1. Kazakhstan is a country of a size similar to Western Europe. Most of the country consists of dry steppe grasslands, traditionally used for livestock production that around 1990 represented some 60% of agricultural output. The livestock and pasture sector in Kazakhstan have experienced drastic changes during the economic transition of the last decade by having to adjust for distortions during the Soviet period when it was solely producing for the, then protected, Soviet market. During that time the sector went through a substantial contraction of its inventory, especially after 1995 when reformed farms as well as rural farm workers liquidated animal stock to pay for debts and farm inputs. The outcome to date is a sector with a current animal inventory that is lower than it was at the beginning of the 20th century (see figure 1 and 2). The rural infrastructure has crumbled and many people living in the outback of the vast Kazakh plains have been left in poverty depending on the few animals left for their main livelihood.

2. The contraction of the sector has bottomed out in 2000. Urban demand, especially for meat is rapidly increasing, in part fueled by the oil boom. However, this has not yet translated into significant reduction of rural poverty. The livestock sector can be regarded as one of the driving forces in rural revival in this country dominated by grasslands. The Government recognizes this, but is uncertain about the approach and the tools to stimulate growth appropriately and sustainably. It continues to believe in the model of agro-industrial complexes with some rehabilitation of large farms and of energy intensive production and considers that, based on feed resources and markets, Kazakhstan livestock sector should be able to export to nearby markets in Russia and China. There are ample examples of emerging small and middle-sized production systems, which potentially can lead the way for a re-emerging animal resources sector. On the other hand, increasing prices threaten to deprive the urban and suburban poor access to meat and dairy products.

3. Before the Soviet break-up Kazakhstan did export meat and wool to other Soviet states. Current and future exports face a much wider competition, but still have some comparative advantages related to geography and trade relations. In developing a livestock strategy Kazakhstan could gain from experiences in comparable countries and regions such as western China, Argentina, Turkey and Australia and others. The Government has expressed a strong interest in World Bank support to review the current
status of the sector and advice on future direction and policies/in the livestock sector. The Bank could also help in developing the needed institutional support for the sector, and help develop policies that ensure an environmentally sustainable development.

Rationale

4. The livestock sector is important in Kazakhstan and has potential, not only because of its history, but also in view of the large underutilized rangeland resources, the increasing upscale markets, and the important role the sector continues to play in alleviating poverty in the rural areas and especially in remote villages of Kazakhstan’s vast territory. The contraction of the production subsector has halted, and there are signs of an emerging selective local recovery. Most changes are still tentative and constraints along the supply chain (fodder supply, production, breeding, food quality, marketing, and in overall knowledge and skills) continue to affect the sector.

5. The Government’s 2003-2005 development plan aims to focus on food security “through the establishment of an efficient agro-industrial complex with competitive products” and lists its objectives as (i) ensuring food security of the country, (ii) establishing efficient agro-industrial systems, (iii) increasing the marketing of primary and processed farm products in both domestic and foreign markets, and (iv) optimizing the state support for agriculture. With respect to livestock development the plan mainly focuses on breeding and animal health, and in the regional stratification of production systems. For a longer term view and development plan for the livestock sector, the Government is interested in the support of the World Bank to do an in-depth analysis of the current issues and constraints in the sector, and to provide guidance and examples on how to address the subsequently identified issues through policy changes and/or programs implemented by the public as well as private sector.

