Kazakhstan
Agricultural Sector Review

December 12, 1994

Agriculture, Industry and Finance Division
Country Department III
Europe and Central Asia Region

Document of the World Bank
### CURRENCY EQUIVALENTS

**Until November 15, 1993**

Currency Unit = Ruble  
1 Ruble = 100 kopecks

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**After November 15, 1993**

Currency unit = Tenge  
1 Tenge = 100 tiyns

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As of August 15, 1994.

### WEIGHTS AND MEASURES

Metric System

### GOVERNMENT FISCAL YEAR

January 1 - December 31

### ABBREVIATIONS

FSU - Former Soviet Union  
GDP - Gross Domestic Product  
NBK - National Bank of Kazakhstan  
NGO - Non-Governmental Organization  
NMP - Net Material Product  
SJSC - State Joint Stock Company  
SPC - State Property Committee
The report is based on findings of a World Bank mission to Kazakhstan in March 1994 comprised of Messrs./Mmes. R. Southworth (Mission Leader), C. Mock, U. Koester, H. Gencaga, C. Hoisington, N. Mahoney, H. Heringa, G. Bakker and K. Baker. The World Bank wishes to thank the authorities of Kazakhstan for their support and cooperation. The report was prepared by Roy Southworth with valuable comments and contributions by Christopher Mock, Bernard Funck, John Holsen and Klaus Lorch. The report was processed by Ishmeet Kochhar. The work was carried out under the general supervision of Michael Gould, Division Chief and Russell J. Cheetham, Director.

This report was discussed with the Government in September/October 1994. In the discussions, Government indicated that it had already introduced a number of reforms in agricultural trade and price policy and in the "state needs" system that are consistent with the reports recommendations. An update based on these discussions has been appended to the executive summary and can be found on page xi.
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EXECUTIVE SUMMARY

1. In Kazakhstan's third year as an independent country, the agricultural sector represents both the promise and the challenge for the future. The promise lies in the important role that agriculture can play in the future growth and development of the economy. The sector is blessed with abundant and diverse agricultural resources and a well-trained agricultural labor force. It is and will remain a major supplier of raw materials and an important source of export revenues for the economy. Moreover, a recovery in the agricultural sector from its current state to sustained growth would stimulate income growth and future demand for farm services and industrial products.

2. The challenge, however, lies in the difficult task of transforming the sector to a market-based system in the face of continuing economic instability and decline in the region. Reforms must be implemented in a difficult economic environment marked by shrinking incomes and decreasing demand and where old trading relations have been disrupted, depressing markets for agricultural exports and creating shortages of key agricultural inputs. Moreover, Government has had to contend with an imperfect consensus on the reform process and a lack of information and experience to draw on in designing and implementing its reform program. The result is reforms that often run counter to the Government's stated objectives and which serve to lock-in existing structures and inefficiencies.

3. Despite these challenges, Government has made an important start through initial reforms of agricultural pricing and subsidy policy and in agricultural privatization. As a result of these reforms, a small but growing private sector has begun to emerge. But, the private sector remains very much on the margin with many of the structures inherited from the old regime still in place. Now, Government faces the imperative of accelerating and enhancing the impact of the reform process. The process requires that old and inefficient structures be replaced and new ways of doing business allowed to emerge.

4. The Government also faces trade-offs in implementing the reform program. Perhaps the most difficult will be reconciling the need for reform with the necessity of maintaining an adequate level of social protection. This issue has two elements. First, a major element of social policy has been the provision of consumer subsidies for bread, financed in large part by an implicit tax on grain production. Elimination of the implicit taxation will make it more difficult to finance bread subsidies and will require that the level of subsidy be reduced and be better targeted to low income groups. Second, there is the issue of how to deal with the social assets currently financed and managed by state owned agro-enterprises undergoing privatization. The privatization process calls for the divestiture of social assets. Developing the capacity of local government or other entities to administer and finance these divested services will be crucial to maintaining adequate levels of social protection. To a large extent success or failure in addressing the difficult issue of social protection will determine the success of the reform process.

5. Successful implementation of further reforms hinges on the development of a comprehensive and consistent strategy. The Government started this process with its Conceptual Program for the Development of Agriculture to the Year 2000 and Beyond, which was prepared by the Kazakh Academy of Agricultural Sciences and approved by the Cabinet of Ministry in early 1994. The program describes the reform measures currently under implementation in the areas of pricing policy, subsidies and taxes, privatization of agro enterprises, land reform, investment policy, and social and labor policies. The report assumes a transition to a market economy where relative prices and profitability guide decisions on production patterns, and resource utilization. But most of the report is devoted to
commodity-by-commodity projections of production trends and input requirements that are similar in
guise to old central planning models and it is unclear whether the targets are to be pursued through
reliance on market forces or administrative decrees. Thus, in addition to the conceptual program, a more
comprehensive assessment is needed of the policy and institutional framework required to support the
transformation of agricultural sector into an efficient market based sector. This report proposes such a
strategic framework for agricultural development.

6. The agricultural sector is caught in the midst of the transition between a command
and market economy where old structures often no longer work and new structures have not yet risen to
take their place. The incomplete reform agenda has helped contribute to a downward spiral of declining
output. Performance in 1993 was disappointing with a 12 percent decline in agricultural net material
product following annual output declines averaging 5.3 percent between 1990 and 1993 in constant 1983
prices. Crop yields are low and for many crops they are declining and measures of livestock productivity
show similar deterioration. Moreover, the financial situation of farm enterprises deteriorated markedly
in 1993 with a sharp increase in the number of farms reporting losses.

7. The sector decline is partly explained by the difficult break-up of the Soviet Union
and the resulting monetary instability and disruption of trade and payment mechanisms that have lead to
shortages in inputs, machinery and spare parts and loss of output markets. But, other more important
factors explaining agriculture’s poor performance have been official prices that are low relative to world
market prices, compulsory marketing arrangements, and export restrictions that have seriously eroded
the internal terms of trade to the sector and created a severe liquidity squeeze. Long delays in payment
for official purchases in the highly inflationary environment have served to further reduce real producer
prices. Government subsidies, particularly subsidized credit have partially compensated for low prices.
But, overall Government pricing, subsidy, credit and trade policies have imposed a heavy tax on the
sector, roughly estimated to be in the range of US$320-750 million dollars in 1993 or about three to six
percent of GDP.

8. The policy-induced decline in the internal terms of trade have reduced earnings
and precipitated a financial crisis. The sector has become increasingly reliant on directed credits from
the banking system to sustain output and its inability to repay the credits has contributed to growing
inflationary pressures. Moreover, attempts to limit directed credits have given rise to a severe problem
with inter-enterprise arrears. The financial and monetary crisis is in part explained by the lack of
structural reforms and sectoral policies that would allow for adjustment in production and marketing.
Remaining elements of the former command economy, namely continued Government involvement in
production and marketing, often serve to lock-in existing production patterns and practices.

9. To address the crisis in agriculture, three key areas must be considered. The first
is Government pricing, trade, and procurement policies that have taxed the sector severely through low
farm prices and have served to lock-in often inefficient production practices. The second area is the lack
of competition in the provision of farm services and output marketing. The third area is land reform
and farm restructuring.

Government should be to halt the policy-induced decline in the agricultural terms of trade and reduce the
sector’s dependence on implicit subsidies through directed credit. The key focus should be on increasing
farm prices by: (i) replacing the system of compulsory deliveries of agricultural commodities to the state
at low prices relative to world market prices with a system of Government procurement based on
competitive bidding procedures and prompt payments; and (ii) reducing barriers to both external and internal agricultural trade by eliminating all remaining export restrictions and prohibiting local Government officials from intervening in internal trade. Measures to liberalize trade and introduce competitive state grain procurement should establish a link between producer prices and world market prices that will lead to improved internal terms of trade for the sector.

11. Improved agricultural terms of trade through higher producer prices should lessen the sector’s need for subsidies and all remaining budgetary subsidies should be removed. Also the implicit subsidies arising from directed credit at below market rates should be eliminated. For consumer subsidies, the increased prices to farmers will require improved efficiency in the delivery of the remaining subsidies for bread and macaroni products to be financed by the budget. Better targeting of the bread subsidy to the poor and vulnerable groups could be achieved by limiting the subsidy to inferior bread products. Eventually, as administrative capacity in the social sector improves the subsidy could be phased out in favor of direct income supplements paid to the target population.

12. Improved Competition in the Provision of Marketing Services: The agricultural marketing and processing system in Kazakhstan remains little changed from the one inherited at the time of independence. More than 5,000 enterprises operate in the marketing system, including grain elevators, flour and feed mills, slaughter houses, dairy processing plants, vegetable storage warehouses, and canning and bottling factories. Another 700 firms provide agricultural inputs, equipment, and maintenance and repair services. Most enterprises are grouped into local or national associations or companies. In the past they were controlled by central ministries but recently they have increasingly come under the control of state or regional joint stock companies. Regionally, some enterprises or their local associations are controlled by the local administration.

13. Government reform of the agro-enterprise sector has focused on privatization issues. The Government is in the process of implementing a privatization program for the industrial sector, based on small-scale auctions, mass coupon privatization for medium-size firms, and case-by-case privatization for the largest firms. The program is designed to transfer ownership and improve governance as quickly as possible, introduce competition into the sales process, broaden participation by the population, and improve fairness and transparency. However, Government has decided to privatize agro-enterprises on a different track from industrial firms and in the process it has introduced a number of anti-competitive elements that the program for the industrial sector was designed to address. Government has chosen an essentially closed process that distributes shares of the agro-enterprises to the suppliers or customers of the enterprise, the employees, and often the state. It also locks-in existing business arrangements and limits competition through long-term supply contracts between the enterprise and its suppliers/shareholders. Moreover, the establishment of State Joint Stock Companies to take over functions formerly handled by Government ministries adds further non-competitive elements.

