asia, including Mongolia, Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan and Turkmenistan. However, the results of this study are also valid for each country wanting to export live animals and their products to the EU and other western countries. The most important factor for each country to remember is that food safety has to be the primary issue. Farmers, the basic producers of food, can only sell their products to the food chain when the quality is guaranteed.

II. SUMMARY AND POLICY

10. This paper presents policy decisions to be made and the institutional, legal and technical infrastructure to be developed for the meat sector in order to export meat to the EU and other countries.

A. Integrated plan to develop meat sector

11. It is challenging to establish a well functioning meat sector for the transition countries. These countries are facing severe production constraints due to difficult climates, the presence of endemic diseases, the small size of farms and the lack of a functioning infrastructure.

12. To develop the meat export sector, it is important to have a clear picture of all requirements. One approach would be to work toward meeting EU requirements and those of the Codex Alimentarius Commission (CAC – see Annex 3). Fulfilling the EU and CAC requirements means that a country can easily fulfil conditions for export to other countries.

13. The institutional, legal and technical infrastructure to use for structuring the national agricultural and food policy plan should be the same as for the implementation of the total food chain.

14. Experience has shown that in most cases priority should be given to the institutional aspects. Certainly this should be the case if development of the sector is financially supported by sources other than national ones. This allows the development process to be controlled easily. However, experience also shows that the sustainability of these institutional projects is rather low for two reasons:

- (a) Institutional projects do not produce a concrete, visible and beneficial result in the short term;
- (b) At the conclusion of the project, Government finances are not always available and, at that point, it is not always possible to ask for financial contributions from the producers.

15. Therefore, the Ministry of Agriculture (MoA) should give the highest priority to supporting the development of farms, thus helping to create a self-sustained industry capable of carrying its own costs. The difficulty for the government is often to find the needed financial resources. Good investment conditions must be created, such as keeping interest rates low and holding the farmer responsible for his investment.

16. For farmers, the farmers organisations could create the necessary infrastructure to negotiate prices and to analyse improvements favourable to local products like buffalo milk and meat.

B. The meat chain

17. Many organisations and companies are active in the livestock sector. They should all be involved in the development of the food chain. Therefore, it could be interesting to create commodity boards. A commodity board represents the entire production chain from raw material to finished product, including producers, industry, as well as wholesale and retail trade. The Government should support the establishment of the supply chain to achieve the necessary infrastructure for the meat sector. Checks on the end product alone would clearly not be capable of providing the same level of safety, quality and transparency to the consumer. Therefore, the whole chain must contribute to the safety of the food.

18. To establish a feasible meat chain from stable to table, you must develop all stages of the chain. A successful chain is only possible when all stakeholders are involved in its development. This requires a comprehensive plan, elaborated and agreed on, in line with the National Agricultural Policy.

19. The development of the food chain, in terms of both quantity and quality, is mainly dependent on the output of the producers. When it becomes profitable to produce meat, entrepreneurs will realize they can gain by improving the other parts of the meat chain.

C. Infrastructure

20. The EU requires an institutional, legal and technical infrastructure to guarantee food safety. This highlights the importance of integrating all stakeholders so that all the related activities can be controlled and later reported to the relevant EU body. Each country has the responsibility of implementing a food safety programme to guarantee food safety. To achieve this, the EU requires a specific infrastructure.

21. A National Food Control Agency should be established as a separate and distinct unit with clearly articulated goals and objectives. It would operate as the interface between the Government and the various stakeholders in the food chain. In all cases, a Ministry must be nominated as responsible for food safety. For the transition countries, we advise that the Ministry of Agriculture (MoA) be responsible for food safety.

22. For EU members, there is in general no difference between the conditions needed for the national market and those for the international market. In all cases, food safety must be guaranteed. The transition countries should follow the same strategy.

23. Today, the prevention of diseases and the guarantee of food safety cannot be reached without strong international agreements. EU legislation has become much more rigorous with regard to its implementation, although it uses internationally accepted standards to which one can refer.

D. International standards and EU legislation

24. In 1963, the United Nations Food and Agriculture Organization (FAO) and the World Trade Organization (WTO) jointly initiated the development of international food standards, codes of practice and principles of food inspection, and certification, among other regulations. For the meat sector, the code of Hygienic Practice for Meat Codex is the most important, and the EU refers to that specific Codex in its legislation.

25. In the past, EU Member States incorporated the text of EU legislation into their national legislation. Today most EU member States only refer to the EU legislation or to other international standards in their national legislation by mentioning the title and number of the legislation or standard. By using references, EU legislation automatically comes into force in the country at the time the changes come into force in the EU. Furthermore, this means that in addition to the references, only points unique to a country (i.e., logistics, who is responsible for what, etc.) have to be indicated in the national legislation.

26. The United Nations Economic Commission for Europe (UNECE) has been working for more than 50 years on commercial quality standards for a wide range of agricultural products and meat products. UNECE standards are widely used and focus on trade as well as the commercial quality for foodstuffs.

27. Regarding institutional structure, countries need to appoint a competent authority and at least one approved Border Inspection Post (BIP). Also, a system of eradication and monitoring of diseases should be initiated. Although this consists of many technical aspects, a clear infrastructure, in which the involved parties are working well together, is necessary to ensure that the monitoring programme is acceptable to the EU. Part of this infrastructure will be the databases, which work together with the veterinary surveillance network.

28. The basic Animal Identification and Registration (I&R) database will be responsible for registration of holdings and of animals. The use of a unique number for the holdings (farms) and the animals guarantees that all other IT systems, such as those for animal health, animal breeding and food safety, can use these data and exchanging data is possible between systems.

E. Perspective meat sector

29. The consumer requires good quality meat. However, in general, profits in the meat sector are low. To achieve profitable export of meat, good knowledge of the market is necessary. For example, until now, pork meat is only imported into the EU in small quantities due to lack of market demand. This means that export of pork meat to the EU is not practical. For poultry,

cattle and sheep meat, there is a good market for the best parts of the carcass and the chicken fillet. The best market strategy is to export the best parts of the meat and use the other parts for national consumption, as is also done by some EU Member States. This strategy requires market diversification. Subsidies in the meat sector should be related to the production of quality meat, only the part of the meat of interest to export.

30. Production and marketing diversification becomes interesting after implementing a food safety programme. Hygiene, of course, is of the highest importance. As an example, preparing meat in ready products for the consumer before export ensures that the products are distributed directly to consumer channels after import. Thus high wage costs are avoided in the importing country and profits are higher for the exporter.

31. Currently, Asia has low levels of meat production. Export from Central Asia to other regions in Asia could be a first step in an export promotion strategy. Naturally, for farmers to find it worthwhile to produce meat, it must be profitability. To implement the EU conditions for export to the EU might take several years. Obviously, having the experience to export to other countries would be beneficial when starting to export to the EU.

32. When the meat sector has the capacity to produce for the EU market and the necessary institutional settings are implemented, including recognition of a competent authority to make export possible. Exporting meat to the EU could start as soon as a processing plant is licensed by the EU.

F. Work Plan

33. Finally, a work plan should be prepared with the main activities to be accomplished, so that production of meat fulfils international standards, ensuring that export to the EU is possible. Financial support of donor organisations would of course be of use to implement the plan.

G. Conclusion

34. An integrated, well-planned development for sustainable meat production is necessary to deliver safe meat for national consumption and for export. Improving the output of farming and implementing the necessary standards to guarantee food safety may not always seem profitable. However, this challenge can be very profitable if the WTO negotiations and other market-driven influences realise that subsidies and import levies should go down or even disappear. This would make it easier for the transition countries to enter the international market.

III. BACKGROUND OF COUNTRIES IN CENTRAL ASIAN REGION

35. The production and economic environment in which transition countries operate must be studied before we can define what is needed to export meat to the EU and other countries. Unfortunately, very little reliable information exists regarding many developing countries.

36. Most transition countries face severe production constraints because of difficult climatic conditions. The prevalence of certain epidemic diseases, like pest of small ruminants and foot and mouth disease; endemic diseases, such as brucellosis, tuberculosis, and trypanosomiasis; and tick born diseases, like babesiosis and anaplasmosis, all put heavy stress on animals and reduce production. The majority of animals in developing countries are low producers. The

infrastructure for processing and marketing of livestock products is not well developed and the farmers do not get good remunerative prices for their produce. There is little awareness among farmers of the importance of keeping records. Low literacy rates, small herds and low productivity of animals are the main reasons put forward for poor awareness. Lack of producer-based records is the basic reason for inadequate development of farming systems. Trained manpower in animal breeding, feeding and housing is often not, or only partially, available.

37. An overall food safety framework is lacking, as well as the flexibility to take appropriate preventive measures. The result is that implementation of food safety control has been merely reactive and enforcement-orientated rather than preventive and holistic in its approach to reduce the risk of food-borne illness. An integrated farm-to-table concept to prevent food safety problems has been non-existent. Most of the activities carried out are not risk-based approaches because no risk assessments of various food hazards have been made. Only minimal use has been made of international recommendations from the Codex or from other international expert committees engaged in this task. Sometimes there has been a lack of transparency and quite often the stakeholders felt excluded from the decision-making processes.

38. In the table below, some information is presented about meat production in Central Asia and in the EU-25. The number of inhabitants in the Central Asian countries is about 62 million, and in the EU about 460 million. Annex 1 of this document presents the data per transition country.

Survey of meat production in Central Asia and in the EU

Year 2005	Cattle		Sheep		Pig		Poultry	
	CA	EU	CA	EU	CA	EU	CA	EU
Live Inventory (000MT ²)	16.792	86.410	67.734	89.360	1.501	151.600	58	
Live Slaughter ³ (000MT)	6.210		25.375		3.413		61	
Meat Imports (000MT)	30	554	0	277	20	14	35	568
Meat Exports (000MT)	7	205	0	4	0	2.182	0	947
Meat Net Trade (000MT)	-23	-349	0	-273	-20	2.168	-35	379
Meat Production (000MT)	1.062	7.909	442	1.008	248	21.163	79	10.695
Meat Dom. Util. (000MT)	1.085	8.233	442	1.294	267	19.881	113	10.258
Meat Per Cap. Cons. (KG)	17,6	17,9	7,2	2,8	4,3	43,1	1,8	22,2

(Ref.: FAOSTAT and regional office in Asia of FAO)

39. We see that the production and consumption of cattle and sheep meat are the most important sectors in Central Asia. In the EU, the most important are pig, poultry and cattle meat. The Central Asian countries also export live sheep (110.000mt). Central Asia and the EU consume equal amounts of meat. In Central Asia, sheep meat consumption is higher than in EU and in the EU, much more pig and poultry meat is consumed than in Central Asia.

² MT = metric tons.

³ Live animal's weight at slaughter.

40. The UNECE statistical website (<http://www.unece.org/stats/links.htm>) gives information about the countries in general and about their agriculture.

41. The need for technical assistance to developing countries in the agricultural sector and to strengthen the national food control systems is well recognized. The success of the programmes will depend on long-term, sustained efforts. Currently, some countries in Central Asia already receive special support for rural development.

IV. AGRICULTURAL AND FOOD POLICY

42. Before achieving an adequate infrastructure for supplying and slaughtering livestock and for exporting meat products, a new agricultural and food policy for the country must be adopted, developed or updated. Once the total policy for the agricultural sector is established, an integrated sustainable structure can be accomplished. Experiences in many countries have shown that this is a difficult process. Knowledge of the strong and weak points of the agricultural sector, especially the livestock sector, has to be linked with plans for sustainable rural development and with market possibilities for the agricultural (meat) products which have yet to be produced.