6. Based on a preliminary analysis it appears that the contraction in animal inventory may have “overshot” the equilibrium between market demand and feed resources and that there are opportunities for sustainable growth. Whether such growth can be achieved depends on a multitude of conditions among which the following appear paramount:

(a) Market demand

Livestock currently accounts for about $50 million in exports, down from close to $150 million a couple of years ago. (During the Soviet period the two major export goods were approx 1 million MT of meat, and wool). Major livestock export products during the 1992-2000 period were hides and skins (38%), beef (25%), wool (18%) and mutton and lamb (6%). These exports, apart from wool, were largely claimed to be a result of “dumping” low costs products associated with the downsizing of the inventory (see figure 2). The reasons for this decrease during the
transformation period were the halting of import and subsidized delivery of feed, the breakdown of transport between remote farms and markets and the use of livestock in barter during the period of rapid inflation. Currently the three major livestock products are meat (mainly beef and lamb), milk and wool. After the period of contraction, the local prices for livestock products (except wool) have rapidly risen, with some prices (lambs for example) close to or exceeding international prices. This demand derives mainly from urban centers and producers close to urban centers (especially dairy and poultry) appear to reap the benefits (as do foreign imports). Farmers in rural areas will have to improve their access to markets in order to take part and benefit from the increased demand. Although currently the sector is mainly supplying local markets, in the longer term there could be a potential for exports into neighboring countries of the region where incomes are rising and demand for livestock products is increasing. Participation in these markets (i.e. Russia, China, Middle East) may require specific trade arrangements and or WTO membership. On the other hand this export orientation should not deprive local poor from access to basic meat and dairy components in their food basket. Further analysis of these issues may help the Government to assess and or protect their marketing advantages, if any, while assuring affordable food to the poor.

(b) An adequate feed base

Natural range and pasturelands cover 170 million ha (over 60% percent) of Kazakhstan’s land resources, and were historically the driving force in the country’s economy as a source of fodder, food, fuel, medicinal plants and recreation. Kazakhstan appears to have two major feed resources i.e. grasslands and wheat; its the sixth country worldwide in terms of the size of its grasslands. The current size of the sector appears to be small compared to other countries (Australia, Argentina) with comparable rangeland resources. The perceived differences are a lack of protein feed, the necessity (in most parts of the country) to preserve fodder during winter, poor fodder preservation and feeding practices, under developed feed and fodder markets and, regionally, limited fresh water resources.

(c) Efficient lines of supply and processing (input as well as output).

Improving the marketing of livestock products and inputs will be one of the mayor issues for the future. Currently national urban centers such as Almaty, Taraz, Chimkent and Karaganda are important markets inside the country. Studies in populated southern Kazakhstan showed that internal markets, largely rural “bazaars” and livestock markets perform reasonably well and that price information reaches these markets. Among the constraints in the market chain (apart from suburban production) is the poor infrastructure (roads, communication, energy supply), i.e. factors beyond the control of the sector. The relatively high transport costs to the markets are a major constraint to smaller-scale farmers in marketing livestock to the major urban centers and in obtaining input to improve their production. The processing is partly based in outdated old
mega structures, partly in small startups, and partly in new plants financed by foreign (especially Russian) food companies. Most of the sector is fragmented with little vertical integration. Improvement in general infrastructure as well as sectoral infrastructure will be among the conditions for further growth. In addition there is a need for quality improvement and consistency, and a need to convince local and international buyers about consistent quality and supplies.

(d) Livestock Services

Efficient livestock services are the basis for an efficient supply chain management. Breeding, animal health, and extension services have proven critical for successful livestock producing countries. Especially the management of animal health and food safety issues has been a supposition for trade and marketing in OECD countries. Kazakhstan is contemplating to invest in improvement of its food safety services. However, the development of efficient livestock services will be difficult for the fragmented sector. The slow revitalization has so far been carried by suburban farms, but most farms and livestock are located in rural areas where market access is more difficult and where transaction costs may be high. Given the limited skills and the depleted infrastructure, the merits of policies of modernization among Western lines, which is the current vision of the Government, may need review, with the option of guided change (including the slower process of skills improvement) with clear priorities.