14. The marketing channels emerging from the process resemble the vertically integrated, monopsonistic structures of the past. Most of the same structures and people from the old state marketing organizations are still in place and functioning as they always have and it is doubtful that the process of privatization currently being used will ever fulfill the objective of developing free and competitive markets for inputs, farm services, and agricultural output. Fortunately, the process has not proceeded very far and there is still an opportunity for Government to reconsider the approach. Instead of treating agro-enterprises separately it is recommended that they be included in the existing small-scale, mass coupon, and case-by-case program of privatization. In this way the monopoly structures at the national and regional levels could be systematically broken-up using prior segmentation where necessary.
Special efforts could also be designed to increase competition at the farm gate by identifying units such as local grain elevators, milk collection and processing facilities, and input supply depots for inclusion in small-scale auctions. Groups of farmers could be encouraged to participate in the auction of such assets as a means of establishing farm service or output marketing cooperatives. In no instance should long-term contracts be used as part of privatization process.

15. Land Reform and Farm Restructuring: Land reform and farm restructuring are key elements of the Government’s reform program for the agricultural sector. After a slow initial start to the program, a second phase was launched in March 1993 to accelerate the process of reform. The key policy goal of the second phase is the recognition of individual rights of farm workers and residents to the farm assets and land. Theoretically, each farm worker is allotted the rights to an identifiable piece of land on the basis of a life-long inheritable lease. This land may be farmed individually or may be grouped into larger units and farmed co-operatively if the holders of the land so desire. The Government intends that for each farm, the workers will debate the advantages and disadvantages of each management and ownership form and decide which one is best for their conditions. The only requirements are that a non-state model of ownership and management be selected and the worker’s right to land and farm assets is recognized.

16. While the second phase has only been under implementation a little more than a year and a half, it appears that the process is still leaving the farm sector fundamentally unchanged. Only a handful of farms undergoing privatization have chosen to break-up into smaller units. Simply put, large inefficient state farms are becoming large inefficient co-operative farms. The new collective enterprises of various forms look and behave much as their predecessors. The harsh economic environment, lack of understanding and information about alternative farm structures and procedures for restructuring, and a resistance to change by many responsible for guiding the process at the local level help to explain the lack of restructuring. Moreover, continued system of compulsory deliveries to the state and the new system of contracting farms to the processing firms they supply help to lock in existing structures.

17. Given the lack of substantive restructuring to date, Government should consider adopting a more pro-active approach to farm restructuring. The ultimate objective should be the break-up of the existing farms into private farm structures including partnerships, joint ventures, corporate farm entities and individual family farms. Non-farm activities such as tractor hire services, equipment maintenance facilities, processing and storage units and even canteens, and recreation facilities could be spun off and privatized or organized into farm service cooperatives. Key components of a farm restructuring program should include: (i) a revised land code that establish the legal rights of private entities to use land and to purchase, sell, trade or transfer of land-use rights; (ii) improved land registration and record keeping through upgraded cadastral mapping and standardized procedures for issuing and transferring land-use titles; (iii) revised procedures for privatizing state farms through the distribution of shares of farm assets and land to farm workers and measures to assist them to restructure the farms into new farm entities and agro-enterprises; (iv) new ways to handle social services including strengthened local government capacity to administer and finance key services and the transfer of some services to the private sector or cooperatives.

18. Much of the legal basis for private use of land already exists. The Presidential decree of April 1994 that established the right of individuals to sell, sub-lease or grant their life time leases to other individuals or non-state organizations is an important step that should help to foster the development of land markets. The procedures for the sale or transfer of leases and the development of
the necessary contractual and administrative arrangements are now being formulated. It is important that the conditions attached to the sale or transfer of leases be kept to a minimum and that the role of Government be limited to establishing the legal framework for such transactions and providing a system to record and maintain a register of such transactions.

19. Land registration systems must be improved through the upgrading of existing cadastral mapping capacity and the standardization of land registration procedures and documentation to facilitate title issuance and market transactions in land. On privatization mechanisms, Government should develop, test and begin implementing approaches to privatization that encourage the restructuring of existing farms and the distribution of the land and assets to new private entities. Guiding principles in the design of pilot approaches to privatization should include (i) a voluntary system based on the farm’s decision to reorganize; (ii) a choice driven process where farm members decide what farm activities to pursue; (iii) a system for allocating entitlement to land and non-land assets of the farm to existing farm members; (iv) a transparent process for trading entitlements, organizing enterprise structures and resolving disputes; and (v) a public information system to inform farm members about the program and guide them through the process. Where farm members choose to keep the farm intact, pilot approaches will be needed to test methods for strengthening the sense of ownership among new farm owners and improving management oversight and efficiency.

20. Post privatization assistance for the farm sector will be needed. Consistent and transparent provisions for dealing with outstanding loans and inter-enterprise arrears will need to be implemented. Farm extension services will need to be developed and training programs adapted to provide new farms with information and training on business plans, accounting, finance and marketing as well as technical advice on farm practices. Advice and training will also be required for emerging farm service enterprises. Government support could be considered for the development of farm service co-operatives to provide such services as input distribution, equipment hire and maintenance facilities, output marketing and processing, and rural financial services. Government support for co-operative development could include development of appropriate co-operative legislation and supporting regulatory framework and the provision of advisory services for the establishment of co-operative enterprises.

21. On the issue of agricultural finance, Government is currently undertaking banking sector reform including liberalization of interest rates, strengthened central bank functions, and improved operating standards both for the commercial and former state specialized banks, including the bank for agriculture, Agroprom Bank. These efforts should lead to a financial system that is better able to provide for rural financial needs including deposit mobilization, short-term working capital, and longer-term capital investment. Non-bank sources of finance such as investment funds, venture capital companies, and securities markets are also important elements of an improved financial sector. In addition special efforts directed to small-scale producers or rural enterprises will be needed possibly including group lending mechanisms and cooperative lending institutions.

22. State and collective farms have traditionally provided a wide array of social services for farm workers. The Government’s farm privatization programs provide for the transfer of these social services to local authorities. The capacity of local authorities to operate these services will need to be strengthened through development of management systems and training. Improved capacity to finance these activities is also required through strengthening local tax administration and budget management, and developing improved arrangements for revenue sharing between central government and local authorities. Also, alternative approaches to the provision of social services could be considered such as provision of certain services by the private sector, or by co-operatives organized by the workers.
23. **Public Administration in the Agricultural Sector:** Changing the role and function of Government to meet the needs of an increasingly market-oriented sector is a critical element of the transition process. Traditional functions held over from the command economy will need to be abolished and legitimate tasks of the public sector in a market economy will need to be strengthened. Such tasks include analysis and formulation of policy; collection and dissemination of market information; support for education, training and research; and enforcement of standards for environmental protection, health, safety and product quality. To ensure that these functions are undertaken and the old structures to control production and marketing are eliminated, a comprehensive review of the structure and function of both local and central government administration in the sector should be undertaken.

24. The Ministry of Agriculture should remain the central institution in charge of public administration for agriculture. It should take the lead role in the debate on reform and restructuring in the sector. To fulfill this role, the Ministry will need to strengthen its capacity for policy analysis and formulation. The Ministry should consider establishing an agricultural policy unit that would be responsible for formulating policy in support of the transition, monitoring the impact of both sector-specific, and macro-economic reforms on the sector and assessing domestic and international market trends. Strengthened analytical and monitoring capacity will allow the Government to make timely corrections in reform measures where needed. It will also help to identify research priorities and to focus efforts to attract foreign investments and donor support. Finally, the policy unit should develop the capacity to assess the environmental impact of proposed policy changes.

25. The research and agricultural training system also need to be reviewed. Research priorities should focus on developing technologies better suited to emerging private sector farms and which not only enhance productivity but are also environmentally sustainable. For training, Government should reorient its farmer training system towards private farmers using a combination of short courses, mass media and extension visits. In undertaking the review of research and training functions, particular attention should be paid to strengthening the links between the research system, the Ministry of Agriculture and the producer.

26. Other technical services performed by the Ministry should be reviewed and strengthened as well. Studies are already underway to determine the investment requirements to rehabilitate the irrigation system to address the widespread problems of excessive water use and high levels of salinity due to poor drainage. Further work will be required in the context of farm restructuring on adapting the current system for water delivery to meet the needs of the emerging private sector. In this context, cost recovery mechanisms will need to be designed and procedures for systems maintenance developed. Associations of water users to operate and maintain irrigation systems should be considered as one means to reduce the involvement of the state in irrigation management.

27. Livestock services are another critical area that will need to be reviewed and strengthened, particularly livestock disease control programs for such diseases as brucellosis and tuberculosis. Reviews of the range land management and soil conservation functions will need to focus on adapting these services to new land holding patterns and farm ownership structures arising from ongoing land reform and farm restructuring initiatives. Finally, Government efforts to improve regulation of agricultural chemicals, including new legislation on the handling and use of chemicals, need to be finalized. In the review of technical services, the potential for private sector participation in the provision of services needs to be explored. For example, considerable potential exists for private sector participation in the seed industry through the development of private seed enterprises out of existing state and collective farms that are currently producing seed and the involvement of foreign seed companies.
Government could then focus on seed testing and plant variety protection as well as completion of the national seed policy.

28. External assistance can support the Government’s reform process by providing international expertise and financing to help in the design, implementation and monitoring of policy reforms, particularly in the areas of pricing, subsidies, trade and marketing. External resources can also be used for strengthening agricultural institutions and services and restructuring farms and agro-enterprises. Technical assistance, training, and study tours would all be important to strengthen Government capacity to undertake price policy analysis and to formulate price and subsidy interventions that are consistent with macro-economic stability and economic restructuring. Support for land reform and farm restructuring would be necessary both to develop the legal and administrative framework for the land tenure system and to test farm restructuring models that can be replicated on a broader scale. For agro-enterprise restructuring, the report recommends that it be incorporated into the industrial restructuring program and additional technical assistance and training will be required to accommodate the resulting expansion in the work program. Assistance will also be needed to help adapt public administration in agriculture to a new role of providing support for a private, market-based sector. Such assistance could include support for reorganization and strengthening of the Ministry of Agriculture, adapting the priorities and programs of the research system to the needs of the emerging private sector, and developing an effective extension and training system.