43. The proper application of the rules in the agricultural sector and their effective enforcement by an efficient public administration are essential for the implementation and functioning of the national agricultural policy. This includes establishing the institutional structures and implementing the necessary technical programmes. The National Programme for Development is funded through the national budget that may be supported by donor funding. The EU requires an institutional infrastructure to guarantee food safety. Infrastructure for farmers and for companies active in the meat sector must also be established. For the transition countries, the development of farms must be a priority.

44. The following textbox presents the main elements of an institutional and technical infrastructure, whereas annex 2 presents a layout for a National Agriculture and Food Policy (NAFP).

A. Institutional structure

1. Government

- (a) Legislative measures
- (b) Governmental bodies
 - (i) Integrated Administration and Control System (IACS)
 - (ii) Food and Consumer Product Safety Authority
 - (iii) Veterinary authority
 - (iv) National standards authority
 - (v) Paying Agency (any subsidies for agricultural sector)
- (c) Universities, agricultural schools and training centres
- (d) Research institutions and laboratories

2. Agricultural and processing industry

- (a) Commodity boards
- (b) Producers' associations
- (c) Farming advisory service
- (d) Livestock breeding and selection centres

B. Technical programmes

1. Rural development

- (a) Land reforms
- (b) Any subsidy system

2. Unique registrations

- (a) The land parcel identification system
- (b) Holdings
- (c) Farm animals

3. Farm management

- (a) Animal welfare
- (b) Animal health
- (c) Animal breeding
- (d) Pasture management and feeding
- (e) Fattening
- (f) Ecologic production

4. Marketing and processing

45. Many organisations and companies are active in the livestock sector. Differences in structure and operation exist between the livestock sub-sectors for cattle, sheep and goats, pigs, poultry and horses. In the pig and poultry sector, and for veal, production chain companies are active. Farmers are part of this chain and have a contract with the production chain company. Services such as breeding, selling, and extension are carried out by the production chain company, and the farmer is obliged to use these services based on a contract. It appears that certain production chain companies are not interested or willing to share their production methods and breeding programmes. Production chain companies are not common in the cattle (except veal) or the sheep and goat sectors. In these sectors, there is a willingness to exchange experiences and to create standards against which the results concerning animals and organisations can be compared. A farmer is free to choose what is needed to be successful and

the market where he will sell his animals. In general, production chain companies compete on the total package of activities and other companies simply on the products.

46. In countries that are the main exporters of meat, a controlled supply chain exists. Often farmer's cooperatives develop this chain for their members. Having achieved control of the supply chain, there is a strong tendency to intensify and control the operation, using sophisticated software tools.

47. Besides national organisations, many international bodies are active in the livestock sector. National and international institutions and organisations are presented in the following paragraphs.

A. National

1. Government organisations

48. A short description is presented of the most important government bodies for the meat sector. The responsibility for food safety is presented in this study as belonging to the Ministry of Agriculture.

(a) The Ministry of Agriculture

49. The Ministry is responsible for the legal and institutional aspects of farming. It stimulates and supports the development of the agriculture sector by creating the needed financial resources.

50. A transparent food control system must be developed and implemented and the involvement of stakeholders is essential in this regard. The Ministry of Agriculture (MoA) should involve all stakeholders in the food chain and request that they make effective contributions. This will enhance consumer confidence in the integrity of the food supply.

51. Currently, a system based on a national integrated approach (integrated system) is considered to be the best structure to meet the present challenges related to food safety and its control.

52. This means that the Ministry of Agriculture:

- (a) Creates communication channels with the agricultural sector and food processing industry;
- (b) Keeps the National Agriculture Policy (NAP) current and up to date;
- (c) Implements the NAP by establishing an institutional and technical infrastructure, making financial resources available to operate the government programmes;
- (d) Has a farmers subsidy system that stimulates structural development and production of quality-guaranteed products, paid for on the basis of their quality;
- (e) Stimulates private initiatives to increase production;
- (f) Operates efficiently the agencies, institutions, laboratories etc, necessary for animal health and food safety;
- (g) Implements a control and enforcement system.

(b) Paying Agency

53. This agency is responsible for any subsidies in the agricultural sector.

(c) Integrated Administration and Control System (IACS)

54. In relation to the safety of meat production and processing, the Ministry has to build up the capacity of the inspection and control bodies and bring official controls in line with EU requirements.

(d) Food and consumer product safety authority

55. In reviewing and revising its food control systems, the government may wish to consider a model, which calls for an autonomous national food control agency. The national food control agency must be perceived as a separate and distinct unit with clearly articulated goals and objectives, operating as the interface between Government and the various stakeholders in the food chain. It must be resourced with well-trained staff managing the key food control programmes and provide a transparent means of controlling food across the whole chain, i.e. consumer protection, promotion of food trade and industry by ensuring the safety and quality of food, and preventing fraudulent practices.

56. At an early stage, governments should decide which Ministry is to be responsible for food safety. In some countries, the Ministry of Agriculture is responsible and in other countries it is the Ministry responsible for Public Health. Where it is decided that a National Food Control Agency is established, less importance is placed on which Ministry is responsible for food safety. For the transition countries, it is advisable that government responsibility for food safety be part of the Ministry of Agriculture. The MoA covers the largest part of the chain and food safety starts at the farm.

(e) Veterinary authority

57. This department of the MoA is responsible for all veterinary affairs in the total food chain.

(f) Universities, agricultural schools and training centres

58. Education and training of persons active in the Agricultural sector is done by low, middle and high schools and by universities. For farming, the agricultural schools and agricultural and veterinary universities are of particular importance. Practical training for students is essential to be prepared to manage a farm. Also, for employees in companies active in the agricultural sector, this is of great importance. Through training centres, it is also possible to educate farmers in new developments, among other things.

(g) Research institutions and Laboratories

59. Establishment of the basic facilities to carry out animal health and food safety programmes is required. It is possible to work together with other countries to make the necessary facilities available for all programmes. It is important to focus on applied research facilities to directly support the agricultural sector. As soon as the agricultural sector is economically healthy, private companies will pay for the costs of research. To manage the farms and control the quality and safety of their products, products must be analysed.

60. Examples of research stations and laboratories:

- (a) Veterinary laboratory
- (b) Laboratory for food safety
- (c) Laboratory for milk analyses
- (d) Laboratory facilities for soil and forage
- (e) Grassland improvement centre
- (f) Practical research stations

61. Laboratories play a vital role in the enforcement of regulatory food control measures and are an essential and highly technical component of the system. They are engaged in the physical, microbiological and chemical analysis of food samples sent by inspectors to determine whether there is non-compliance with food standards. For BSE, it is obligatory to carry out analyses on the animals at risk. The laboratories may judge certain food to be unsafe and injurious to health. The evidence provided by laboratories in this respect is crucial to prosecuting offenders in a court of law. The utmost care is necessary to ensure the efficient and effective performance of the laboratory.

(h) National standard authority

62. Authority that is responsible for all national standards. The national standards must be in accordance with international standards.

2. Commodity and branch organisations in the meat sector

(a) Commodity boards

63. Each board operates within a specific sector and its responsibilities derive from the needs of that sector. Commodity boards represent businesses involved in the same commodity (such as meat, fish, dairy or wine). They are mainly found in the agri-food sector, and represent the entire production chain from raw material to finished product, including the producers, industry, and wholesale and retail trade.

64. Examples of activities in the collective interests of a sector include:

- (a) Market development and promoting selling of products
 - (b) Promotion of public information about the relationship between health and specific products
 - (c) Actively promote sustainable development
 - (d) Introduction of a complete supply chain management system that assists companies in the sector to improve the quality of their products (specific hygiene codes for the sector), production processes, supply chain logistics, industrial relations and sales networks
 - (e) Targeted areas will include energy-saving measures, employment opportunities, organic farming and environmental protection.
- (b) Branch organisations for the meat industry (supply and purchase companies)

65. Branch organisations take care to represent a certain group of companies active in a sector.

66. Examples of branch organisations are feed companies, slaughterhouses, and retailers.

3. Farmers organisations

(a) Producers' associations

67. A producers' organisation takes care of the producers' interests for a certain product or products. The goal is to present and support their interests to the Government, consumers, companies etc. It will consider all possibilities to improve the quality of agricultural products.

68. Possible activities of a producers association:

- (a) Ensure institutional capacity building and lobbying
- (b) Commercialise the developing agricultural sector
- (c) Ensure meaningful participation of farmers in commercial agribusiness sector
- (d) Ensure the long term sustainability of the relevant sector
- (e) Establish a sustainable credit revolving fund
- (f) Promote self-funding mechanisms
- (g) Work with other State and non-profit organizations
- (h) Support consulting and training to improve methods of production, processing and marketing
- (i) Train producers in more effective production and marketing techniques
- (j) Ensure economic empowerment of members, youth and women through the creation of business opportunities within the supply chain
- (k) Improve the smallholders livelihoods, increasing cash income through sustainable associate activities
- (l) Promote the products of the producers
- (m) Commercialise the emerging sector by facilitating access to technical support
- (n) Have a quality assurance programme, credit facilities and markets
- (o) Sponsor workshops and conferences
- (p) Offer improved market information and contract negotiating skills
- (q) Facilitate access to resources and farming opportunities in food science; work with universities and research centres
- (r) Determine, develop, and implement research needs for producers
- (s) Seek methods to secure funding for research
- (t) Provide a forum for sharing technical innovations
- (u) Organise funds for applied research

(b) Farming advisory service

69. It is only possible to establish an economic and healthy agricultural sector when the producers can efficiently produce quality products. Farmers need to be trained and need to have access to advisory services. Governments should help by developing advisory services in co-operation with the sector. Supply and processing companies offer advisory services and the farmer pays for these services through the bought or sold products. In many countries, the Government pays for, and continues to subsidize, advisory services. In Western countries, advisory services today are mostly fully paid for by the farmers.

70. Important aspects of the farm managers education:

- (a) Business planning, investment feasibilities, economics and the environment
- (b) Technical information about housing systems, new farming techniques, grazing and feeding of raw materials and premixes, animal health and fertility, genetic breeding material
- (c) Training and technical assistance in: using new equipment, animal husbandry, quality and hygiene standards, establishing food processing facilities on the farm, forming an integrated production chain, product development, management information systems and marketing techniques, including trade and consumer branding strategies
- (d) Organization of open days and seminars for the sector and the production of promotional material

71. Each sector will have its specific points of interest in the advisory services.

(c) Livestock breeding and selection centres

72. To improve the quantity and quality of the products of live animals, a breeding programme that improves the genetic value for meat production must be adopted. Having a breeding programme implies having a testing programme for young bulls. Semen and embryos can be bought on the international market. The genetic value of the semen and embryos must fit the breeding goal. Through the breeding programme, animals are selected which will provide the next generation of animals. The best animals, selected according to the breeding goal, should be used intensively.

73. Differences exist in the way breeding associations/companies function. In the pig and poultry sector, several large chain companies (dealing with feed, slaughtering and breeding) are active. For S&G, usually only national breeding programmes exist. Today, breeding cattle is a worldwide business. For local breeds, it is important to maintain a national breeding programme and to co-operate with other countries having the same breeds to achieve the best genetic progress. Those breeds can consequently compete with international breeds and yet safeguard genetic diversity.

74. Historically, governments initiated breeding activities. Today, in Western countries, governments are only dealing with the legal aspects and approval of breeding organisations.

75. Cattle breeding organisations need to be service-oriented. To run a breeding programme you must collect data on animals. These data are also very important tools for the management of farms. The best approach is to use the collected data to assist the farmer in his farm management, so that he experiences the importance of recording data. Then he will pay for these services.

76. Data are collected for cattle, sheep and goats in a national database incorporated with data collected by other organisations or companies (data of dairy and slaughter plants, veterinary data etc.). Using the database, a broad range of parameters can be analysed for management purposes. The methods for calculating management parameters are also used in herd management programmes, and it is possible to exchange data between the personal computer on the farm and the computer of the breeding organisation.