(e) Adequate macro economic and stable political conditions

In the short term the sector is still dependent on foreign inputs for production (protein feed, concentrate, day-old chicks etc) as well as processing (new equipment etc) and, as such, it is vulnerable to exchange rate volatility. Currently the country is becoming a grain exporter and in the medium term international grain markets and prices may affect the livestock sector. In the longer term the country could become an exporter of livestock products. The Kazakh economy was severely affected by the Russian crisis, and the vulnerability of the livestock sector to such shocks needs to be assessed.

This possible growth of the sector, however, is not without risk. Apart from the problem to find and hold on to competitive markets (both inside and outside the country) there are externalities associated with intensification of both the production and processing systems, especially the environmental sustainability. As a sector that largely depending on grazing, a livestock policy is integrally linked to the
environment and to policies regarding Kazakhstan’s natural resources. In view of the size of these resources any drastic change may have global consequences and there is a need for the right polices to guide the sector towards sustainable development.

8. Currently, the sector also fulfills a social role in providing some security and income to people that remained in the rural areas after the break up of the collectives. The total number of households depending on livestock has increased during the last decade to an estimated 1.6 million, but many of these may be owners against their will, who obtained livestock and other assets during the break-up of the farms, and have few alternatives but trying to survive with their small flock or herd. Development of the sector, therefore, requires a careful policy debate and well thought-out instruments to succeed in both continued support for the rural poor (as long as other social protection systems are deficient) and support for the development of a viable livestock sector.

9. The above described conditions for sustainable growth lead to key questions in different fields that will have to be answered in order to develop a comprehensive strategy for the livestock sector in Kazakhstan:

(a) Economic issues: Did the animal privatization lead to greater efficiency? What is the comparative advantage of current and future animal products? What are the optimal production systems - i.e. large, small or both – and what are the suitable breeds? What can be learned from successful livestock producers? How can the available input resources be used more effectively and sustainably?

(b) Marketing issues: What needs to be done to improve the efficiency in marketing (local or international market)? Are the current initiatives in market improvement indeed cost effective and do they improve access of the consumers? What is required to develop a consumer-responsive production/processing system? How can vertical integration be improved and processing be promoted? How can quality issues be addressed?

(c) Social policy issues: How is it possible to support a commercial livestock farming community in an environment where backyard farmers that produce for domestic consumption, often in lieu of social security, dominate animal ownership and production.

10. The Ministry of Agriculture has in particular requested to discuss (a) different approaches in production (smallholder and mid size or mega farms; intensive or extensive production); (b) different strategies in breeding-, veterinary- and extension services (e.g. how to serve intensive vs. extensive production systems with the adequate breeds, feeding, animal health management systems; what are the needs in terms of skills); (c) different approaches in marketing and trading: bulk commodities at low costs with little value added (cost leader strategy) vs. production of high quality products with higher margins (quality leader strategy).

11. It appears, from preliminary policy debate and documents, that the approach to sector development by Kazakh policy makers is still fragmented - often only dealing with a single commodity or animal species - and not well integrated. It is the intend of the study to contribute to a comprehensive view of the sector, as well as to broader policy issues such as poverty alleviation and linkages to other sectors. The study would also try
to involve local decision makers, whether in private or public sector, in the process of taking a more comprehensive view of sub sector issues.

**Link to country assistance strategy**

12. The process and outcome of the study supports the CAS objectives that include: (i) reform of the public sector to improve resource and public revenue management, transparency and accountability; (ii) promotion of broad-based, private sector-led growth through enterprise privatization and restructuring, improvement of business environment, and arresting rural productivity decline; (iii) support to most vulnerable groups through improvement of social services and reform of social protection systems; and (iv) protecting the environment through reducing industrial pollution and water shortage and restoring marginal lands. The proposed study would generate specific knowledge needed to address the CAS priorities in improvement of livestock sector management, improving private sector involvement in the livestock sector, improving food quality and enhancing growth and development in the rural areas.