29. The details of the reforms summarized here are discussed in the following chapters of this report. Following an overview in chapter one, chapter two examines pricing and trade issues and the continuing role of Government in agricultural markets. Chapter three deals with the marketing system for agriculture and the impact of the Governments privatization program for agro-enterprises. Chapter four considers land reform and farm restructuring issues. Chapter five examines issues of Government’s role in the agricultural sector and chapter six discuss external assistance requirements. The reforms identified in these chapters are summarized in the following table:
Policy Agenda for Reforms in Agriculture

<table>
<thead>
<tr>
<th>Issues</th>
<th>Recommendations</th>
<th>Ultimate Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Prices, Subsidies</td>
<td>• Increase output prices by eliminating the &quot;state needs&quot; program</td>
<td>• End implicit tax on producer through low producer prices and encourage higher production</td>
</tr>
<tr>
<td></td>
<td>• Eliminate remaining producer subsidies and stop directed credit at subsidized interest rates</td>
<td>• Distortion free incentive system where prices reflect real factor and product costs and encourages efficient production</td>
</tr>
<tr>
<td></td>
<td>• Target bread subsidies to low income groups by limiting subsidies to inferior bread products eventually replace with income supplements to low income consumers</td>
<td></td>
</tr>
<tr>
<td>Agricultural Trade &amp; Marketing</td>
<td>• Procure state food requirements through competitive tenders</td>
<td>• Create competitive agricultural markets and encourage efficient production</td>
</tr>
<tr>
<td></td>
<td>• Delink state procurement of agricultural goods from delivery of inputs, subsidies or credit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Limit power and responsibility of administrators at the oblast and rayon level to establish compulsory quotas or to direct or restrict in any way trade in inputs and output</td>
<td>• Improve market functioning, and enhance the role of prices in determining output mix and resource allocation</td>
</tr>
<tr>
<td></td>
<td>• Complete trade liberalization by eliminating export quotas, licensing requirements and taxes</td>
<td></td>
</tr>
<tr>
<td>Issues</td>
<td>Recommendations</td>
<td>Ultimate Objective</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Creation of competitive and efficient input and output markets | • Break-up national and regional holding companies in agriculture and privatize subsidiary firms in context of ongoing industrial privatization program  
• End practice of establishing long-term contracts between producers and agro-enterprises in exchange for shares in the agro-enterprise  
• Support entry of new firms, to compete in the provision of farm marketing services, through technical and business advisory support, and creation of supporting legal and administrative framework | • Encourage the establishment of competitive services and the growth of competition and efficiency in input and output markets and in agro-processing. |
| Land Reform                                | • Finalize legal and administrative framework to make land leases fully tradable  
• Develop and implement a land cadastre and information management system to improve security of tenure, provide accurate information on land transactions, and serve as a basis for land taxation. | Create secure and transferable rights to land to promote development of land markets and improve access to financial markets |
<p>| Farm Restructuring                         | • Provide information and support to farms undergoing restructuring on alternative ownership structures and options and procedures for distributing farm assets. | Develop mixed farming sector, where the incentive, administrative, and legal framework encourages evolution of farm structures to more efficient and sustainable forms including individual farms |</p>
<table>
<thead>
<tr>
<th>Issues</th>
<th>Recommendations</th>
<th>Ultimate Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Create farm management and technical advisory services for emerging private farms*</td>
<td>* Encourage development of agricultural service and marketing co-operatives through technical advisory services and development of legal and administrative framework including cooperative legislation*</td>
<td>* Accelerate transition to market based agricultural sector*</td>
</tr>
<tr>
<td>* Encourage development of agricultural service and marketing co-operatives through technical advisory services and development of legal and administrative framework including cooperative legislation*</td>
<td>* Develop capacity for the provision and financing of social services such as schools, health facilities and physical infrastructure by local government authorities or private sector providers.*</td>
<td>* Improve quality of policy formulation*</td>
</tr>
<tr>
<td>* Develop capacity for the provision and financing of social services such as schools, health facilities and physical infrastructure by local government authorities or private sector providers.*</td>
<td>* Undertake pilot initiatives to develop replicable models for privatizing state farms that include an integrated approach to the provision of farm services*</td>
<td>* Improve technology and management practices in the sector.*</td>
</tr>
<tr>
<td>* Undertake pilot initiatives to develop replicable models for privatizing state farms that include an integrated approach to the provision of farm services*</td>
<td>* Phase-out Government involvement in production, marketing and trade*</td>
<td></td>
</tr>
<tr>
<td>Role of Government</td>
<td>* Develop policy analysis and formulation capacity in the areas of price, trade and subsidy policy consistent with the requirements of a market-based agricultural sector*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Analyze requirements for agricultural research, training and extension in context of evolving mixed farming sector and determine appropriate priorities, structures and organization for these services, including the respective roles of the public and private sectors*</td>
<td></td>
</tr>
</tbody>
</table>
30. This report was discussed with Government in September/October 1994, six months after the field work and in the midst of the 1994 harvest. The crisis in agriculture continues. The 1994 grain harvest is estimated at 18 million tons, down 17 percent from 1993 and 40 percent from the record harvest in 1992. Livestock production also recorded declines, with meat production falling 8 percent and egg production falling 14 percent in the first half of 1994. Overall gross agricultural output in the first seven months of 1994 was down 13 percent from 1993.

31. Weather, both at planting and harvest, was certainly a contributing factor to declining production, particularly for grains. But the liquidity crisis gripping the sector at the end of 1993 made it increasingly difficult for farms to pay labor and buy critical inputs for the 1994 season and contributed further to the decline. As the report argues, the primary cause of the liquidity crisis is the Government’s procurement and pricing policy for agricultural commodities that serve to tax the sector severely through low farm prices that are much below world market levels. The crisis has been exacerbated this year by a significant tightening of directed credits to the sector.

32. Faced with the imperative to reduce the budget deficit and stem the decline in output, Government has made notable progress since the field visit in March in the reform of its procurement, subsidy and trade policy in the sector. Much of the change was in line with recommendations in this report. Specifically, in August the state needs program for 1994 was reduced for grain from seven to five million tons and eliminated altogether for non-grain commodities. Moreover, the Government has announced its intention to scrap the state needs program completely starting the next season and replace it with a public procurement system based on competitive tenders. On the bread subsidy, parliamentary approval was given on October 15 for the elimination the subsidy, which has led to an eight to ten-fold increase in bread prices. In place of the subsidy, Government intends to target income support to the poor. The Government also remains committed to removing the subsidy on animal feed in 1995. On agricultural trade, quotas for all agricultural commodities were recently eliminated. However, licensing is still required for agricultural exports which continues to serve as a barrier to unrestricted trade.

33. Less progress has been made on agricultural privatization. Land reform continues to be a concern. A series of decrees issued by the President and the Cabinet of Ministers in 1994 laid the foundation for the development of land markets based on the trade in leases. But, legislation has yet to be introduced to the Parliament that clarifies and defines the rights to use and lease land and the mechanisms under which these rights can be bought, sold, traded, donated, or bequeathed. Work on such legislation is currently underway.

34. Privatization of state farms was started on another 334 farms in 1994 bringing the number undergoing the process to over 920 or about 45 percent of the total. But the number that have actually completed the process is only a fraction of the total and often the final result of the process is still unsatisfactory in that the farms that emerge are little changed from their predecessors in terms of size, management structure, organization, and operations. Privatization of agricultural processing, marketing, storage, and input supply firms continues to proceed on a separate track from industrial privatization. It is essentially a closed process with access to shares of agro-enterprises limited to
employees, suppliers and the state. Agro-enterprises have also been grouped under several state joint stock companies that were established in the last two years, nominally to manage the state shares during the privatization process but which operate similarly to the old command structures.

35. Pricing and marketing reforms implemented in 1994 and planned for 1995 are indeed important steps in the effort to eliminate the implicit taxation of the sector arising from Government procurement and pricing policies. But these steps alone, while necessary, will by no means be sufficient to assure increased real prices to producers. The next steps of the reform process must focus on removing existing impediments to the development of competitive markets. The marketing, storage and processing of agricultural commodities continues to be dominated by monopsonistic structures that exert excessive market power. The existence of these structures, coupled with the continued involvement of local government administrators in restrictive trade practices are slowing the emergence of competitive market structures. As recommended in this report, Government will need to redirect its privatization program by dismantling the various state joint stock companies involved in input distribution and agricultural marketing and privatizing the subsidiary enterprises within the guidelines of the existing industrial privatization program. Finally the lack of progress in effective farm restructuring in 1994 lends credence to the report’s call for a fundamental redirection of the farm privatization program to stimulate development of alternative approaches to restructuring. New land legislation and improved land registration systems also are required to provide secure and tradable rights to use and lease land.
KAZAKHSTAN
AGRICULTURAL SECTOR REVIEW

CHAPTER I

SECTOR OVERVIEW

1.1 Structure: Agriculture has long been a major contributor to Kazakhstan's economy. In 1993 it constituted about 31.4 percent of net material product (NMP), compared to an average of about 35 percent for the period 1985-1990 (Table 1.1). In 1993 the sector accounted for over 24.4 percent of total employment. It is the only sector to have recorded continuous, albeit small, employment increases since independence suggesting that the sector may be acting as a labor reservoir for labor released elsewhere. Livestock accounts for between 50 and 60 percent of total output with beef, mutton, dairy products and wool being the major livestock products. The crop sector is dominated by grain, mostly wheat which accounts for 66 percent of total crop output. Other important crops are fodder crops, potatoes and vegetables. Agriculture continues to be a major source of export earnings with agricultural products constituting about ten percent of total export revenues in 1993. Major agricultural exports include grain, meat, and wool.