77. The collected data, including those of other organisations and companies, are used to calculate breeding values for the animals.

78. The main tasks of a cattle-breeding organisation:

- (a) Herd-book registration
- (b) Performance recording (milk, meat, type, other traits)
- (c) Calculation and presentation of farm management tools
- (d) Breeding programme
- (e) Artificial insemination (AI) and embryo transplantation (ET)
- (f) Training
- (g) Promotion (exhibitions etc)

B. International organisations

79. The most important international organisations regarding meat production and food safety:

CAC	- EU	- FAO
GS1	- ICAR	- ISO
OIE	- SCC	- UNECE
WAAP	- WTO	

80. In annex 3, we present a short description of the organisations. The websites of these international organisations show relevant information about the production, processing and marketing of meat.

1. Support programmes in the livestock sector

81. To develop the agricultural sector, several bodies make money available to carry out projects in developing countries. The World Bank, USAID and the EU (EuropeAid) are well-known organisations in this field. Also, large umbrella banks such as the Asian Developing Bank and the European Bank for Reconstruction and Development (EBRD) carry out projects, often together with one of the above-mentioned organisations. Furthermore, many countries have bi-lateral programmes with the developing countries.

82. For the development of the meat sector, support programmes should focus on one of the following sectors:

- (a) The Ministry of Agriculture

- (b) The regularity infrastructure
- (c) The institutional infrastructure
- (d) The technical infrastructure
- (e) The meat sector
- (f) The structural and technical development of the farms
- (g) Reliable and cost effective supply companies and service organisations
- (h) Reliable and market/quality oriented purchasing/processing companies

83. In accordance with the Agreement on Sanitary and Phytosanitary Measures of the World Trade Organisation (WTO), the European Commission provides technical assistance and facilities for institutional capacity building. Within the EU, the agency EuropeAid is responsible for the subsidy programmes.

84. EU investments must meet certain objectives, such as:

- (a) Reducing production costs
- (b) Improving product quality
- (c) Preserving and improving the environment
- (d) Meeting hygiene and animal welfare conditions
- (e) Encouraging diversification in agricultural activities

85. The delegations of the European Union can provide detailed information on available programmes.

86. In 2005, EuropeAid contributed 52% of the world support to developing countries. The United Nations received € 921,58 million in 2005. For Central Asia, the EU and EBRD worked together through the TACIS programme. The budget was € 56,5 million for 2005. (Ref. EuropeAid)

87. Those organisations/institutions can help developing countries to comply with EU import conditions. In addition to national and regional development programmes, specific facilities have been established to improve hygiene, safety and animal health in developing countries and to provide training for government officials from worldwide authorities.

FAO/WHO TRUST FUND FOR PARTICIPATION IN CODEX

Launched in 2003 by the Directors-General of FAO and WHO, the Trust Fund is helping developing countries and countries in transition over a 12-year period to increase their participation in the vital work of the CAC. Increased participation will be achieved by: helping regulators and food experts from all areas of the world to participate in international standards-setting work in the framework of Codex; and enhancing their capacity to help establish effective food safety and quality standards and fair practices in the food trade, both in the framework of the Codex Alimentarius and in their own countries. The Trust Fund is based at the headquarters of the World Health Organization.

2. Examples of project proposals in Central Asian countries

88. The following projects have been carried out, are running or planned to be carried out in the agricultural sector in the transition countries:

- (a) World Bank
 - (i) Agricultural Competitiveness Project in Kazakhstan (running)
 - (ii) The Agricultural Support Services Project in Kyrgyzstan (running)
 - (iii) The Rural Enterprise Support Project in Uzbekistan (running)
 - (iv) The Land Registration and Cadastre System in Tajikistan (running)
 - (b) ADB
 - "Central Asian Border Crossings" Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan (completed)
 - (c) EU
 - (i) Addressing Social issues in the Ferghana Valley Kyrgyz Republic and Tajikistan (running)
 - (ii) Integrated Crop and Livestock Production in Mongolia (running)
 - (iii) Support to the Development, Implementation and Evaluation of the Agricultural Policy Tajikistan (proposed)
 - (iv) Economic Reform and Sustainable Rural Development in Turkmenistan (proposed)
 - (v) Land registration Phase 3 Uzbekistan (proposed)
 - (vi) Mongolia: Increase herdsmen's income by making meat preparation production and trade system more advanced (proposed)
- (Ref. Web sites of World Bank and EuropeAid)

VI. OPERATION OF THE MEAT SECTOR

89. The livestock and meat industry is a complex network of individual companies of all sizes. They are all involved in the production of meat from farm to plate and work within specific supply chains.
90. A supply chain is a group of businesses linked together for mutual benefit to supply products to customers. A red meat supply chain, for example, involves beef, lamb and mutton from the paddock to the plate.
91. The supply chains in the cattle, sheep and pig sectors have the same six functional stages:
- (a) Inputs - the provision of inputs to livestock production
 - (b) Livestock (primary) production (farms)
 - (c) Livestock marketing
 - (d) Primary processing (slaughterhouses)
 - (e) Secondary processing (plant for manufacturing processed food)
 - (f) Food distribution
92. Food production, processing, marketing and distribution systems are complex. They are fragmented, involving a large number of intermediaries between the producer and the consumer. Moreover, the problems of food safety and quality are multidisciplinary in nature. At the governmental level, they may fall under many jurisdictions depending upon the constitutional powers of various ministries. Many activities have been and are being undertaken at the international level to determine suitable, cost effective, scientific approaches that would enhance the quality and safety within food supply systems, increase consumer protection and assist in promoting international trade in food.
93. For each sector it is important to create a good business environment. Experience has taught us that net profits are very small for the meat sector. Therefore, the sector needs to be open to beneficial developments. When the conditions for export are fulfilled, possibilities for diversification and production of (more valuable) by-products need to be analysed.
94. The following characteristics of the livestock sector must be thoroughly understood:
- (a) Productivity and profitability
 - (b) Stability and sustainability
 - (c) Diversity and flexibility
 - (d) Time-dispersion
 - (e) Complementary and environmental compatibility
95. Today, the development of a sustainable farming system requires multiple factors:
- (a) The optimized use of land and other inputs (see table below)
 - (b) The productivity of the animals

- (c) Environmentally friendly production
- (d) Normal environmental fluctuations
- (e) A sustainable livelihood for the farmer under difficult situations or the possibility of changing his production system due to a change in environment or the market situation
- (f) Improvement of agricultural productivity through complementary regional actions
- (g) The achievement of an economically sustainable business through the farmer's capabilities and multi-skills

96. For a sustainable meat production, the following examples, among others, should be considered:

- (a) Low-cost feeding and housing
- (b) An appropriate grazing system
- (c) High value from the livestock slaughtered (which the species/breed to use)
- (d) Alternative marketing strategies

97. FAO and other organisations have several publications relating to sustainable farming. The working paper by John Sumelius, prepared for the FAO, defines the relevant terms employed in the sector.

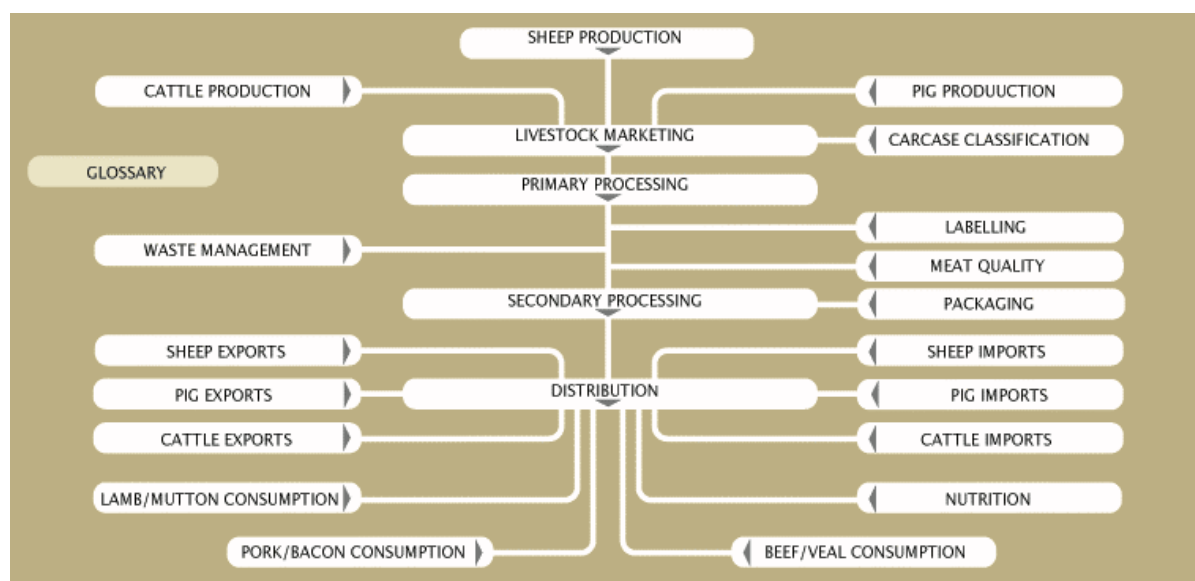
98. To establish a well-functioning meat chain from stable to table, all stages of the chain must be developed. The chain depends primarily on the output of the producers for both quantity and quality. Therefore, the Ministry of Agriculture should give the highest priority to supporting the development of its local farms. The other stages will develop automatically and certainly when the government establishes the necessary institutional and technical structure.

99. The activities of the companies that operate within these stages define their role as 'agents' within the supply chains. They are connected by a variety of business relationships. The main agents within the meat industry's six functional supply chain stages are presented below.

Functional stages of supply chain	Main agents
1. Inputs	Agricultural suppliers of feed (ingredients and additives), veterinary products, equipment, farm consumables, breeding products (among other things), pesticides, fertilisers, packaging materials, service providers, transport and storage operators. These suppliers are composed of commercial companies, farmer-owned companies and supply co-operatives.
2. Livestock production	Livestock breeders, store stock farmers, finished stock farmers and integrated farmers.
3. Livestock marketing	Producer marketing groups, dealers and purchasing agents, markets and private sale.

Functional stages of supply chain	Main agents
4. Primary food processing	Abattoirs, cutting plants, minced meat and meat preparation plants, cold stores. Integrated plants carry out more than one of these functions.
5. Secondary food processing	Catering butchers; retail packers; plants preparing meats and recipe products (e.g. sausages), burgers, reformed products; manufacturing plants for cooking, curing, canning, ready meals; integrated plants carrying out more than one of these functions.
6. Distribution	Meat wholesalers, e.g. meat suppliers, depots, traders, importers, exporters; specialist foodservice suppliers; supermarkets; retailers such as traditional butchers, independent grocers; direct sale outlets such as farm shops, farmers markets, delivered/box schemes; food service companies supplying both the private and the public sector.

100. The next figure presents an example of a survey involving parties at the second stage in the supply chain: the producers (ref. Red Meat Industry Forum UK). Differences in the structure of the meat chain exist between countries. However, the goal is the same: to guarantee food safety.



101. The Government should appoint a competent authority for each stage of the supply chain. A competent authority can be responsible for more than one stage.