**Study objectives**

13. The overall objective of the study is to assist the Kazakhstan government in reaching a consensus for the sustainable development of the livestock sector and for priority activities in key policy and investments initiatives that will overcome current and anticipated constraints and facilitate the creation of a demand driven production and marketing system, while assuring affordable availability of essential livestock products to the poor. A number of short policy notes, and a summary report, envisage to provide guidance to Government on necessary changes,

**Method and Scope of work**

14. The study will use a combination of continuous dialogue, analysis (with, where, needed, short policy notes) and a final report.

15. In order to enhance local ownership and obtain a basic data set the work will start with recruitment of local consultants requested to produce a basic data set and information on:

   (a) availability of a feedbase i.e. local feed and selected imports as well as grasslands and cultivated fodders, with some follow up on an earlier study on rangeland development that focused on land tenure, risk reduction, skills improvement and institutional development\(^1\).

   (b) the quality, structure and farmer responsiveness of livestock services (breeding, animal health, and extension); how well do the services respond to the fragmented producers community, and are there any specific actions to address the specific demand of the larger producers on the one hand and the (poor) small holders on the other;
(c) the macro economic environment and the effects of exchange rate. How did the sector cope during the macroeconomic stress in the later nineties and what have been the tools used by Government, if any, to accommodate the shock of transition in general as well as the “Russian” crisis in 1998; can the sector cope with a possibly overvalued exchange rate (fueled by energy exports);

(d) microeconomics and trade policies of the livestock sector, including comparative advantages in national and international markets, local stratification (changes) in production and processing;

(e) marketing of animal products including the demand in general, elasticity of demand, opportunities to participate in international trade, and the process of marketing and food safety and phytosanitary issues.

16. This information will be analyzed and summarized in simple policy notes and or policy questions to be presented in a few local workshops. Where needed some further information and data may be gathered. Interaction with Government and other local players will be maintained by mission visits and by proactive involvement of the local team member in Astana. This mode of operation has been successfully used in the studies and policy dialogue on the range and forestry issues. The workshops and the further data will be the basic for a preliminary report and recommendation to be presented in a national workshop as well as to a Bank audience. The outcome and report of these presentations will be discussed in more detail with Government and should produce a series of policy recommendations as well as possible investment concepts.

Relation to World Bank activities

17. The study would follow up on earlier discussion of agricultural policy in the mid nineties, and provide further background for a current and future portfolio in institutional and rural development. Currently the World Bank is financing, and planning, a number of project interventions that indirectly deal with livestock related issues. Among the interventions are

(a) the Agricultural Post Privatization Assistance project that includes a on-lending components which, among others, supports investments in livestock.

(b) the planned Drylands Management Project includes rangeland improvement and livestock marketing components

(c) The planned Increase of Competitiveness of Agricultural Products (previously named Agricultural Support Service) Project may consider investments in improvement of services such as animal health, farmer skills, applied research;

(d) the planned Forest Rehabilitation Project and the ongoing Regional Biodiversity Project include components that touches upon rangeland use and rehabilitation, as well as on forest grazing issues.
In addition technical assistance has been provided in forestry and rangeland policy and especially the latter was closely associated with issues relating to rangeland use and tenure. The study will also review and follow up on ongoing and related projects, as the sector work is especially relevant to the socio-economic conditions of rural herders and farmers.

18. The team would use its experience in analyzing agriculture, livestock and rural poverty issues in general and the Bank’s recent experience of similar animal resources related economic sector work in India, China, Turkey, and Indonesia.

**Plan of action**

19. The Government actively supports this study, it has reviewed and accepted the basic concept as well as the suggested approach of recruiting local consultants to write “state of the arts” papers on specific subsectoral issues and provide an up to date dataset. This will be followed by a simple analysis of the data to identify additional issues and possible short draft policy notes on urgent issues, which are sufficiently clear at this stage. Feedback will be provided through direct contacts and through the team members in Astana. The drafts and data will be presented and debated in regional workshops, to obtain the necessary regional angle in this very large country as well as stakeholder understanding and ownership of the main issues. Where needed specialized international expertise will be brought in to explain how other countries are dealing with challenges such as marketing, environmental sustainability, food safety etc. The outcome will be summarized, where possible, in short policy notes for Government and be the basis for more targeted policy discussions and final agreement on policy and possible investments opportunities.