TABLE 1.1: Key Agricultural Indicators

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Contribution to NMP</td>
<td>35.6</td>
<td>34.2</td>
<td>30.4</td>
<td>31.4</td>
</tr>
<tr>
<td>Growth in Output</td>
<td>-24.7</td>
<td>0.5</td>
<td>-15.0</td>
<td></td>
</tr>
<tr>
<td>Contribution to Employment</td>
<td>22.8</td>
<td>23.4</td>
<td>24.4</td>
<td>N. A.</td>
</tr>
</tbody>
</table>

SOURCE: GOSKOMSTAT and World Bank Estimate

1.2 Land Use and Climate: About 75 percent of Kazakhstan's total land area is used for cropping or grazing (Table 1.2). This area can be subdivided into three geographic locations: the south, where most irrigated agriculture is undertaken; the north which is well-suited to rain-fed farming and livestock production; and the expansive central region, which is semi-desert steppe suitable mainly for extensive grazing. Kazakhstan is not particularly blessed with good soils. Only about 7 percent of the area, mostly in the north, is covered with fertile chernozem soils with good water retention. These soils give way to the south to brown chestnut soils that cover about 26 percent of the total area and which are less fertile, and have less water retention capacity making them susceptible to low yields in dry years. Another one third of Kazakhstan is covered by infertile, erosion prone alkaline soils lying in areas of low rainfall. A dry continental climate prevails throughout the country. The variability of the weather from year to year makes it difficult to maintain steady growth in agricultural output. Drought, violent thunderstorms, and hail frequently reduces yields (Graph 1.1).
Graph 1.1: Average Annual Grain Yields in Kazakhstan
### TABLE 1.2: Agricultural Land Use

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (Million ha)</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grazing Land</td>
<td>152.0</td>
<td>77.0</td>
</tr>
<tr>
<td>Cultivated Pastures</td>
<td>4.5</td>
<td>2.3</td>
</tr>
<tr>
<td>Annually Cropped</td>
<td>35.6</td>
<td>18.1</td>
</tr>
<tr>
<td>Annual Fallow</td>
<td>4.7</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>196.8</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

SOURCE: GOSKOMSTAT

1.3 **Rainfed Crops:** Total cropped area is about 35 million hectares (Table 1.3) of which about 32 million hectares is rainfed. About 65 percent of the rainfed area is sown to grain crops, 32 percent to fodder crops, and the balance to oilseed and other crops. Much of the land currently under production was first cultivated as part of the Virgin Lands Campaign in the 1950’s that converted about 17 million hectares of mostly grazing land to cereal production. Much of this land is located in desert steppes with low and variable rainfall and contains soils with low fertility and water retentive capacity. Yields in such areas are low, averaging about 0.5 tons per hectare. Moreover, production practices have contributed to low yields and soil degradation. Much of the area is used for spring cereal production which leaves the soil bare over the winter, creating problems with wind and water erosion. The problem is intensified by taking as much of the organic matter as possible for cattle feed, consequently reducing the humus content of the soil. Use of chemical fertilizers on rainfed cereals is limited leading to further declines in soil fertility.
TABLE 1.3: Annually Cropped Area of Main Agricultural Crops (1000 HA).

<table>
<thead>
<tr>
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<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sown Area</td>
<td>35796</td>
<td>35182</td>
<td>34936</td>
<td>34840</td>
<td>34137</td>
</tr>
<tr>
<td>Wheat</td>
<td>16162</td>
<td>14070</td>
<td>13456</td>
<td>13877</td>
<td>12753</td>
</tr>
<tr>
<td>Rye</td>
<td>230</td>
<td>772</td>
<td>550</td>
<td>629</td>
<td>604</td>
</tr>
<tr>
<td>Barley</td>
<td>6826</td>
<td>6660</td>
<td>6614</td>
<td>5718</td>
<td>7001</td>
</tr>
<tr>
<td>Oats</td>
<td>351</td>
<td>382</td>
<td>512</td>
<td>456</td>
<td>549</td>
</tr>
<tr>
<td>Corn (grain)</td>
<td>134</td>
<td>129</td>
<td>121</td>
<td>126</td>
<td>116</td>
</tr>
<tr>
<td>Millet</td>
<td>825</td>
<td>781</td>
<td>848</td>
<td>1003</td>
<td>527</td>
</tr>
<tr>
<td>Buckwheat</td>
<td>206</td>
<td>218</td>
<td>318</td>
<td>447</td>
<td>409</td>
</tr>
<tr>
<td>Rice</td>
<td>142</td>
<td>125</td>
<td>118</td>
<td>121</td>
<td>112</td>
</tr>
<tr>
<td>Beans</td>
<td>166</td>
<td>159</td>
<td>152</td>
<td>140</td>
<td>112</td>
</tr>
<tr>
<td>Cotton</td>
<td>131</td>
<td>120</td>
<td>117</td>
<td>112</td>
<td>111</td>
</tr>
<tr>
<td>Sugar-beet</td>
<td>72</td>
<td>44</td>
<td>46</td>
<td>85</td>
<td>69</td>
</tr>
<tr>
<td>Oilcrops</td>
<td>214</td>
<td>267</td>
<td>303</td>
<td>462</td>
<td>430</td>
</tr>
<tr>
<td>Veg, Potato, Melons</td>
<td>297</td>
<td>321</td>
<td>337</td>
<td>375</td>
<td>348</td>
</tr>
<tr>
<td><strong>Foddercrops</strong></td>
<td><strong>9935</strong></td>
<td><strong>11066</strong></td>
<td><strong>11372</strong></td>
<td><strong>11203</strong></td>
<td><strong>10847</strong></td>
</tr>
</tbody>
</table>

**SOURCE: GOSKOMSTAT**

1.4 In response to these problems, cultivation of some of the more marginal lands has been cut back since the peak year of 1985. Since then area planted to cereals as declined by about 1.6 million hectares or 11.5 percent. The area under wheat declined even more over the same period, moving from 16.16 million hectares to 12.75 million for a 21 percent decline. Much of the area released from wheat has been planted to barley and rye for cattle feed. The Government's concept paper for the agricultural sector calls for more dramatic in cuts in cultivation over the next five years on marginal areas of between 4.5 to 6.5 million hectares.¹ The released land is intended to be returned to pasture and sown fodder production. The concept paper envisages production levels of cereals to be sustained at near current averages by increasing yields on the remaining soils. Such yield increases would require more intensive use of chemical fertilizer and improved seed. New technologies to promote soil conservation such as minimum tillage also show some promise and are being tested on a limited scale in North Kazakhstan.

¹ The paper, Conceptual Program for the Development of Agriculture to the year 2000 and Beyond, was prepared by the Kazakh Academy of Agricultural Sciences and approved by the Cabinet of Ministers in early 1994.
1.5 A key issue is how the consolidation in cereal production is accomplished. The transition to a market-based economy would hasten the conversion of marginal lands to other uses as producers would no longer find it profitable to produce cereals. But continued pressures by local authorities on farm managers to meet "state needs" quotas could slow the transition. Another concern is that reduced cultivation of lower yielding lands and intensifying production on better lands may lead to unsustainable agricultural practices, particularly as output prices increase and input distribution becomes more efficient.

1.6 Yields for sugar beets and oil crops have dropped dramatically in recent years (Table 1.4). The decline is in part the result of expansion of cultivation according to production plans into marginal areas. For sugar beet, area planted nearly doubled between 1991 and 1992, as new land in the North was brought into production in an effort to expand local sugar output. But the new areas were poorly suited to sugar beet and yields were less than half what is achieved in traditional sugar beet areas further south. Oil seed cultivation also planted increased by over 60 percent between 1990 and 1993 as new areas were brought under cultivation. Over the same period average yields dropped by 40 percent.

1.7 Irrigated Agriculture: A total of 2.3 million hectares, or about seven percent of the total cropped land has been developed for irrigation, mostly in the South (83 percent). About 1.2 million hectares of the system seems to be performing satisfactorily, while about 970,000 hectares are in need of extensive repair and rehabilitation. Another 110,000 hectares has been abandoned because of salinity problems. Major crops under irrigation include cereal and fodder crops. Fodder crops are grown in many areas where high salinity and poor drainage prevent other crops from being cultivated.


TABLE 1.4: Yield Figures for the Period 1986 - 1993 (TONS/HA)

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Grains</td>
<td>1.00</td>
<td>0.53</td>
<td>1.32</td>
<td>0.97</td>
</tr>
<tr>
<td>Wheat</td>
<td>0.97</td>
<td>0.51</td>
<td>1.32</td>
<td>0.91</td>
</tr>
<tr>
<td>Rice</td>
<td>4.52</td>
<td>4.40</td>
<td>3.86</td>
<td>3.63</td>
</tr>
<tr>
<td>Corn grain</td>
<td>3.88</td>
<td>2.72</td>
<td>2.91</td>
<td>2.84</td>
</tr>
<tr>
<td>Sugar-beet</td>
<td>28.80</td>
<td>15.93</td>
<td>14.99</td>
<td>13.17</td>
</tr>
<tr>
<td>Cotton</td>
<td>2.58</td>
<td>2.50</td>
<td>2.25</td>
<td></td>
</tr>
<tr>
<td>Tobacco</td>
<td>1.55</td>
<td>1.33</td>
<td>1.42</td>
<td></td>
</tr>
<tr>
<td>Oilseed</td>
<td>0.73</td>
<td>0.51</td>
<td>0.51</td>
<td>0.45</td>
</tr>
<tr>
<td>Sunflower</td>
<td>0.99</td>
<td>0.57</td>
<td>0.41</td>
<td>0.40</td>
</tr>
<tr>
<td>Potato</td>
<td>10.50</td>
<td>9.90</td>
<td>10.41</td>
<td></td>
</tr>
<tr>
<td>Vegetables</td>
<td>16.50</td>
<td>12.10</td>
<td>11.38</td>
<td></td>
</tr>
<tr>
<td>Melons &amp; squash</td>
<td>9.10</td>
<td>7.90</td>
<td>7.23</td>
<td></td>
</tr>
<tr>
<td>Fruits &amp; berry</td>
<td>3.60</td>
<td>1.46</td>
<td>2.22</td>
<td></td>
</tr>
<tr>
<td>Grapes</td>
<td>5.43</td>
<td>3.85</td>
<td>3.68</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: GOSKOMSTAT

1.8 The most pressing problem in irrigated agriculture is the environmental consequence of excessive water usage from surface water sources (over 96 percent of all irrigated land is supplied by surface water). The most visible manifestation of this problem is the Aral Sea crisis. This crisis has spurred a concerted international effort to address the manifold environmental consequences of excessive diversion of water from the sea. Kazakhstan is an active participant in this initiative and much of the efforts to control the crisis will take place within its borders. Moreover, at the national level, Government with donor assistance is undertaking a study of investment requirements to rehabilitate the national irrigation network and address problems of excessive water loss and poor drainage. Additional issues that will need to be addressed are (i) the engineering and investment requirements of adapting the present state farm-based system to individual private farms; and (ii) cost recovery requirements and mechanisms for water sharing and system maintenance. The establishment of water user groups to operate and maintain irrigation systems should be considered as one means to reduce the involvement of the state in irrigation management.