3. Inputs

102. Many suppliers exist for agriculture sector. We can distinguish the following groups:

- (a) Housing (stables, electricity, cooling facilities, etc.)
- (b) Equipment (milking machines, tractors, irrigation etc.)
- (c) Feed

- (d) Medicines
- (e) Seeds, fertilisers and insecticides
- (f) Water

103. Animal feed and medicines play an important part in the food chain and have implications for the composition and quality of the livestock products (milk, meat and eggs) that people consume. As a result of the BSE problem, the feed industry has developed quality programmes to ensure the safety of the feed so that:

- (a) The tracking and tracing of feed is possible
- (b) The Hazard Analysis and Critical Control Point (HACCP) principle into risk assessment and control is incorporated
- (c) The whole feed chain (incl. raw materials suppliers) is guaranteed
- (d) An early warning system exists

4. Farms (producers)

104. When there is an economic profit, farmers will be motivated to establish the needed facilities on their farm and land to produce meat.

105. Of course, it is the farmers' own responsibility to achieve a healthy economic situation for their business. However, for transition countries to compete on the international market, financial resources are made available to create institutional and technical development. Only then can the producers reach the necessary level of quality food production to compete on the international market.

106. Farmers need to know how to implement a Good Agriculture Practice (GAP). This includes livestock breeding, feeding stuffs, control of use of animal health status and use of veterinary drugs.

107. Regarding the welfare of animals, the owners are obliged to satisfy the biological needs of each category of animal and provide safety, food and water. It is forbidden to punish or torture animals during their breeding or keeping.

108. Animal owners must consent to veterinary-sanitary examination and control, taking and examining samples, as well as fulfilling other measures for the protection of animal and public health.

5. Livestock marketing

109. The agents involved in the sale and marketing of animals include:

- A. Producer marketing groups:** Typically these are producer co-operatives that market livestock on behalf of their members. They are particularly important in the pig sector. Livestock is sold on a deadweight basis.
- B. Dealers and buying agents:** Operate independently or on behalf of specific abattoirs; they assess the stock on the farm and arrange for the

transport to abattoir, where the livestock are purchased on a deadweight basis. They may also purchase livestock from auction markets.

- C. **Auction markets:** They sell livestock (finished, store and breeding stock) on a live weight basis. Typically, producers are responsible for the transport of livestock to the market and the buyer for the transport from the auction market.
- D. **Individual farmers:** They can make their own private arrangements for the sale and transport of livestock directly to an abattoir (on a deadweight basis) or via livestock markets. Private sale of finished and store stock between buyers and sellers is increasingly done via the Internet.

6. Primary processors

110. The agents involved in the slaughter and primary processing of carcasses include:

- A. **Abattoirs (first stage primary processing):** The slaughter and dressing of stock carried out in plants licensed to cut the carcass into quarters.
- B. **Cutting plants (second stage primary processing):** Further cutting into small pieces requires a separate cutting licence. This increasingly refers to sectioning the carcass into smaller de-boned joints, usually accompanied by vacuum packing, boxing and palletisation of the product. This can include production of consumer portions and diced and minced meat, often retail-packed, ready for shop display.
- C. **Minced meat and meat preparation plants (third stage primary processing):** The meat is broken down into mince and special products, such as quick grill steaks.
- D. **Cold stores: Storing the meat and meat products:** Cold stores, abattoirs and cutting plants (other than those cutting plants only supplying consumers or caterers) have to be licensed by the Food Standards Agency (FSA).

Day-to-day control is the responsibility of the Meat Hygiene Service (MHS). The small cutting and meat preparation facilities supplying final consumers or caterers are currently controlled at a local level by Local Authority Environmental Health Officers (EHOs).

7. Secondary processors

111. The agents involved in the secondary processing of meat undertake further preparation to produce a product ready for sale by the retailer or caterer to the final consumer. This includes:

- A. **Catering butchery:** The production of portion-controlled packs and cuts meeting the specifications of the foodservice and catering trade (e.g. hotels, restaurants, hospitals, schools, works canteens).

- B. Retail packing:** The production of ready-packaged and labelled meat for sale in supermarkets. Prepared meats and recipe products – the production of uncooked meat products such as burgers, sausages or reformed products, ready to cook convenience meats, breaded and coated products, with flavourings or seasonings.
- C. Manufacturing:** The cooking, curing, drying/smoking or canning of products, the preparation of foods and ready meals for which meat is an ingredient.

112. These companies will obtain meat for processing (usually de-boned small cuts or minced and diced product) from a variety of sources. The fastest growing sector of the convenience market has been frozen and chilled food products, especially ready meals. The output of ready meals has grown as the eating structure of the market has changed from 'meat centred' to 'dish centred' meals. Other new products in the manufactured recipe product and prepared meats categories have met the demand for part-meal solutions. Many of the new products provide a ready prepared part of the full meal, whilst fresh cuts of meat are still regarded as needing more preparation before they are ready for cooking.

8. Food distribution

113. The agents involved in the distribution of meat and meat products include a broad range of companies:

- (a) Wholesalers, to include meat suppliers, depots, traders, importers, exporters, specialist foodservice suppliers
- (b) Supermarkets
- (c) Traditional butchers
- (d) Independent grocers
- (e) Direct sales outlets, such as farm shops, farmers markets, delivered/box schemes
- (f) Foodservice companies

114. Within the meat industry in the developed countries, a complex network of "wholesaling" companies exists. These companies sell meat and meat products to both final sellers (e.g. retailers and caterers) and to further processors (e.g. to all other types of plant in the meat sector). Some wholesalers are also importers and exporters. To differing extents, all of these are servicing the needs of companies in the secondary processing sector, while also complying with the fresh meat and processed meat requirements of the independent butchers, caterers and others in the foodservice sector.

115. Because of its complexity, the meat industry requires agreements on traceability and adequate control of the movements of meat and meat products.

9. Supply Chain Management (SCM)

116. To increase exports of meat and meat products, countries need to have an adequate organizational model in which all parts of the chain are connected. This improves the traceability

and creates an efficient, logical system involving all companies active in the meat chain. Such a model includes:

- (a) Standard descriptions of management processes
- (b) A framework of relationships among the standard processes
- (c) Standard metrics to measure process performance
- (d) Management practices that produce best-in-class performance
- (e) Standard alignment to features and functionality

117. The benefits to businesses that participate in SCM include:

- (a) Increased production efficiency
- (b) Improved cost competitiveness, product quality and integrity
- (c) New product development and business opportunities
- (d) Broader market access and reduced marketing risk
- (e) Advance quality assurance and better consumer satisfaction
- (f) Streamlined information transfer and boosted long-term viability

VII. THE TECHNICAL REGULATIONS AND STANDARDS FOR NATIONAL COMMERCIAL AGRICULTURAL (MEAT) PRODUCTS

118. For EU members in general, no difference exists between the conditions to produce for the national market and those for the international market. In all cases, food quality and food safety must be guaranteed. It is suggested that the transition countries follow the same policy. Export can begin as soon as (1) the sector has the capacity to produce for the export market, (2) the institutional settings are implemented to make export possible and (3) a closed chain fulfils the technical conditions.

119. Besides the initiatives taken by the EU, major ones have been taken within the inter-governmental Codex Alimentarius Commission (Codex) of FAO/WTO. They are engaged in the task of developing international food standards, codes of practices and principles of food inspection, certification, etc. For the meat sector, the code of Hygienic Practice for Meat (58-2005) is obviously important.

120. In the past, each country developed its own legislation. International standards did not cover the chain or were not broadly accepted. Economic communities like the EU did not cover the total chain either, and Member States were given freedom on how to implement the legislation. Today, the effective prevention of diseases and the guarantee of food safety cannot be reached without strong international agreements. Consequently, the EU has become much more rigorous about the implementation of its legislation. Additionally, in its legislation the EU refers to standards of internationally EU accepted bodies such as FAO, ICAR, UNECE and WTO, thereby creating only one international standard for each subject.

121. These international standards are technically orientated. Using internationally acknowledged standards can be beneficial because:

- (a) Referring to international standards in the legislation ensures that changes in standards are directly in force in the country
- (b) Data on animals, carcasses etc. are much more comparable between countries
- (c) Companies have to deal with only one standard and can produce their product for a much lower price, thus benefiting the farmers

A. The veterinary surveillance network

122. Veterinary surveillance is the term used to describe everything we do to collect information about diseases affecting animals. Not just farm animals, but pets and wildlife too. We are not only interested in disease caused by organisms such as bacteria and virus. We also need information on animal welfare and poisonings.

123. Animals can carry infections, which may have no effect on the animal and yet still be a threat to human health. We need to monitor them as well. An equally important part of veterinary surveillance is ensuring that the information collected gets to those who need it.

124. The definition for monitoring and surveillance is as follows:

- (a) Monitoring
 - (i) Active follow-up of disease and/or problem performances
 - (ii) Deviations from the standard values
 - (iii) Systemic and reliable collection of disease and health data
 - (iv) Systems that collect and analyse data
 - (v) Interpretation of data
- (b) Surveillance
 - (i) Take action: based on monitoring information
 - (ii) Bring or maintain a situation within the standard values

B. The EU veterinary legislation

125. The EU legislation in force for the veterinary sector was developed to ensure adequate veterinary control within the European Single Market. Its main purpose is (a) to prevent the outbreak and spread of animal diseases, (b) to promote veterinary public health through the monitoring of various substances and (c) to secure greater public confidence in the safety of food and animal products. The relevant legislation can be divided into four parts:

- (a) Production
- (b) Food safety
- (c) Food quality
- (d) Marketing standards, price reporting and reporting of production statistics

126. The European Commission's White Paper on Food Safety published in January 2000 contained a number of proposals to strengthen feeding stuffs legislation.

127. The first rules on food safety date from the very early days of the EU. Since 2002, ‘umbrella’ legislation exists, known as the General Food Law. This law lays down the principles applying to food safety. It also:

- (a) Introduces the concept of ‘traceability’
- (b) Establishes the European Food Safety Authority (EFSA)
- (c) Reinforces the rapid alert system, which the European Commission and EU governments use to act quickly in the event of a food and/or feed safety incident

128. In Annex 4, more detailed information is presented about the EU legislation on food safety.

129. Among the measures now in force and implemented in national legislation, some key measures are listed below.

(a) **EC Regulation 178/2002, laying down the general principles of food and feed law, including provisions on feed for food-producing animals. This prohibits the marketing of unsafe feed and requires feed businesses to have traceability procedures in place.**

(b) **EC Regulation 882/2004 on official food and feed controls, which consolidates existing enforcement and inspection measures, lays down the principles and powers for carrying out these controls, and specifies the action to be taken both to check businesses’ compliance with the rules and when breaches are found.**

(c) **EC Regulation 183/2005 on feed hygiene, which requires most feed businesses involved in making, marketing or using feeds, including livestock farms and arable farms growing crops for feed use, to be registered or approved. Feed businesses will have to comply with standards in respect of facilities, storage, personnel and record-keeping. This regulation applies throughout the feed chain, including food manufacturers selling by-products of food production into the feed chain, all livestock and some arable farmers.**

130. The EU publication “Guidelines for the import of live animals and their products into the EU” provides guidance primarily to the national authorities in third countries interested in exporting live mammals and birds and/or their products to the European Union. Interested parties should always contact the European Commission (for contact details see Annex 4) to check whether any changes have been made to the procedures described in this document, and for more detailed guidance concerning particular production sectors. Other interested stakeholders can also benefit from the information provided in the guidelines and they should contact their national authorities for further assistance, information and/or to initiate approval procedures concerning imports into the European Commission.

131. Information about food safety and related subjects of the EU is available on the Internet. For the website address, see annex 4.

VIII. REGULATORY, INSTITUTIONAL AND TECHNICAL INFRASTRUCTURE

132. The European Union is by far the biggest importer of food worldwide. Import rules for meat and meat products are fully harmonised and the European Commission acts as the competent authority on behalf of the 27 Member States. The EU Commission is the sole negotiating partner for all non-EU countries on questions relating to import conditions for meat and meat products.