20. Based on a broad cooperation with the local officials the following plan of action has been proposed.

Draft of concept paper (World Bank) November 2002
Discussion of concept December 2002
Hiring of local consultants December 2002
Consultant reports received March 2003
Establishment and meeting of working groups (workshops) May 2003
Preparation of draft sector notes June 2003
Discussion of sector study in open forum with government August 2003
Issue sector note for discussion in Bank Nov 2003
Finalize sector note and recommendation March 2004

In addition to the above listed plan of action it is planned to keep intense dialogue between local-, government- and bank officials based on short policy notes that will be provided by the Bank staff and or consultants.

1 Kazakhstan rangelands in transition. The resource, the users and sustainable use. 2002
Audiences

21. As the study is intended to be a participatory process there is overlap between audience and participants. The government and state agencies are major players both as participants in the exercise and as the final audience; so are the emerging private sector whether farmers and farmer associations, civil society or input- and output industry. Issuance of policy notes and reports are largely contributions to the dialogue with these partners. The audience also includes the international development community as well as the international financial institutions and private sector. International institutions have reviewed selected parts of the sector such as farm budgeting (EU-TACIS) and localized marketing studies (USAID and ADB), but endorsed the proposed comprehensive approach.

Output

22. The expected outputs include (i) a participatory process of policy dialogue with Government, supported by (ii) brief policy notes to Government and other participants where appropriate or requested, (iii) a participatory process of other sectorial players in national and regional workshops on sectoral policy, (iv) progress reports, and (v) a final joint Bank-Government sector report and recommendations for policy (where needed) and for public and private investment support.

23. The review would assess current livestock management practices, with regard to livestock economics and marketing, livestock services (breeding, extension, animal health etc) and the input issues of the sector (feed and fodder supply). In the light of recent international experience, especially in similar ecosystems, it would review options for improving the efficiency and sustainability of these practices as appropriate

Expected outcome and impact

24. The overall expected outcome includes accepted policies that lead to increased efficiency of the livestock sector, sustainability of natural resources use and increasing rural income. The expected outcome would include:

(a) a well-defined strategy for the livestock sector development which would make provisions for sustainable usage of the natural resources;

(b) consensus about the key livestock management and livestock production issues and opportunities in Kazakhstan in general and some indications of regional priorities;

(c) consensus building process about priority areas for policy and institutional change along the production and supply chain of livestock products, including lessons learned from the sudden economic downturn in Russia in 1998;

(d) awareness among key players in the sector as well as in all parts of Government about the major issues and opportunities in the sector;

(e) a local understanding about public- and private sector roles and about possible public sector investments and policy reforms that are facilitating the development of the sector;
(f) a process of (gradual) reduction of government involvement in certain areas including animal health, breeding services, processing, input supply and marketing, and an assessment of the proper tools to improve the quality of production and to encourage private sector investments;

(g) a local appreciation for the shared Bank’s experience (from other countries) and collaboration to improve livestock sector development;

(h) a knowledge base for Bank staff in the rural sector, that would help management to reach decisions on further support and reform.

Resources
Bank resources as well as local contributions will fund the study, it is expected that part of the study will be supported by the joint Kazakh-World Bank ESW funds. Current Bank funding for FY 2003 is US$ 90,000.

The current bank team consists of Tjaart Schillhorn van Veen (teamleader) and includes Frauke Jungbluth, William Sutton, Bulat Utkelov (Astana) and Juergen Venema (JPA). The team is expected to be complemented by local consultants as well as an international livestock consultant.
Cost estimate

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² Other includes joint Kazakh–World Bank fund for ESW