1.9 Input Use: The use of fertilizer and agro-chemicals has declined dramatically from peaks in the mid to late 1980's (Table 1.5). Part of the decline for chemicals can be explained by
a Government decision to scale back use because of environmental problems. Most persistent agricultural chemicals have been banned and the selection of chemicals and directives on their use in recent years reflect a more heightened concern about their environmental impact. In this regard, a law to regulate pesticide use is currently under preparation. While heightened environmental concerns help explain the decline in the use of agricultural chemicals, the disruptions in trade relations, and the liquidity crisis facing farms were perhaps more important factors. Fertilizer use has declined both on both rainfed and irrigated areas, though use on irrigated areas remains much higher than in rainfed areas.

**TABLE 1.5: Input Use in Kazakhstan**

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Chemicals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area treated (ml ha)</td>
<td>19.6</td>
<td>20.9</td>
<td>20.7</td>
<td>19.0</td>
<td>18.1</td>
<td>17.5</td>
<td>15.4</td>
<td>10.2</td>
<td></td>
</tr>
<tr>
<td><strong>Fertilizer (kg/ha)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fertilizer</td>
<td>17.8</td>
<td>24.5</td>
<td>30.6</td>
<td>33.4</td>
<td>33.9</td>
<td>28.7</td>
<td>21.7</td>
<td>16.6</td>
<td>14.0</td>
</tr>
<tr>
<td>Nitrogen/ha</td>
<td>8.0</td>
<td>10.0</td>
<td>12.3</td>
<td>12.9</td>
<td>12.8</td>
<td>10.5</td>
<td>8.8</td>
<td>6.7</td>
<td>5.6</td>
</tr>
<tr>
<td>Phosphate/ha</td>
<td>9.1</td>
<td>13.5</td>
<td>17.0</td>
<td>19.2</td>
<td>19.9</td>
<td>17.3</td>
<td>12.6</td>
<td>9.6</td>
<td>8.0</td>
</tr>
<tr>
<td>Potassium/ha</td>
<td>0.7</td>
<td>1.0</td>
<td>1.3</td>
<td>1.3</td>
<td>1.2</td>
<td>0.9</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
</tr>
</tbody>
</table>

**SOURCE:** GOSKOMSTAT

1.10 **The Livestock Sector:** Production is falling for all livestock commodities. Production of meat was down by 15 percent between 1991 and 1993. Milk production fell by 4 percent and wool production by 9 percent over the same period (Table 1.6). Most of the adjustment in output has resulted from declining productivity as the total livestock numbers, through reduced somewhat, have not fallen nearly as much as production of livestock products. Reduced domestic demand for livestock products resulting from declining real wages and higher prices is also affecting the sector. Consumption of meat and associated products per capita fell by 14 percent between 1990 and 1992, and consumption of milk products and eggs fell by 12 percent and 21 percent respectively over the same period (Table 1.7). Wool and meat have traditionally been exported to the former Soviet Union but volumes sold have declined significantly.
TABLE 1.6: Production of Selected Livestock Products in Kazakhstan
(on all farms in '000 Tons)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat (lv. wt)</td>
<td>2456.4</td>
<td>2573.1</td>
<td>2155.4</td>
<td>2192</td>
</tr>
<tr>
<td>Incl. Beef</td>
<td>1120.5</td>
<td>1213.6</td>
<td>1013.9</td>
<td>1077</td>
</tr>
<tr>
<td>Pork</td>
<td>350.6</td>
<td>376.3</td>
<td>301.3</td>
<td>275</td>
</tr>
<tr>
<td>Mutton</td>
<td>609.3</td>
<td>607.4</td>
<td>540.8</td>
<td>570</td>
</tr>
<tr>
<td>Poultry</td>
<td>260.3</td>
<td>253.7</td>
<td>191.8</td>
<td>170</td>
</tr>
<tr>
<td>Other</td>
<td>115.7</td>
<td>122.1</td>
<td>107.6</td>
<td>100</td>
</tr>
<tr>
<td>Meat (sl. wt)</td>
<td>1465.1</td>
<td>1524.1</td>
<td>1257.5</td>
<td>1257</td>
</tr>
<tr>
<td>Milk</td>
<td>5350.2</td>
<td>5555.4</td>
<td>5265.1</td>
<td>5335</td>
</tr>
<tr>
<td>Eggs (millions)</td>
<td>4185.2</td>
<td>4075.3</td>
<td>3564.7</td>
<td>3540</td>
</tr>
<tr>
<td>Wool</td>
<td>107.7</td>
<td>104.4</td>
<td>96.5</td>
<td>95</td>
</tr>
<tr>
<td>Karakul (skins)</td>
<td>1773</td>
<td>1821.4</td>
<td>1994.5</td>
<td>1520</td>
</tr>
</tbody>
</table>


TABLE 1.7: Norm and Actual Consumption Per Capita (Kg)

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>1991</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat &amp; Products</td>
<td>71</td>
<td>70.5</td>
<td>61</td>
</tr>
<tr>
<td>Milk &amp; Products</td>
<td>307</td>
<td>303</td>
<td>269</td>
</tr>
<tr>
<td>Eggs (units)</td>
<td>221</td>
<td>206</td>
<td>175</td>
</tr>
</tbody>
</table>


1.11 The emphasis prior to independence under central planning had been on the rapid build-up of livestock production, often based on intensive production techniques. This build-up has lead to a number of problems that have affected both productivity and the environment including: (i) overgrazing of pastures; (ii) poor disease control; and (iii) poor nutrition resulting from a lack of high grade protein supplements and forage. Severe overgrazing and deterioration of natural pasture has resulted in a reduction in carrying capacity. Some 63 million hectares or about 40 percent of all grazing
land is reported to be affected by overgrazing and up to 15 million hectares are said to be irreparably
damaged. Livestock diseases including brucellosis, tuberculosis, internal parasites and mastitis are
decreasing productivity and may be carrying over into the human population as well. Farms lack drugs
and other control mechanisms for disease, dairies and meat processing plants lack cleaning and
disinfecting agents and motivation to control hygiene problems. For fodder crops there are serious
problems with harvesting and storage. Forage harvesting machinery is inadequate and spare parts are
in short supply. Poor fermentation of silage is often a problem and overheating results in damage to
proteins and a loss in energy value. Silage is often butyric which lowers intake, taints milk and in severe
cases can poison animals.

1.12 The Government’s conceptual program, in recognition of the overgrazing and
fodder supply problems, proposes sharp reduction in beef and sheep numbers and the planting of fodder
crops on lands released from cereal production. As with plans for the reduction of areas under cereal
cultivation, the issue is how the reduction in herd size is to be implemented. As the economy undergoes
the transition to a market-based system, weakness in demand for livestock products should be transmitted
back to producer in the form of low market prices that should provide incentives to reduce livestock
numbers and production. But more active Government involvement will be required in such areas as
improved range land management including restrictions on grazing rights and disease control.

1.13 Farm Structure: Most production takes place on large state and collective farms
or their recently privatized successors. State farms, numbering 2,055, are particularly big, averaging
some 80,000 hectares in 1992 of which just over 14,000 hectares was cultivated. Nearly a third (644)
of the state farms specialize in grain production and are mostly located in areas first cultivated in the
1950s as part of the Virgin Lands Campaign. Another 600 farms are engaged in extensive sheep raising
and 380 are intensive dairy and beef operations. The remainder produce swine, poultry, cotton,
sugarbeet, vegetable and fruit.

1.14 Collective farms number about 430 and are smaller than the state farms with
average cultivated area of about 9800 hectares. Most collectives were formed out of lands cultivated
prior to the Virgin Lands Campaign. Collective farms tend to be more diversified in production than
state farms but in terms of management there is little difference between the two. As in other parts of
the FSU, private plots on state farms and near urban centers are playing a growing role in total output
particularly for meat, milk, vegetables and fruit.

1.15 The farm sector is currently undergoing privatization and nearly 500 farms have
been privatized. In nearly all instances state ownership passed to workers and managers with the same
physical infrastructure, management, and organizational structures, and trading relations remaining intact.
However, in the process individuals have been given the option of establishing private farms, usually
from land considered to be surplus to the needs of the state farms and by September 1994 about 20,000
individual farms had been established. These farms covered about three percent of agricultural land and
mostly consist of pasture and grazing land.

1.16 Recent Performance: Performance of the sector in 1993 was disappointing after
a near-record grain harvest in 1992. Overall GDP fell about 16 percent in 1993 with a 12 percent decline
in agricultural net material product. Between 1990 and 1993, sectoral output declined by 5.3 percent per

Area planted to cereals nearly tripled to 28.5 million hectares between 1954 and 1960.
annum, in constant 1983 prices. The fall was relatively large in crop output (7.4 percent) while the livestock output declined by 4.0 percent. There are indications that the output decline may accelerate without major policy changes as the use of critical production inputs has declined sharply. Fertilizer utilization dropped from 672,100 tons in 1990 to 284,300 tons in 1993, area irrigated has declined by 20 percent and there has been little replacement of worn out farm machinery. Serious shortages of fuel over the same period and other inputs occurred in 1993, and are continuing in 1994.

1.17 The financial position of farm enterprises deteriorated markedly in 1993, with a sharp increase in the number of farms reporting losses. The losses were due largely to low official producer prices relative to prices of inputs which have essentially been liberalized. Moreover, delays in payments rapidly reduced the value of sales in the highly inflationary environment. As a result of these losses, most state and collective farms were unable to repay production credits extended by the banking system.