133. Establishing an operational supply chain is a challenge for every country. Many duties have to be fulfilled and each of them needs human and financial resources. The most difficult to achieve is an integrated system in which all parts are connected.

134. To achieve optimum consumer protection, safety concerns must be embodied from production to consumption. This calls for an integrated farm-to-table approach in which the producer, processor, transporters, vendors and consumers all play vital roles in ensuring food safety.

135. First, it is important to have the total picture and to keep this in mind. To be successful, the various government bodies must work together at all levels of implementation.

136. The advantage for the transition countries is that they will not have to reinvent the wheel. Through concrete defined projects, in the right order, and with guidance from experts, much can be achieved in a short time. However, in practice this is not easy. Conflicts between departments, miscommunication, different opinions about implementation, among other things, are real risks.

A. Regulatory infrastructure

137. Modern production systems and trade structures are now capable of providing full transparency on animal health and food safety issues as well as on environmental standards of production and animal welfare. To meet these expectations and take stock of the technical progress made during the past few years, the European Union has undertaken a fundamental overhaul of its food safety legislation. The new EU food laws regulation (see annex 4) put strong emphasis on process controls throughout the food chain, from farm to fork. The general food law (EC No. 178/2002) advocates the flow of information and the management of quality. This philosophy reflects the demands of the consumer and exploits the opportunities made accessible through technical progress. Checks on the end product alone would clearly not be capable of providing the same level of safety, quality and transparency to the consumer.

138. Imports of fresh meat and meat products into the European Union are subject to veterinary certification by a recognized and competent authority in the non-EU country (for example, by the Directorate-General for Health and Consumer Protection). This formal recognition of reliability is a pre-requisite for the country to be eligible and authorized to export to the European Union.

139. This measure is designed to evaluate whether the animal health situation, the official services, the legal provisions, the control systems and production standards meet EU requirements.

140. Before approval can be considered, the national authorities must be able to demonstrate the following fundamental principles:

- (a) The animal health situation satisfies EU requirements for imports of the animals/products in question
- (a) Effective measures exist to prevent and control certain infectious or contagious animal diseases
- (b) The veterinary services are capable of enforcing the necessary health controls
- (c) The country can provide rapid and regular information on the existence of certain infectious or contagious animal diseases on its territory, in particular those diseases mentioned in the lists of the World Organisation for Animal Health (OIE)
- (d) Effective legislation and monitoring system exists with regard to the use of substances
- (e) The legislation covers, in particular, the prohibition or authorisation of substances, their distribution, their release onto the market and their rules covering administration and inspection
- (f) The monitoring covers the presence of certain substances and the residues thereof in live animals and animal products for which export approval is sought

141. The competent national veterinary authority must undertake all bilateral negotiations (and other relevant dialogue) concerning the imports of meat and meat products. All other interested parties and private businesses should contact the competent authority and communicate with the EU via this channel.

142. The EU guidelines for importing meat⁴ aim to assist all players in the food chain to better understand and apply the regulations correctly and consistently. However, this document has no formal legal status, and in the event of a dispute, ultimate responsibility for the interpretation of the law lies with the Court of Justice of the EU in Luxembourg.

B. Institutional infrastructure

143. For meat and meat products from all species, countries of origin must be on a list of eligible countries for the relevant product. The eligibility criteria are the following:

- (a) Exporting countries must have a competent veterinary authority, which is responsible throughout the food chain. The Authority must be empowered, structured and resourced to implement effective inspection and guarantee credible certification of the relevant veterinary and general hygiene conditions for the total chain.
- (b) The veterinary control system in the internal market regarding animal disease control measures must provide national contingency plans on (i) foot-and-mouth disease, (ii) classical swine fever, (iii) Newcastle disease and (iv) Avian influenza.

⁴ http://ec.europa.eu/food/international/trade/guide_thirdcountries2006_en.pdf

- (c) A veterinary field unit must be established, which will outsource and supervise tasks allotted to private veterinary practitioners and trained technicians.
- (d) The country must join the Animal Disease Notification System (ADNS).
- (e) The third country must either have its own laboratory facilities that allow detection and confirmation to take place, or have agreements with suitable laboratories in other countries.

144. Imports of meat or meat products must enter the EU via an approved Border Inspection Post (No. 2001/881/EC: Commission Decision of 7 December 2001) under the authority of an official veterinarian. To protect animal health, there is a general ban on personal imports by passengers or travellers bringing meat or meat products into the EU. For more information, you may visit the website at the following address:

http://europa.eu.int/comm/food/animal/animalproducts/personal_imports/index_en.htm

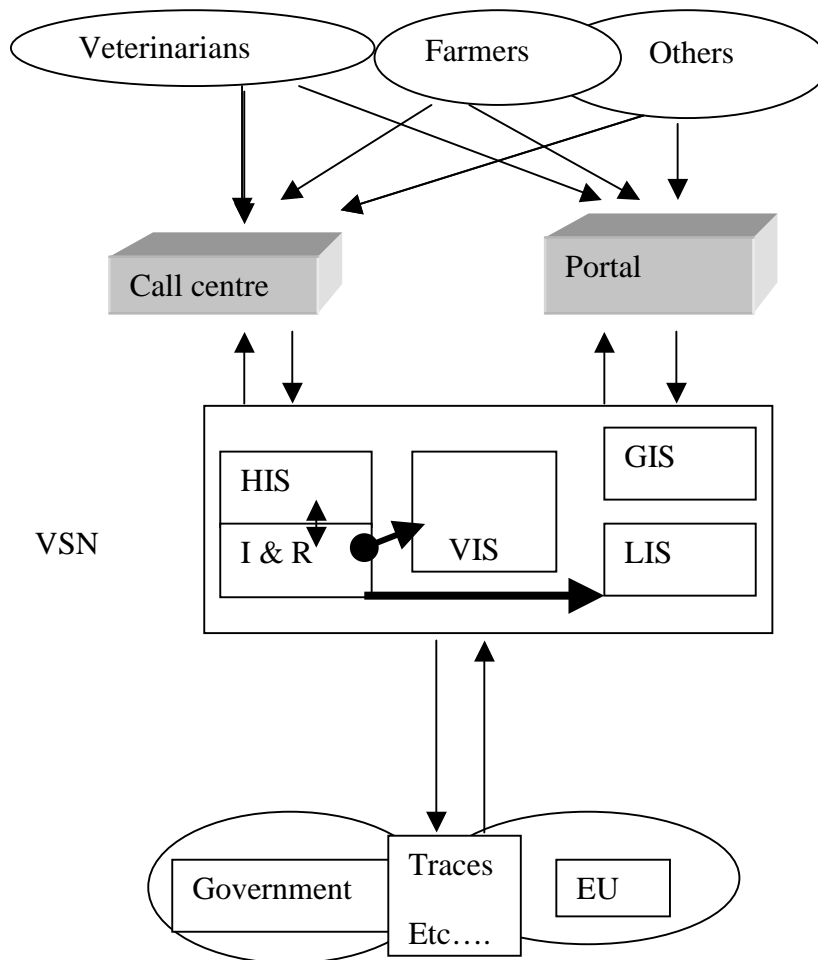
145. Strong linkages must exist between farmers, traders and processors, with emphasis placed on improving overall product quality, branding, promotion and involvement in trading forums.

146. The monitoring programme must be designed by the competent authority and submitted to the European Commission for initial approval and yearly renewal.

147. The availability of an information technology (IT) structure is another important part of the institutional infrastructure for animal health and food safety. It is important that responsibilities are defined and data-exchange between systems is standardised. The best strategy would be to collect data only once and use it in all relevant places. Of course, authorisation rules must apply to ensure that only the right person/organisation can enter/change data, and to know who can see which data. To create efficient and flexible working databases, it is important that the Ministry of Agriculture develops an IT strategy paper.

148. Below is a summary on how the parties in the veterinary surveillance network work together. Data are entered in the relevant database through different recording systems. The databases work together to ensure that each one has the most recent information for its functions. Management data are directly available and reported to the responsible person ensuring that the most recent information about the animal health status is available, and, in the case of an outbreak of a disease, an action plan starts immediately. Databases can be integrated into one or two databases. Most countries decide to have separate databases (mostly using the same hardware) to be flexible in developing the database functions.

Schema of integrated bodies and databases:



Key to databases used in the schema

HIS:	Holding (herd) information system (this includes slaughterhouses, markets etc.)
I&R:	Identification and registration database for animals (cattle, pigs, sheep, goats, horses, pets)
GIS:	Geographical information system
VIS:	Veterinary information system
LIS:	Laboratory information system
TRACES:	EU database to register import of animals and goods from third countries

149. The schema can be extended to include input from human health programs in the case of zoonoses and from the feed sector in the case of food safety. This is displayed as “others” in the upper line of the diagram above. More than these three inputs will be available, and the data will

be used by many organisations, like the statistical office, the subsidy system, the breeding database, for example.

C. Technical infrastructure

150. Companies should work in accordance with the National legislation. For the government, five important sectors exist in the technical infrastructure for exporting meat:

- (b) An integrated animal identification, herd registration and movement control system (I&R system) is implemented for cattle, pigs, sheep and goats and horses
 - (i) To maintain an up-to-date record of holdings, persons, animals and animal events (births, movements, slaughters, deaths) as required by EU legislation
 - (ii) To track and trace the movements of individual animals and their contacts
 - (iii) To apply movement controls and veterinary restrictions
 - (iv) To control the animals from birth or import to moment of slaughtering, death or export, as well as controlling all the animal products
- (c) Contingency plans are established and operational for the control and/or eradication of the World Organisation for Animal Health (OIE) Special List disease outbreaks (the nature and extent of these plans will depend upon the nature of the animals or products for which approval is sought)
 - (i) A system of animal health surveillance and disease control (OIE list of diseases, including zoonoses) must exist
 - (ii) Prevention and control of disease, monitoring and control of outbreaks of animal diseases, significant in the international trade in animals and animal products (see the OIE List diseases), are carried out effectively, in compliance with EU trade and animal health directives
 - (iii) A veterinary surveillance and control programme is strictly maintained, as required for internal and international trade
- (d) An monitoring system verifies compliance with EU requirements on residues of veterinary medicines, pesticides and contaminants
 - (i) A licensing system and marketing authorization is established for veterinary drugs and to establish and maintain a national residue monitoring plan, as required by EU legislation
 - (ii) Licensing, importing, distribution and application of veterinary pharmaceutical products remain under the permanent surveillance and control of the competent authority, in compliance with EU requirements
 - (iii) The diagnostic capacities of the relevant laboratories are adequate and analyses are prepared in compliance with EU legislation
- (e) Border veterinary inspection exists for the import/export and transit of live animals and food of an animal origin

- (i) Imports are only authorised from approved establishments (e.g. slaughterhouses, cutting plants, game handling establishments, cold stores, meat processing plants), which have been inspected by the competent authority of the exporting country and found to meet EU requirements
- (ii) The exporting authority provides the necessary guarantees and carries out obligatory regular inspections
- (iii) A laboratory information system exists which:
 - a. Identifies individually (and in groups) all samples delivered to the laboratories for analysis
 - b. Allows (and where possible automates) the distribution of samples (or their aliquots) to the appropriate internal laboratories (or external laboratories, such as reference laboratories)
 - c. Stores all information relevant to each sample (client, origin, request, material, species)
 - d. Stores data on results obtained and automatically prepares test reports, in conformity with requirements of laboratory quality assurance systems (ISO/IEC 17025 standard)
- (f) Marketing of agricultural food products is strengthened
 - (i) Contribute to the development and implementation of effective agri-marketing policies and help to strengthen the marketing capacity in this area
 - (ii) Improve market access for local producers by encouraging investment into and the development of wholesale/farmer/retail markets, post-harvest and added value activities, farmer marketing and enterprise groups, as well as improved networks between farmers, traders and processors
 - (iii) Enable further quality assurance programmes
 - (iv) Develop schemes for improved promotion of meat
 - (v) Encourage agri-trade with the EU and other regions

D. What are the formal steps towards approval for imports?

151. The EU has designed a multiple-step procedure to evaluate the third country requirements to meet eligibility criteria for exporting meat and meat products to the EU.

- (a) The National Authority of a third country must submit a formal request to the Directorate General for Health and Consumer Protection of the European Commission to export meat or meat products to the EU. The request should contain confirmation that the Authority can fulfil all relevant legal provisions to satisfy EU requirements.
- (b) The Directorate-General for Health and Consumer Protection sends out a questionnaire to be completed and returned.

- (c) The residue-monitoring plan of the exporting country must be submitted and approved at this stage (if not already done).
- (d) If the evaluation of the residue monitoring plan and the questionnaire is positive, an inspection by the Food and Veterinary Office is carried out to assess the situation on the spot.
- (e) Based on the results of the inspection and the guarantees given by the exporting country, the Directorate General for Health and Consumer Protection proposes the listing of the country, the specific conditions under which imports from that country will be authorised and the list of approved establishments in the country. These are then discussed with representatives of all EU Member States.
- (f) If the Member States have a favourable opinion on the proposal, the European Commission adopts the specific import conditions.

IX. POTENTIAL SEGMENTS OF THE EU MARKET FOR MEAT PRODUCTS FROM TRANSITION COUNTRIES

A. World meat market and the import of meat products into the EU

152. In the table below, the world meat market (in 1000 MT) is presented for 2006 (ref. USDA World Markets & Trade report, livestock and poultry April 2007).

	Production	Import
Beef & veal	40.038	4.715
Pork	99.016	4.355
Broiler	60.362	5.059
Turkey	5.014	384
Sheep*	13.800	500
Total	218.230	15.013

* ref FAOSTAT

153. In annex 5, the production and trade figures are presented for 2005 as well as the figures for 2006 and 2007, as published by the FAO. Columns with some figures for the EU and for six countries in Central Asia (CA) are added. The production of meat in the EU is about 15 % of the world market.

154. Global meat markets in 2007 are expected to recover gradually in the aftermath of animal disease outbreaks that have plagued the sector for the past years. Low poultry prices and renewed consumer confidence, in the context of strong economic growth and reduced disease outbreaks, are forecast to sustain a gradual recovery in global meat demand.

155. The table below represents the most important world market exports and imports (in 1000 MT) of meat (excluding sheep meat) in 2005 and 2006.

	Import in 1000 MT	In %
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Country	2005	2006	2005	2006
Australia	80	90	0,6	0,6
Brazil	0	0	0,0	0,0
Canada	324	313	2,4	2,1
China	565	444	4,2	3,0
EU-25	995	1.150	7,3	7,7
Russia	2.308	3.094	17,0	20,6
USA	2.240	1.871	16,5	12,5
Other	7.031	8.051	51,9	53,6
Total	13.543	15.013	100,0	100,0

Source: USDA World Markets & Trade report, livestock and poultry, April 2007)

156. Other important countries importing meat are Japan (2545), Mexico (1275), Hong Kong (535), South Korea (490) and Saudi Arabia (443).

157. Annex 5 presents figures for the most important countries regarding production, import and export of meat.

B. Main players in Europe for the import of meat

158. Annex 6 presents a non-exhaustive list of companies with an important role in the meat sector (slaughtering and or processing) in Europe.

C. Potential segments for the transition countries

159. Several years will be necessary to fulfil the conditions for exporting to the EU member states. Furthermore, it is expected that the demand for meat will be high in the large Asian countries. For that reason, it is worthwhile considering export to neighbouring countries such as the Russian Federation or China.

160. The following remarks are pertinent to the export of meat to the EU:

- (a) Pork is only imported into EU in small quantities due to lack of market demand
- (b) The highest demand for meat in EU member states is for the best parts of the carcass, such as chicken fillet, pork tenderloin and fillet steak
- (c) To sell the best part of the carcass and keep the other parts for national consumption or other uses can be of interest economically

161. Based on a market analysis, countries in Central Asia need to prepare a strategic plan for the export of meat. In the beginning, exports should be upgraded to countries in Asia and then, when the country has fulfilled conditions for export to the EU, an analysis can be made to see if entering the European market would be of interest.

X. ESTABLISHMENT OF AN OPERATIONAL SUPPLY CHAIN

162. With regard to establishing a supply chain, the most important sectors are the primary sector, the markets and the slaughterhouses. When these sectors are developed and the tracing of animals is functioning correctly, the chain will not be difficult to complete. The sectors are important for the following reasons:

- (a) Large numbers of farms need to be controlled
- (b) Live animals are involved, which means risk for animal diseases
- (c) Tracing of animals is complex
- (d) There is a need to fight against fraud

A. Identifying the major gaps

163. This paper could form the basis for a policy discussion on exporting meat. Should there be an interest for further study, the first step would be to analyse the major areas where gaps exist to fulfil the EU requirements for importing into the EU.

164. To analyse the gaps, the following schema could be used.

- (a) Present state of affairs:
 - (i) Country profile
 - (ii) Macro-economic context of agricultural sector
 - (iii) Privatisation process
 - (iv) Foreign investment
- (b) Agricultural sector overview:
 - (i) Policies
 - (ii) Legislation
 - (iii) Economy
 - (iv) Structure
 - (v) Input supply, processing and marketing
 - (vi) Finance of investments
 - (vii) Research, extension and training
 - (viii) Import and export
 - (ix) International assistance
- (c) Analysis of the sub-sectors:
 - (i) Animal husbandry
 - (ii) Short description of the sub-sectors related to meat production
 - a. Beef cattle
 - b. Dairy cattle

- c. Sheep and goats
- d. Pigs
- e. Poultry
- (iii) Other sub-sectors:
 - a. Horticulture
 - b. Other food crops
- (d) Miscellaneous

165. Parts of this survey will already be available in the transition countries because internationally funded projects have been instigated and even completed. As described above, the total picture is important, and sub-sectors can be beneficial for each other in establishing the necessary legal, institutional and technical infrastructure.

166. The analysis of the sub-sector related to meat production should include:

- (a) Size of the sub-sector and scope for development
- (b) Description of the chain
- (c) Degree of private initiatives in the sub-sector
- (d) Potential to produce, process, monitor etc., in accordance with EU legislation
- (e) Constraints and opportunities

167. For the other sub-sectors, a more general analysis would be sufficient, when a specific analysis is not available. Having completed the study, input from the government would be needed to define the agriculture and food policy.

B. Action plan to develop exports of meat products to the EU

168. Based on the results of the analysis, an action plan could be prepared to proceed with the export of meat. This plan must be a detailed plan that needs the acceptance of all parties involved. The Government will take the lead to develop and implement the plan. The Government has the duty to achieve food safety in all its aspects, even without exporting meat.

169. Having an accepted action plan, each party will know what it should do. This will shorten the implementation time, but much more importantly, the plan will create the co-operation needed between the involved parties. Furthermore, the initiatives of each party will also comply with the plan. In the next paragraph, a general plan is presented to export meat.

C. Work to be undertaken

170. Based on the defined constraints and opportunities for the sub-sectors related to meat production, a detailed plan should be worked out to define and develop the relevant sub sectors. What has to be done and what time span is needed can vary for different countries according to:

- (a) Existing national agriculture and food policy;
- (b) Countries' infrastructure;
- (c) The introduction of a free market policy;

- (d) The development of the relevant sub-sectors;
- (e) The availability of financial resources.

171. To create the necessary institutional and technical infrastructure, there must be a good programme for the different plans (projects). Depending on what has been achieved, the responsible government body should prepare a new plan based on the National Action Plan (NAP). The best method is to divide the plans into those to be undertaken by the government and those to be undertaken by the meat chain. The government must establish the legal, institutional and technical infrastructure and, in the meantime, branch organisations can prepare the sector for implementing food safety and quality standards.

172. In general, implementation of the Animal Identification and Registration (I&R) system for the different species is of the utmost importance. All programmes need to have information on the farms and the animals. All bodies should use the I&R system data and should not implement their own identification system.

173. Experiences in many countries have taught that establishing a reliable I&R system is difficult. But once achieved, tracing animals becomes easy, and both farms and markets can easily be monitored and controlled. The slaughterhouses will use the unique ID number of the animal as the beginning of labelling the meat.

174. When a country is developing an I&R system, it is best to start with cattle. Simultaneously, the animal health authority should begin to upgrade or implement the animal health system.

175. When the animal health system in a country has begun to be upgraded, the first three functional stages of the supply chain come under control. Then the government can start to implement food safety at the last three stages: the primary and secondary processing and the distribution.

176. As described above, the development of farms is an essential factor for creating a profitable meat sector. Farmers will have their own responsibility for improving production and establishing the parties in the supply chain. When the government has established the required legal, institutional and technical infrastructure, the parties in the supply chain can begin to function. The government will support the supply chain in order to implement the infrastructure for the sector.

177. The total process is expected to take no less than 5 years.

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ANNEX 1

BACKGROUND DATA PRESENTED PER TRANSITION COUNTRY

Year 2005	KZA	TUR	TAJ	MON	KYR	UZB	Total
	Cattle						
Live inventory	5.212,9	2.000,0	1.303,0	1.841,6	1.034,9	5.400,0	16.792,4
Live slaughter (000mt)	2.200,0	550,0	140,0	400,0	520,0	2.400,0	6.210,0
Meat imports (000mt)	8,0	5,0	15,0	0,1	0,1	2,0	30,2
Meat exports (000mt)	0,1	0,0	0,0	7,0	0,0	0,0	7,1
Meat net trade	-8,0	-5,0	-15,0	-0,1	-0,1	-2,0	-30,2
Meat production	343,0	100,0	24,0	47,0	98,0	450,0	1.062,0
Meat dom. Util.	350,9	105,0	39,0	40,1	98,1	452,0	1.085,1
Meat per cap.	22,8	20,9	6,1	15,0	18,6	16,8	17,6
	Sheep						
Live inventory	13.409,1	13.370,0	2.757,0	23.924,4	3.773,6	10.500,0	67.734,1
Live slaughter (000mt)	6.300,0	6.195,0	1.200,0	5.840,0	2.240,0	3.600,0	25.375,0
Meat imports (000mt)	0,3	0,0	0,0	0,0	0,0	0,0	0,3
Meat exports (000mt)	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Meat net trade	-0,3	0,0	0,0	0,0	0,0	0,0	-0,3
Meat production	113,3	93,0	18,7	102,0	45,1	70,0	442,1
Meat dom. Util.	113,6	93,0	18,7	102,0	45,1	70,0	442,4
Meat per cap.	7,4	18,5	2,9	38,2	8,5	2,6	7,2
	Pig						
Live inventory	1.292,1	30,0	0,7	6,0	82,7	90,0	1.501,5
Live slaughter (000mt)	2.900,0	3,5	4,8	10,0	290,0	205,0	3.413,3
Meat imports (000mt)	10,0	0,3	2,2	0,2	0,0	7,0	19,7
Meat exports (000mt)	0,2	0,0	0,0	0,1	0,0	0,0	0,4
Meat net trade	-10,0	-0,3	-2,2	-0,2	0,0	-7,0	-19,7
Meat production	206,5	0,2	0,2	0,3	25,3	15,0	247,5
Meat dom. Util.	216,3	0,5	2,4	0,3	25,3	22,0	266,9
Meat per cap.	14,1	0,1	0,4	0,1	4,8	0,8	4,3
	Poultry						
Live inventory	25,5	7,2	2,3	0,0	4,5	18,4	57,9
Live slaughter (000mt)	32,0	10,0	3,0	0,1	3,5	12,0	60,6
Meat imports (000mt)	20,0	4,0	0,9	0,3	2,0	8,0	35,19
Meat exports (000mt)	0,1	0,0	0,0	0,0	0,2	0,0	0,255
Meat net trade	-20,0	-4,0	-0,9	-0,3	-2,0	-8,0	-35,19
Meat production	43,0	12,0	2,6	0,0	4,9	16,0	78,507
Meat dom. Util.	62,9	16,0	3,5	0,3	6,7	24,0	113,442
Meat per cap.	4,1	3,2	0,6	0,1	1,3	0,9	1,8

(Ref.: FAOSTAT and regional office in Asia of FAO).