1.18 In summary, the agricultural sector remains locked in a crisis of mounting losses and declining output and productivity. The major factor affecting the sector is the incomplete reform agenda. Agriculture, like other sectors of the economy, is caught in the transition between a command and market economy where old structures do not work as well as they once did and new structures have not yet risen to take their place. Yields are low because farmers are often unable to assemble a complete package of inputs such as seed, fertilizer, agro-chemicals, fuel, and spare parts for agricultural machinery. And when inputs are available many farms can not afford them because of the cost-price squeeze gripping the sector. Moreover, poor producer incentives, continued state involvement in production and marketing, and only cosmetic changes in farm ownership and organization perpetuate bad farm management practices and stifles incentives to innovate. Thus, more rapid pricing, trade, marketing, and land reform are key to accelerating the transition and improving performance in the sector.

1.19 An important issue in managing the transition is the potential environmental impact of the reform process. Reforms that are successful in halting the decline in the sector and restoring growth have the potential to intensify environmental degradation if they are not properly designed to promote improved resource use and minimize environmental impact. Government at all levels must play a dynamic role in protecting the environment by maintaining an appropriate regulatory, legislative, and incentive framework to promote sustainable resource use.
CHAPTER II

PRICING AND SUBSIDY POLICY

A. AGRICULTURAL POLICY AND RECENT REFORM

2.1 Introduction: This chapter examines Government's agricultural pricing, subsidy, and trade policy. It concludes that while some of reforms have been introduced, the farm sector is severely squeezed by an output price policy and payment system that pays farmers as little as 30 percent of world market prices. At the same time, input subsidies are being reduced which has contributed to a deterioration in the terms of trade facing the sector. The sector continues to receive subsidies through the banking system via highly negative interest rates and frequent rescheduling of seasonal credits. Nevertheless, these subsidies are not sufficient to offset the impact of low prices and delayed payments so that the net effect of Government pricing, subsidy, credit and trade policy is significant taxation of the sector. The chapter argues that the deterioration in the terms of trade and the taxation of the sector must be reversed through measures to increase producer prices. Ultimately, marketing, trade and macro-economic reforms should create an environment where there would be little, if any, need for Government intervention in agricultural markets. But the chapter will show that because of considerable remaining monopoly power in the agricultural marketing system, Government will need to maintain an active presence in the market in the short run. The nature of Government interventions will need to change, however, from a pricing and procurement policy that extracts considerable rents from the sector to a policy that emphasizes increased competition through trade reform and competitive procurement of commodities for public consumption.

2.2 Background: At independence Kazakhstan inherited a supply-constrained economic system where quantities to be produced were determined on the basis of planning guidelines. For agriculture, quantities were determined by calculating consumption "norms" and adding trade and animal feed requirements. Once production targets were determined, prices were established using cost-plus pricing to cover the costs of producing, processing and distributing agricultural commodities. Since the system was intended to fulfill production targets with little regard to cost, patterns of production rarely reflected competitive advantage and little incentive or leeway existed to change cropping patterns, improve efficiency, or reduce costs. Cost plus pricing was applied at the local and even farm level. The result was a wide-range of producer prices being paid to cover widely varying cost structures often for neighboring oblasts and even for neighboring farms.

2.3 At the center of the system were the state orders through which commodities were procured to supply state stores, public institutions, and the military, to meet requirements of deficit producing oblasts, and to fulfill trade agreements. State orders covered most marketed supplies with only limited quantities moving through alternative cooperative or private farm markets. Quantities to be procured were determined at the national level and allocated between regions and farms on the basis of long-standing production plans. Local administrators played a key role in approving farm production plans and allocating state order quotas. Once the plans were set and quotas allocated, individual farm managers had little leeway to change cropping patterns or use alternative market channels without the approval of the local authorities.

2.4 In addition to administered prices, a variety of subsidies paid both to producers and consumers supported the system. For producers, direct subsidies for inputs through controlled prices
or through direct budget transfers helped cover costs of production. Also important were implicit subsidies through directed credit at highly subsidized interest rates. For consumers, subsidies were delivered through low consumer prices at state stores.

2.5 Recent Reforms: The system of state orders, administered prices, and subsidies began to change prior to the dissolution of the Soviet Union and the changes accelerated after independence as the authorities tried to check growth of subsidies. The quantities earmarked for state orders, renamed "state needs" in 1993, were reduced gradually. State needs requirements in 1993 were about 60 percent of the volume of state orders in 1990 and planned procurement for 1994 is being reduced further to about 40 percent of 1990 levels. Nevertheless, the quantities involved are significant particularly for grain (Table 2.1). The quantity of grain procured in 1993 accounted for about one third of total production or about 380 kgs per capita, half of which was procured for domestic consumption. What has not changed about state needs is the involvement of local officials in determining state needs quotas and allocating resources for each farm. Moreover, with the reduction of state needs, local administrators are now often involved in directing marketing and trade for commodities marketed outside the state needs system (Box 2.1). The result is continued rigidity in production patterns and resource use as farmers continue to have little choice in what they produce or how they market their output.

**BOX 2.1: Oblast Administration Influence Over Agricultural Trade**

Trade in agricultural commodities continues to be dominated by oblast and rayon officials. Of the approximately 12.5 million tons of grain available for sale in 1993, 6.5 million tons was delivered under state need requirements. Oblast officials negotiated quotas for state needs with their counterparts at the Republican level and then divided the quota among state and collective farms in the oblast. Various inducements, such as access to directed credit and inputs in short supply (e.g. fuel), were used to ensure fulfillment of the quota. The stakes are high: reportedly, two oblast administrators lost their jobs for failing to meet 1993 quota targets. Furthermore, non-quota grain owned by state and individual farms were confiscated to meet contracted deliveries.

Notionally, state and collective farms could freely market the six million tons of grain outside of the state needs requirements in 1993. In practice, however, most farms were required to market their output under instruction from the oblast administration. In Turgai Oblast, for example, the administrator contracted grain to a joint-stock trading company for use in barter trade with Russia for oil, machinery and fertilizer. Farms in the oblast were obliged to make deliveries to the company to fulfill this contract. In Kostanai, the oblast administrator entered into a similar arrangement with an enterprise to barter grain for combine harvesters, trucks and tractors from Belarus.

Similarly, while farms may arrange their own export contracts, the oblast administration is responsible for issuing necessary export licenses. These are particularly difficult to obtain if deliveries on administration contracts are outstanding. Farms can also enter into barter agreements with local industry, exchanging meat or grain for such items such as coal, construction materials, or consumer goods which are then used either on the farm, or to make 'in-kind' payments to farm workers. However, such transactions can only be undertaken with the approval of the oblast administration. Moreover, local administrators often restrict trade between oblasts in an effort to assure adequate local supplies.
### TABLE 2.1: State Orders and State Needs (in thousand tons)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>quantity set</td>
<td>quantity delivered</td>
<td>quantity set</td>
<td>quantity delivered</td>
<td>quantity set</td>
</tr>
<tr>
<td>Grain</td>
<td>16400</td>
<td>14758.1</td>
<td>14700</td>
<td>3232.2</td>
<td>10000</td>
</tr>
<tr>
<td>Oil Seeds (Sunflower)</td>
<td>170</td>
<td>151.4</td>
<td>153</td>
<td>70.1</td>
<td>107</td>
</tr>
<tr>
<td>Sugar beets</td>
<td>1200</td>
<td>1033.7</td>
<td>1200</td>
<td>616.2</td>
<td>840</td>
</tr>
<tr>
<td>Potatoes</td>
<td>508.9</td>
<td>571.1</td>
<td>540</td>
<td>358.8</td>
<td>180</td>
</tr>
<tr>
<td>Vegetables</td>
<td>748.7</td>
<td>676.1</td>
<td>770</td>
<td>454.1</td>
<td>101.5</td>
</tr>
<tr>
<td>Fibre Cotton</td>
<td>97</td>
<td>101.9</td>
<td>90.0</td>
<td>94.1</td>
<td>65</td>
</tr>
<tr>
<td>Meat Products</td>
<td>1522.6</td>
<td>1844.4</td>
<td>1515</td>
<td>1551.4</td>
<td>1056</td>
</tr>
<tr>
<td>Milk Products</td>
<td>3102.8</td>
<td>3294.1</td>
<td>3230</td>
<td>1924.9</td>
<td>2260</td>
</tr>
<tr>
<td>Eggs (million pieces)</td>
<td>2318.5</td>
<td>2573.1</td>
<td>2430</td>
<td>2355.7</td>
<td>1704</td>
</tr>
<tr>
<td>Wool (in tons)</td>
<td>59500</td>
<td>60166</td>
<td>56000</td>
<td>58893</td>
<td>39201</td>
</tr>
</tbody>
</table>

**SOURCE:** Ministry of Economy

---

3/ n.a. means 'not available'
2.6 **Output Prices:** The system for setting prices for commodities procured under the state order/needs system has changed considerably since independence. Prior to 1992, cost-plus pricing was applied at the oblast and even farm-specific basis so that the costs of individual producing units were always covered. In 1992, pan-territorial prices were introduced. These prices are set in the Cabinet of Ministers based on negotiations between the Ministries of Agriculture, Economy, and Finance, and other agencies. The average costs of production for the Republic are taken into consideration in establishing the price. But consumer interests as well as budget constraints also play a prominent role in the negotiations. The result is that the prices for state needs are set well below world market prices. In 1993, prices for state needs purchase of grains were in the range of 30 to 50 percent of the relevant world market price (graph 2.1). The change in the State Needs Price between March and June reflects the depreciation of the ruble. In July, just prior to harvest, the State Needs Price was nearly doubled and it was increased again in October by 25 percent. But, accelerated depreciation erased all the gain by the end of the year. Similar price comparisons for meat and milk reveal state needs price averaging about 40 to 50 percent of world market prices. Perhaps more important than the low initial price, is the delayed payments to producers in face of rapid inflation. Delays of two to four and even up to six months are not uncommon. With inflation at 25 percent a month, a two month delay decreases the real price by 36 percent. Delays of six months reduce real prices by 74 percent.

2.7 The prices above apply only to quantities delivered to the state needs system. With the gradual reduction of state needs an increasing share of production is sold outside government channels. However, price formation on the free market is significantly affected by the still dominate role the state plays in agricultural markets. State dominated trading companies and local administrators control much of the market outside of state needs and they still use Government prices or cost plus techniques as a reference point. Finally, in the limited instances where private traders are involved they can often secure supplies at considerable discounts by offering immediate cash payments. Moreover, export restrictions in effect in 1993 served to drive a further wedge between border and domestic prices irrespective of the marketing channel used.