KAZ = Kazakhstan; Largest in slaughtered sheep and in live and slaughtered pigs and poultry

KYR = Kyrgyzstan

MON = Mongolia; Largest for live sheep

UZB = Uzbekistan; Largest in live and slaughtered cattle

TAJ = Tajikistan

TUR = Turkmenistan

ANNEX 2

GENERAL LAYOUT FOR A NATIONAL AGRICULTURAL AND FOOD POLICY

A. The Need for a New Agricultural and Food Policy

1. There are several reasons for developing and adopting a new agricultural and food policy from time to time. Starting new programmes to develop the agricultural sector is a good reason. For the transition countries it is strongly advisable to have a National Agriculture and Food Policy (NAFP). The NAFP supports the country:

- (a) To solve problems which have accumulated before the transition, in order to stabilise the agri-food sector and create conditions for its sustainable development.
- (b) To align the country agricultural policy with international policy and standards and especially with the EU Common Agricultural Policy, and to prepare the agriculture and food processing industry to work in accordance with EU legislation.
- (c) To increase the quantity and quality of farm products.
- (d) To further liberalise the global agri-food trade and to the progress globalisation of the economy.
- (e) To adopt efficient measures to increase competitiveness of agriculture and the food processing industry with regard to the EU single market, as well as vis-a-vis other countries.
- (f) To determine a medium-term strategy for the Government economic policy.
- (g) To receive financial support from International bodies to implement programmes determined to develop the agricultural sector.

B. The Basic Starting Points of the Concept of Agricultural and Food Policy

2. Current problems of agriculture, food production and identification of their reasons. In this paragraph the current problems are characterised.

3. Problems following from inadequate fulfilment of objectives of the previous agricultural policy: The description is included of the main shortcomings of the previous agricultural policy, which did not create a stable corporate environment in agriculture.

4. National interest in the development of the agri-food sector: The State's interest to maintain productive agriculture is presented, which would ensure efficient cultivation of the land throughout the territory of the country.

5. Anticipated external conditions for the development of the sector: External conditions are taken into consideration, such as, for example:

- (a) **Development of the global market with agricultural and food commodities**
- (b) **Further development of trade within the international trade agreements**
- (c) **Modifications to the Europe Agreement**

6. Anticipated development of internal economic conditions and their influence on the development of the sector. Internal conditions are taken into consideration.

C. Objectives of the Agricultural and Food Policy

7. The basic objectives of the National agricultural and food policy are described. Important points will be:

- (a) Creating efficient, modern and competitive agriculture and food management
- (b) Providing enough affordable, wholesome, high-quality and safe food from domestic production to satisfy domestic demand, while at the same time using advantages of international trade exchange
- (c) Ensuring blanket use of available agricultural production resources, especially soil, to the maximum extent justifiable in terms of economy and the environment, as well as appropriate care for agricultural land, the cultural heritage, recreational and other non-agricultural economic use of the territory
- (d) Ensuring a sufficient income level in agriculture and the food processing industry, as well as an appropriate level of personal income for people whose livelihood depends on agricultural activity
- (e) Modernising and restructuring the food processing industry, especially in order to ensure quality and safety of food.
- (f) Adjusting agriculture to environmental requirements for conservation of soil, water, air and the natural environment, biodiversity and conservation of traditional gene pools
- (g) Supporting the development of regions, especially in rural areas with a significant share of agriculture and low density of population, within the framework of sustainable development.
- (h) Preparing agriculture and food management, by gradual adjustment of institutions (food, veterinary and phytosanitary legislation) and creating technical and organisational conditions for the transition to applied regulatory and control mechanisms

D. Strategic Intentions and Basic Orientation of the Concept

8. On the basis of national interests, the strategic intentions in the agricultural and food sector for the next 5 years can be defined as follows:

- (a) Stabilising the sector and creating a viable agri-food sector
- (b) Strengthening the competitiveness of the agri-food sector in the domestic and foreign markets
- (c) Restructuring the food processing industry

9. In greater detail this means:

- (a) Increasing the competitiveness
- (b) Changing the support policy
- (c) Payment of products based on quantity and quality
 - (i) Strengthening the marketing infrastructure of the agri-food sector
 - (ii) Improving the foreign trade balance in agricultural and food products and temperate zone products
- (d) Co-participation of agriculture in preserving and developing the rural environment and maintaining rural settlement
- (e) Strengthening domestic research in the sector and the educational level of workers in agriculture and the food processing industry

E. The Pillars of the Agricultural and Food Policy, Programmes and Instruments

10. Education and training of farmers

- (a) Research institutions
- (b) Agriculture schools
- (c) Training centres
- (d) Extension services

11. Establishment of market organisations for:

- (a) Meat market organisation
- (b) Milk and dairy products market organisation
- (c) Cereals market organisation etc.
- (d) Improving the conditions of agricultural foreign trade by creating market regimes for the most important agricultural products such as milk, meat, among others.
- (e) Improvement of agricultural foreign trade conditions.

12. Support for operations in poor production conditions with regard to:

- (a) Modernisation and support for corporate sector restructuring

- (b) Modernisation and restructuring in the food sector
- 13. Support for the execution of ownership rights
- 14. Support for accelerating the restructuring of businesses:
 - (a) Modernisation of machines and equipment in agriculture
 - (b) Modernisation and restructuring in the food processing industry and registration of titles to land

General services for agriculture and the food processing industry

15. Human resources development in agriculture and the food processing industry is necessary to improve the competitiveness of the businesses by a targeted use of results of domestic sectoral research, consultancy and a system of vocational schools. Instruments and measures include:

- (a) Market information system
- (b) Integrated administrative and control system
- (c) Classification systems for agricultural products
- (d) EU standards (Codex Alimentarius, ISO standards, etc.)
- (e) Veterinary and phytosanitary institutions
- (f) Identification and registration of farm animals
- (g) Development and testing of principles of good agricultural practice and basic environmental programmes (in accordance with the EU)

Accompanying financial measures

- (a) Providing credit
- (b) Taxes
- (c) Addressing the risk of agricultural production and uses of operational financial resources

Anticipated benefits and costs linked to the implementation of the agricultural and food policy

16. The strategy of agricultural and food policy is based on realistic possibilities of the National economy.

17. The calculations of the proposed scope of production and use of agricultural land are based on:

- (a) Commodity concepts (the presumed growth of intensity and use of agricultural land)
- (b) Growth of purchasing power and preferences in the consumption of foodstuffs
- (c) Ability to export a certain volume of the surplus production and to supplement the production deficit
- (d) Compliance with the World Trade Organisation commitments

- (e) All the model variants have proved:
 - (i) The necessity for support, differentiated according to individual commodities, for the provision of basic foodstuffs from domestic production in the required amount and quality
 - (ii) The necessity of differentiated non-production support and income support

3. Anticipated benefits

18. Forecast of sales, costs and profit in the time scale. Gross agricultural production (GAP) will grow, both in nominal and real terms. This growth is conditioned by:

- (a) Growing consumption of intensification inputs (intermediate consumption) and their quality
- (b) Applying good manufacturing practice
- (c) Technological and technical changes supported by targeted resources defined in the basic concept

19. Benefits from the renewal of fixed capital can be expected in:

- (a) Increased efficiency and reliability of the technology and labour productivity
- (b) Decreased operational and labour costs
- (c) Making more realistic needs for modernisation of the technical equipment
- (d) Improving the quality of products and breeding standards
- (e) Ensuring the development and stabilisation of agricultural and food production

4. Agricultural and food policy and sources of covering them

20. Anticipated expenditures are estimated based on the Concept of Agricultural and Food Policy and sources of their coverage by the State budget and other public resources.

F. Risks of Implementation of The Agricultural Policy

21. The implementation of the proposed variant of the concept is also linked to some risks.

22. Examples of risks are:

- (a) Decrease in domestic production
- (b) The loss in agricultural entities
- (c) The efficiency of the use of labour and capital will decrease
- (d) Employment will decrease in agriculture, the food sector and other related branches

23. The share of expenditures of the population on foodstuffs and thus the living cost will be increased.

24. The share of consumer prices of foodstuffs in inflation will be increased.

ANNEX 3

INTERNATIONAL ORGANIZATIONS

CAC

1. The Codex Alimentarius Commission (CAC) was created in 1963 by FAO and WHO to develop food standards, guidelines and related texts such as codes of practice under the Joint FAO/WHO Food Standards Programme. The main purposes of this Programme are protecting health of the consumers and ensuring fair trade practices in the food trade, and promoting coordination of all food standards work undertaken by international governmental and non-governmental organizations (www.codexalimentarius.net).

EUROPEAN UNION

2. The European Union (EU) is a family of democratic European countries, committed to working together for peace and prosperity. It is not a State intended to replace existing States, nor is it just an organisation for international cooperation. The EU is, in fact, unique. Its member states have set up common institutions to which they delegate some of their sovereignty so that decisions on specific matters of joint interest can be made democratically at European level.

3. The European Commission's Directorate-General for Health and Consumer Protection is responsible for food safety in the European Union. The EU import rules for meat and meat products seek to guarantee that all imports fulfil the same high standards as products from EU (www.europa.eu).

FAO

4. The Food and Agriculture Organization of the United Nations leads international efforts to defeat hunger. Serving both developed and developing countries, FAO acts as a neutral forum where all nations meet as equals to negotiate agreements and debate policy. FAO is also a source of knowledge and information. It helps developing countries and countries in transition modernize and improve agriculture, forestry and fisheries practices and ensure good nutrition for all (www.fao.org).

GS1

5. GS1 is a leading global organisation dedicated to the design and implementation of global standards (an example is barcodes) and solutions to improve efficiency and visibility in supply and demand chains globally and across sectors (www.gs1.org).

ICAR

6. Animal breeding and management tools: (cattle, sheep and goats). The aim of the International Committee for Animal Recording (ICAR) is to promote the development and improvement of the activities of performance recording and the evaluation of farm livestock (www.icar.org).

IMS

7. IMS is the International Meat Secretariat. It brings together meat and livestock organisations throughout the world, in a single non-profit making association. It provides a forum for the exchange of ideas and experiences on the issues affecting the international meat and livestock sector (<http://www.meat-ims.org/en>).

ISO

8. The International Standard Organisation is the worlds leading developer of international ISO standards that specify the requirements for state of the art products, services, materials and systems and for good conformity assessment, managerial and organisational practice (www.iso.org).

OIE

9. Animal health: The World Organisation for Animal Health (OIE) provides technical support to Member Countries requesting assistance with animal disease control and eradication operations, including diseases transmissible to humans. The OIE notably offers expertise to the poorest countries to help them control animal diseases that cause livestock losses, present a risk to public health and threaten other Member Countries. The OIE Member Countries have decided to provide a better guarantee of the safety of food of animal origin by creating greater synergy between the activities of the OIE and those of the Codex Alimentarius Commission. The OIE standard-setting activities in this field focus on eliminating potential hazards existing prior to the slaughter of animals or the primary processing of their products (www.oie.int).

SCC

10. The Supply-Chain Council (SCC) is a global, not-for-profit trade association open to all types of organizations. It sponsors and supports educational programs, including conferences, retreats, benchmarking studies, and development of the Supply-Chain Operations Reference-model (SCOR), designed to improve users' efficiency and productivity. The Council is dedicated to improving the supply chain efficiency of its members (www.supply-chain.org).

UNECE WP.7

11. UNECE has been working for more than 50 years on commercial quality standards for a wide range of agricultural products: fresh fruit and vegetables, dry and dried produce, potatoes, meat products, eggs and egg products and cut flowers. Governments, producers, importers and exporters as well as other international organisations use the standards. The role of the UNECE standards is to define a common trading language, to fill the gap between food safety regulations and marketing and to define the commercial quality for foodstuffs (http://www.unece.org/trade/agr/standard/meat/meat_e.htm).

WAAP

12. WAAP is a Federation of Societies and Associations around the world. Policy makers and industry representatives are also involved in its activities. WAAP aims to encourage closer collaboration between the animal production organisations and to bring together scientists, educators, technicians and administrators with the objective of reviewing development concerns on the five continents. From Asia the AAAS is a member of WAAP (www.waap.it).

WTO

13. The World Trade Organization (WTO) is the only global international organization dealing with the rules of trade between nations. At its heart are the WTO agreements, negotiated and signed by the bulk of the world's trading nations and ratified in their parliaments. The goal is to help producers of goods and services, exporters, and importers conduct their business (www.wto.org).

ANNEX 4

EUROPEAN UNION REGULATIONS

1. The legislation on animal production covers the following fields:
 - (a) Animal welfare
 - (b) Animal health (Veterinary surveillance network)
 - (c) Environment
 - (d) Zootechnical legislation
 - (e) Food safety
 - (f) General provisions
 - (g) Product labelling and packaging traceability
 - (h) Contamination and environmental factors
 - (i) Hygiene of food
 - (j) Food quality
 - (k) Carcass classification for poultry, beef-meat, sheep-meat and pig-meat
 - (l) Beef-meat labelling
 - (m) Marketing standards, price reporting and reporting of production statistics
2. The first rules on food safety date from the very early days of the EU. Since 2002, an “umbrella” legislation known as the General Food Law exists. This law does not only lay down the principles applying to food safety but also:
 - (a) It introduces the concept of ‘traceability’
 - (b) It set up the European Food Safety Authority (EFSA)
 - (c) It also reinforces the rapid alert system, which the European Commission and EU governments use to act quickly in the event of a food and/or feed safety scare
3. Regulation (EC) No. 178/2002 of the European Parliament and of the Council of 28 January 2002, laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety.
4. Regulation (EC) No 854/2004 of the European Parliament and of the Council of 29 April 2004, laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption
5. Producers and processors must also comply with a large number of rules on specific issues. The point of all these rules is to make sure that food is as safe as is technically possible, to keep consumers informed and to give them as much choice as possible.
6. In the main, the legislation on the composition and marketing of animal feed (which covers feed for farmed livestock as well as horses, pet food and farmed fish) is derived from EU measures.

7. This legislation covers:
- (a) The additives (vitamins, colourants, flavourings, binders, and so on) authorised for use in animal feed
 - (b) The maximum levels of various contaminants (e.g., arsenic, lead, dioxins and certain pesticides)
 - (c) Certain ingredients that may not be used in feed, the nutritional claims that can be made for certain feeds
 - (d) The names and descriptions, which must be applied to various feed materials (i.e., ingredients fed singly)
 - (e) The information to be provided on feed labels

(These measures are enforced in England by the Feeding Stuffs Regulations 2005, with separate but parallel legislation applying in Scotland, Wales and Northern Ireland.)

8. Feed additives fall within the remit of the EC Standing Committee on the Food Chain and Animal Health. Please see the separate page on the EC website concerning the Committee for further information about feed additives.

9. Feed measures relating to the control of animal diseases, including transmissible spongiform encephalopathies (TSE), remain the responsibility of the Department for the Environment, Food and Rural Affairs (Defra), but the Agency maintains a close watching brief.

10. The European Commission's White Paper on Food Safety, published in January 2000, contained a number of proposals to strengthen feeding stuffs legislation.

11. These are now in force, and implemented in national legislation. The key measures are:
- (a) EC Regulation 178/2002, laying down the general principles of food and feed law, which includes provisions on feed for food-producing animals. This prohibits the marketing of unsafe feed and requires feed businesses to have traceability procedures in place.
 - (b) EC Regulation 882/2004 on official food and feed controls, which consolidates existing enforcement and inspection measures, lays down the principles and powers for carrying out these controls, and specifies the action to be taken both to check businesses' compliance with the rules and when breaches are found.
 - (c) EC Regulation 183/2005 on feed hygiene, which requires most feed businesses involved in making, marketing or using feeds, including livestock farms and arable farms growing crops for feed use, to be registered or approved. Feed businesses will have to comply with standards in respect of facilities, storage, personnel and record-keeping. This regulation applies throughout the feed chain, including to food manufacturers selling by-products of food production into the feed chain and all livestock and some arable farmers.

12. The EU has published the document called "Guidelines for the import of live animals and their products into the EU".

13. This document provides guidance primarily to the national authorities in third countries interested in exporting live mammals and birds and/or their products to the European Union.

Interested parties should always make contact with the European Commission (for contact details see below) to check whether there have been any changes to the procedures described in this document, and for more detailed guidance in respect of particular production sectors. Other interested stakeholders can benefit from the information provided in this guidance. In that case, they are advised to contact their national authorities if they wish further assistance, information and/or to initiate approval procedures concerning imports into the European Commission.

Information about food safety of the European Union and related subjects is available on the internet:

14. For information about food safety: <http://europa.eu/scadplus/leg/en/s04000.htm>. Select “Agriculture” and than “Food safety”. Hereafter you can make another choice, for example for “animal nutrition”.

15. For “Markets for agricultural products”, use the same webpage and instead of “food safety” select “Markets etc.”.

Furthermore, all European Union legislation is available on the Internet. Agriculture is chapter 3 - http://eur-lex.europa.eu/en/repert/index_03.htm

16. The EU legislation on animal health and zootechnics (03.50.30) can be found at the following address: <http://eur-lex.europa.eu/en/repert/035030.htm>. For the production of meat, it is: pig meat (03.50.52); beef and veal (03.50.57); Sheep meat and goat meat (03.50. 68); and poultry (03.60.69).

ANNEX 5

DATA ABOUT PRODUCTION AND THE MARKET OF MEAT IN THE WORLD

World market in meat (ref. FAO Food Outlook)			EU	CA	
	2005	2006	2007	2005	2005
Production	269,1	275,7	284,3	40,6	
Bovine meat	64,5	65,7	67,5	7,8	1,1
Poultry	82,2	83,1	85,5	10,7	0,1
Pig meat	104	108	112	21,1	0,3
Ovine meat	13,1	13,5	13,8	1	0,4
Trade	20,9	20,7	22	3,4	
Bovine meat	6,6	6,6	7,2	0,2	< 0,1
Poultry	8,4	8,4	8,7	0,9	< 0,1
Pig meat	4,8	4,8	5	2,2	< 0,1
Ovine meat	0,8	0,8	0,9	0	< 0,1
Supply and demand indicators					
World (kg/year)	41,7	42,2	43		
Developed (kg/year)	83	83,8	85,1	86	
Developing (kg/year)	30,9	31,5	32,3		33
FAO Price index	121	115			

World production, import and export 2006 (Ref. USDA, World Markets & Trade report, livestock and poultry April 2007)

Production	in %	Total	Beef & veal	Pork	Broiler	Turkey *
Australia	1,0	2.183	2.183			
Brazil	9,8	21.451	9.020	2.830	9.355	246
Canada	2,0	4.412	1.425	1.870	970	147
China	32,1	70.103	7.492	52.261	10.350	
EU-25	17,9	39.040	7.930	21.400	7.625	2.085
Russia	2,0	4.432	1.430	1.805	1.180	17
USA	18,4	40.079	11.981	9.559	16.043	2.496
Other countries	16,7	36.530	12.377	9.291	14.839	23
Source: USDA	100,0	218.230	53.838	99.016	60.362	5.014

Import of meat	in %	Total	Beef & veal	Pork	Broiler	Turkey *
Australia	0,6	90		90		
Brazil	0,0	0				
Canada	2,1	313	159	145		9
China	3,0	444	10	91	343	
EU-25	7,7	1.150	560		525	65
Russia	20,6	3.094	955	852	1.189	98
USA	12,5	1.871	1.399	449	21	2
Other countries	53,6	8.051	2.132	2.728	2.981	210
Source: USDA	100,0	15.013	5.215	4.355	5.059	384

* Year 2005

ANNEX 6

COMPANIES ACTIVE IN THE MEAT SECTOR IN EUROPEAN UNION MEMBER STATES

Beef and sheep

- (a) Atria Finland
- (b) Campofrio Alimentacion S.A., Avenida de Europa 24, 28108 Alcobendas (Madrid) Spain
- (c) Cooperl-Hunaudaye France
- (d) Coren Spain
- (e) Cremonini, via Modena, 53, MO 41014 Castelvetro Italy
- (f) Danish crown Denmark
- (g) Dawn Meats Ltd, (also lamb meat)
- (h) Inalca S.p.A., Via Spilamberto 30/C, 41014 Castelvetro di Modena Italy
- (i) Gilde Norway
- (j) Grannagh Waterford Ireland
- (k) HK Ruokatalo Finland
- (l) Irish Food Processors, 14 Castle St. Ardee, Louth Ireland
- (m) Kepak Group Co.Meath Clonee Ireland
- (n) Slaney Meats International, Ryland Bunclody Co. Wexford Ireland
- (o) Swedish Meats, Slakthusplan 4, S-121 86 Johanneshov Sweden
- (p) Smithfield Europe Products, 29403 Lampaul Guimiliau France
- (q) Socopa, BP 20, 72401, La Ferté Bernard cedex France
- (r) Sovion, (Vion Food Group) , NCB-Weg 10, 5681 RH Best Netherlands
- (s) Swedish meat
- (t) Unicarni Soc. Coop. A Rl, Via Due Canali, 13, 42100 Reggio Emilia Italy
- (u) Unicopa France
- (v) Westfleisch Germany

Pig

- (a) Glanbia Meats Edenderry - Co. Offaly Ireland
- (b) Inalca S.p.A., Via Spilamberto 30/C, 41014 Castelvetro di Modena Italy (also pork)
- (c) Socopa, BP 20, 72401, La Ferté Bernard cedex France

- (d) Sovion, (Vion Food Group) (also pork), NCB-Weg 10, 5681 RH Best Netherlands
- (e) Unipork Soc. Coop. A RI, Via Due Canali, 13, 42100 Reggio Emilia Italy

Poultry

- (a) A.I.A. S.P.A., Via san Antonio 60, 37036 San Martino Buon Albergo Italy
- (b) AMADORI, Via Del Rio 400, 47023 Cesena Italy
- (c) Barou SA, ZA le Flacher, 07340 Feilines France
- (d) G.P.S., Oosteinderweg 104, Postbus 41, 8070 AA Nunspeet Netherlands
- (e) KLAASEN & Co N.V., Peelsestraat 50, B-2380 RAVELS Belgium
- (f) Plukon Poultry B.V. (Friki), Industrieweg 36, Postbus 10, 8090 AA Wezep

- (g) Tyson International, Europe, 5 Devonhurst Place, Heathfield Terrace W4 4JD, London UK
- (h) Wiesenhof Geflügel GmbH & Co KG, Paul-Wesjohann-Strasse 45, 49429 Visbek Germany