2.8 For 1994, Government has introduced further changes in pricing policy. Prices for state needs purchases are to be set at "free contractual levels" for grain, oil seeds, and sugar beets and prices for state needs purchases of livestock products are to be at "free wholesale prices". It is not clear what the difference is between free contractual and free wholesale prices. But it is clear that such prices are not determined through the interplay of market forces, even though the central Government may no longer be directly involved in setting prices. Instead they appear to be the result of negotiations for compulsory deliveries between producers and Government-appointed procurement agencies which are generally monopsonistic buyers. The result is likely to be a continued pattern of low prices relative to world market levels and delayed payments to producers.

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4/ The delays are due to slow budget transfers to procurement agencies and the glacial speed of the banking system in clearing deposit transfers.
Graph 2.1: Grain - World Market Price v/s State Needs Price
- 1993 -
2.9 **Input Prices:** Shortly after independence, price controls were removed on about 80 percent of wholesale prices and 90 percent of retail prices. Included were farm equipment and critical farm inputs such as fertilizer, pesticides, and veterinary supplies. Some inputs important to agriculture such as petrol, diesel, and electricity remain under administrative price controls but they have been subjected to several large price increases. The result has been a dramatic increase in the cost structure confronting the farm sector.

2.10 **Subsidies:** Direct subsidy payments to producers also have been sharply curtailed. From a peak of 10 to 12 percent of GDP prior to independence, budget subsidies for farmers in Kazakhstan stood at about 2 to 3 percent of GDP in 1993. Subsidy payments in 1993 were made for fuel, and animal feed and other items such as special compensation to livestock producers, compensation for high interest rates and social infrastructure subsidies. The largest subsidy item was 290 million Tenge paid to compensate producers of meat, and eggs for low prices. Another 116 million Tenge was paid to animal feed processors to cover the difference between controlled feed prices for livestock producers and the wholesale price of feed components (Table 2.2). Direct subsidies were further reduced for 1994 with only the subsidy for animal feed remaining.

---

**TABLE 2.2: Estimated Agricultural Producer Subsidies in 1993**

<table>
<thead>
<tr>
<th>Type of Subsidy</th>
<th>Tenge (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm investment</td>
<td>7.0</td>
</tr>
<tr>
<td>Private farms</td>
<td>4.0</td>
</tr>
<tr>
<td>Operational Expenditure</td>
<td>46.6</td>
</tr>
<tr>
<td>Compensation for high interest rates</td>
<td>100.0</td>
</tr>
<tr>
<td>Producer price, livestock</td>
<td>290.0</td>
</tr>
<tr>
<td>Social Infrastructure</td>
<td>6.0</td>
</tr>
<tr>
<td>Fuel and lube</td>
<td>54.0</td>
</tr>
<tr>
<td>Mixed fodder</td>
<td>116.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>623.6</strong></td>
</tr>
</tbody>
</table>

SOURCE: Ministry of Economy

2.11 Agricultural credit has been a major source of indirect subsidies through highly negative real rates of interest and frequent rescheduling of unpaid balances. In 1993 the banking sector

5/ 100.0 million Tenge were included in the budget to compensate producers for high nominal interest rates even though real interest rates were highly negative in 1993.

6/ In April, the retail price of animal feed was 35 Tenge per ton, and the wholesale price was 230 Tenge per ton. The difference is subsidized by the state.
extended just over 1.3 billion Tenge to the farm sector to finance planting and harvest activities. Interest rates were highly negative at 65 percent, which translates to a grant element of over 80 percent. Moreover the grant element grew to close to 100 since at the end of 1993 most of this credit was still outstanding and was rescheduled until 1999 at a 25 percent per annum rate. Also included in the amount rescheduled were credits that had been rolled over from the 1992 season. A short time later an additional 540 million Tenge in emergency credits were extended to state farms and collectives to help them cover back wages. This use of directed credit to subsidize agriculture has been a major factor contributing to inflation and the poor financial condition of the banking sector.

2.12 **Net Impact of Pricing, Subsidy and Credit Policies**: Rough calculations of the impact of Government pricing, procurement, subsidy and credit policies are shown below for wheat, meat and milk which are the three major commodities procured through the state needs program (Table 2.3). Low prices and delayed payments for these commodities were estimated to tax the sector in the range of $1.0 to $1.5 billion in 1993. These transfers from the sector were offset by about $710 million in subsidies to the sector largely in the form of subsidized credits from the banking sector. After netting out the subsidies, the tax on the sector in 1993 were between $323-756 million, or from nearly three to six percent of GDP. The large range in the estimated tax reflects the impact of delayed payments in the face of the high inflation. The lower figure assumes immediate payments to producers while the higher amount assumes a two month delay. The actual tax on the sector was likely much higher as in many instances delays in payments were much longer than two months. Moreover, the predominance of the state in marketing, trade restrictions, and the lack of competition in other markets channels likely served to reduce producer prices outside the state needs system to below world market levels. Finally, it was reported that many of the subsidies earmarked for 1993 were in fact never paid.
TABLE 2.3: Estimated Net Tax from State Needs Program in 1993

<table>
<thead>
<tr>
<th>Commodity</th>
<th>State Needs Price a</th>
<th>Real Price for Delayed Paymt. b</th>
<th>World Market Price</th>
<th>Transfer From the Sector Per Ton</th>
<th>Total Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain (6.6 Million Tons)</td>
<td>65</td>
<td>28</td>
<td>130</td>
<td>65</td>
<td>102</td>
</tr>
<tr>
<td>Meat (730 Thousand Tons)</td>
<td>505</td>
<td>323</td>
<td>1000</td>
<td>495</td>
<td>677</td>
</tr>
<tr>
<td>Milk (2 Million Tons)</td>
<td>77</td>
<td>49</td>
<td>200</td>
<td>123</td>
<td>151</td>
</tr>
<tr>
<td>Total Transfers Out</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Transfer to the Sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Producer Subsidies from Table 2.2 c</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implicit Credit Subsidies d</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Transfer from the Sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: World Bank Estimates

a. The state needs price for grains was converted to dollars at the exchange rate prevailing at the harvest (Sept. - Oct.). For meat and milk the state needs price converted at the average exchange rate for 1993.

b. The impact of delayed payments for grains was calculated by converting the State needs price to dollars by using the exchange rate prevailing at the end of 1993 which was two months after the end of the harvest. For meat and milk the price was reduced by 36%, representing the impact of two months delay based on a 25% monthly rate of inflation.

c. The Producer subsidy was calculated by assuming that all the subsidies listed in Table 2.2 were paid to producers of grains, meat and milk. The average exchange rate for 1993 was used to convert the subsidy payments to dollars.

d. The credit subsidy was calculated as 80 percent of the total amount lent for planting and harvest activities.
2.13 **Effects on Agriculture’s Terms of Trade:** As a result of the continued controls on output prices in face of liberalized input prices and reduced subsidies, the internal terms of trade have moved against agriculture. In 1993, the agricultural sector lost close to 50 percent of its purchasing power as the prices of inputs used in agriculture increased by 18.8 times while output prices increased by 7.8 times. The erosion in agricultural terms of trade is also evident in the deterioration in the barter terms of trade (Table 2.4).

<table>
<thead>
<tr>
<th></th>
<th>Grain Combine</th>
<th>Tractor</th>
<th>Ton of Fertilizer</th>
<th>Diesel Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>41</td>
<td>83</td>
<td>3.3</td>
<td>1.1</td>
</tr>
<tr>
<td>1992</td>
<td>49</td>
<td>150</td>
<td>1.9</td>
<td>1.5</td>
</tr>
<tr>
<td>1993</td>
<td>233</td>
<td>367</td>
<td>23.3</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SOURCE:** Mission Estimates

2.14 This policy-induced deterioration in the internal terms of trade has contributed to mounting losses for the sector. According to official statistics, the sector as a whole was profitable in 1992 but had small net losses of 130 million tenge in 1993. In total about 50 percent of farms reported losses in 1993 up from 17 percent the year before. 7 Part of the growth in farms reporting losses may be explained by a shift to pan-territorial pricing in 1992. Prior to that year cost-plus pricing was applied on an oblast and even farm-specific basis so that the costs of individual producing units were nearly always covered. But given the wide variation in costs between farms and regions, many farms with above average costs have begun to show losses under the pan-territorial price regime.

2.15 **Response of the Agricultural Sector:** While the terms of trade have shifted significantly against agriculture, there seems to be a limited response so far to the deteriorating incentive structure. Cropping patterns and area cropped have changed little since 1990. Also energy usage has changed little despite energy prices increasing nearly five times faster than output prices. Moreover, the move from cost-plus prices for individual farms and regions to pan-territorial pricing would normally be expected to lead to more regional specialization as production shifts from higher to lower cost regions. But, continued controls on production patterns to meet state needs requirements have limited the ability of the sector to adjust in face of the deteriorating terms of trade.

2.16 The situation is likely to deteriorate further in 1994. Farms have entered the 1994 season in an extremely illiquid position and they face little relief from Government pricing policy. State needs requirements, though reduced for livestock, are set at nearly the same level as last year for grain and only minor adjustments have been made in the structure and level of procurement prices. Moreover, the sector will be further squeezed by additional cuts in budgetary subsidies with only the subsidy on fodder remaining for 1994. Also, Government has signaled its intention to limit directed credits in 1994.

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7/ It must be noted that the official statistics underestimate both losses and number of loss making farms because accounting methods underestimate depreciation and base cost estimates on expenditures and not cost of replacement. Also, some expenditures such as payments in kind are treated as a use of profits rather than costs.
which, if implemented, would have a significant impact on production levels. The situation in 1994 is clearly unsustainable without significant reforms of the price structure and state needs system. The losses that are beginning to emerge in the sector are a clear indication of the inefficiencies that have been perpetuated by the operations of the state needs system. But they are unnecessarily exaggerated by the administered pricing structure that keeps farm prices at a fraction of world market levels.

2.17 **Consumer Subsidies:** One rationale for the state needs system is to maintain an affordable food supply. In the past this was accomplished by explicit budgetary subsidies on a number of food items. But with the price liberalization in 1991 most of these subsidies were removed. At present, the subsidy on bread and macaroni products is the only food subsidy remaining on the budget. The subsidy is paid to bread makers to cover costs of each stage of the production process to enable them to supply bread at the same price all over the country. In 1993 the bread subsidy accounted for about 20 percent of all subsidies in the budget and covered about 40 percent of the cost of bread. In the 1994 budget 810 million tenge has been allocated for the bread subsidy.

B. **EXTERNAL TRADE**

2.18 Agricultural exports account for between eight to ten percent of total export revenues, ranking second behind the exports of energy products (oil, gas, coal and petroleum products). Agricultural products account for over half of the approximately $2.5 billion in annual non-oil exports.\(^8\) The net trade flows for agriculture are strongly positive as Kazakhstan produces large surpluses above domestic needs for most major commodities. Over 80 percent all agricultural exports still go to countries of the FSU. Kazakhstan is a traditional exporter of grain to Russia and other republics in central Asia, particularly Uzbekistan. Grain exports have averaged around five million tons over the last three years, and are destined mostly to feed livestock. Another major export is meat products with beef and mutton exports averaging around 200 thousand tons over the last five years. Other significant livestock exports are hides and skins and wool (Table 2.5). Nearly all trade with the FSU is under bilateral trade or barter arrangements.

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\(^8\) Official trade statistics are not very reliable and underestimate the contribution of agriculture to total trade. There is considerable under-reporting of trade, particularly barter trade arrangements as well as under-invoicing to avoid export taxes and facilitate capital flight.
TABLE 2.5: Exports to FSU by Destination in 1993

<table>
<thead>
<tr>
<th></th>
<th>Russia</th>
<th>Ukraine</th>
<th>Belarus</th>
<th>Uzbekistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain (000 tons)</td>
<td>1,011</td>
<td>599</td>
<td>830</td>
<td>393</td>
</tr>
<tr>
<td>Cotton (tons)</td>
<td>13,681</td>
<td>560</td>
<td>2,566</td>
<td></td>
</tr>
<tr>
<td>Clean Wool (tons)</td>
<td>9,093</td>
<td>1,835</td>
<td>4,451</td>
<td>185</td>
</tr>
<tr>
<td>Leather (dm2)</td>
<td>4,619</td>
<td></td>
<td></td>
<td>401</td>
</tr>
<tr>
<td>Hides (Pieces)</td>
<td>108,431</td>
<td></td>
<td>65,453</td>
<td></td>
</tr>
<tr>
<td>Skins (Pieces)</td>
<td>74,447</td>
<td>40,000</td>
<td>20,247</td>
<td></td>
</tr>
<tr>
<td>Karakul (Pieces)</td>
<td>65,100</td>
<td></td>
<td>247</td>
<td>23,500</td>
</tr>
</tbody>
</table>

SOURCE: Ministry of Foreign Economic Relations

2.19 The Agricultural Trade Regime: Despite considerable trade liberalization since independence, trade policy remains an important area of Government influence over the agricultural sector. Traditionally, government has used a variety of trade instruments to control exports of agricultural commodities including bilateral trade agreements and for trade outside of the bilateral arrangements, export quotas, licenses and taxes. There also has been a state monopoly in export trade. In contrast imports are relatively free. None require a license and tax rates are fairly uniform and generally lower than for export taxes. The main rationale for maintaining controls on agriculture is to assure adequate domestic supplies for commodities considered to be of strategic importance.

2.20 Bilateral Trade Agreements: Bilateral trade agreements remain the principal trade tool covering agricultural trade, particularly for grains. About 3.5 million metric tons of grain are expected to be subject to such agreements in 1994. Supplies for bilateral agreements are procured through the state needs system. Prices stipulated in agreements for both the exports and imports are usually set in reference to international prices. But the prices paid to the producers of the export commodities is the state needs price which is considerably below international levels. Compounding the low prices is the fact that the producers of exports are paid only after the imports under the bilateral arrangements are sold in the domestic markets. With this gap between the international and state needs prices, Government is able to sell the corresponding imports at below world market levels and still cover the costs of the exports with the proceeds. In this way the producers of grain are subsidizing consumption of imports. With the significant differences between domestic procurement prices and export prices, producers have every incentive to divert commodities away from official export channels. However, they are constrained by a combination of incentives such as directed credit and access to inputs and administrative pressures to deliver contracted supplies. Moreover, export trade over and above bilateral trade is controlled through quotas, licenses and the tax regime.

2.21 Export Quotas: During 1993, 34 commodities remained under quota down from around 90 the year before. The quotas covered mostly raw materials and among the agricultural commodities were grain, wool, leather, hides and skins. Quotas are set by the Government based on
calculations of domestic needs and taking into account volumes agreed under bilateral agreements. Quota levels set at the beginning of 1994 for agricultural commodities included one million tons of grain (Table 2.6). Quotas are mostly allocated to recently privatized trading organizations established as state joint stock companies to take over trading functions from the former state trade and distribution ministries. However, in February 1994, Government issued a decree allowing for the auctioning or tendering of 30 percent of all quotas to individuals and private trading firms. Part of the quotas are also reserved for allocation at the oblast level by regional administrators.

**TABLE 2.6: Export Quotas in Effect in 1994 for the Main Agricultural Commodities**

<table>
<thead>
<tr>
<th></th>
<th>FSU</th>
<th>Outside FSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain (000 tons)</td>
<td>1000.0</td>
<td></td>
</tr>
<tr>
<td>Cotton (tons)</td>
<td></td>
<td>10.6</td>
</tr>
<tr>
<td>Hides (Pieces)</td>
<td>275.0</td>
<td>812.0</td>
</tr>
<tr>
<td>Skins (Pieces)</td>
<td>980.0</td>
<td>1720.0</td>
</tr>
<tr>
<td>Karakul (Pieces)</td>
<td></td>
<td>500.0</td>
</tr>
<tr>
<td>Leather Goods (million dm2)</td>
<td></td>
<td>52.9</td>
</tr>
<tr>
<td>Sugar (000 tons)</td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>Vegetable Oil (000 tons)</td>
<td></td>
<td>7.0</td>
</tr>
<tr>
<td>Fish &amp; Products (000 tons)</td>
<td></td>
<td>18.0</td>
</tr>
<tr>
<td>Wool (000 tons)</td>
<td></td>
<td>10.0</td>
</tr>
</tbody>
</table>

**SOURCE:** Ministry of Foreign Economic Relations

2.22 **Export Licenses:** The February 1994 decree reduced the number of goods subject to export licensing from 61 in 1993 to 35 in 1994. Among the items still subject to licensing are grain, vegetable oil, sugar, meat products, and hides and skins. The rationale for licensing is to protect domestic consumers. Responsibility for issuing licenses lies both with the central Government and the oblast administrations for exports of grain, meat and hides.

2.23 Aside from the direct controls arising from quota and licensing requirements, the lack of transparency associated with export regulations also acts as an impediment to trade. There is no single document that specifies export regulations, restrictions, and procedures. Moreover, the regulations themselves are changed frequently and the authority to regulate trade is split between different agencies.
and different levels of Government. This lack of transparency creates considerable confusion and uncertainty that serve to discourage trade.

2.24 **Export Taxes:** Export taxes are specified for all groups of commodities. The tax rate was reduced in 1994 to an average level of seven to eight percent, down from 15 percent in 1994. The export tax for grain and other unprocessed products is set at 20 percent.

**C. AN AGENDA FOR REFORM OF GOVERNMENT PRICING AND PROCUREMENT**

2.25 **Prices, Subsidies, and State Needs:** The state needs system: (i) taxes producers through low producer prices relative to world market prices, (ii) perpetuates the command economy through the continued involvement of local administrators in production and marketing decisions; and (iii) locks-in existing production and marketing inefficiencies. The deteriorating terms of trade arising from increases in input prices squeezes the sector and increases farm losses. These losses are translated into deteriorating loan portfolios for the banking system, excessive credit emissions and increasing inflationary pressures. In essence the state needs system is not based on market principals and it precludes the allocation of resources on the basis of market-determined prices. It must be eliminated as a precondition for the emergence of a well-functioning marketing system.

2.26 The most important priority for Government is to raise prices paid to farmers to reverse the deterioration in terms of trade facing the sector. The recommended approach to raising prices is to minimize the Government’s role in price setting by stopping Government procurement at administered prices through the state needs program and eliminating all restrictions on external trade in agricultural commodities. Government should procure public supplies in competition with other marketing agents. Market forces would then be expected to move producer prices to world market levels, which would result in substantial increases in producer prices and reduce if not eliminate the need for continued subsidies on inputs and credit.

2.27 The design of a system for competitive procurement of agricultural commodities for public consumption could be quite simple. Government could contract with private firms to operate an open tender process on its behalf. Under open tenders, suppliers (trading companies, elevator operators, and producers) would be invited to submit priced bids to supply specified quantities. Contracts would be awarded to those offering the lowest priced bids. This approach differs radically from the state needs program. Delivery to Government would not be compulsory and delivery would not be based on fixed prices. No quotas would be established either at the national, regional or farm level and producers would be free to market their output as they see fit. Participation in Government tenders simply would be one option available to producers. Government would need to make timely budgetary transfers to cover cost of procurement. Also, sufficient sanctions would be needed to ensure that the firms selected to operate the tenders pay for any delivery on a timely basis so that the proceeds are not eroded by inflation.

2.28 Replacement of the state systems with open tenders should lead to substantial increases in the producer prices. However, this approach relies on competitive market forces to establish price levels that more closely reflect world market prices. A potential problem for the short run is that market forces are only beginning emerge. The sector is dominated by monopolies in both the input and output markets (see Chapter 3). The Government will need to act quickly to reduce the influence of these monopolies. It will also need to monitor producer price trends to ensure that the changes in government
procurement practices and the steps to increase competition do indeed improve the producer price structure. If the monitoring reveals that prices are failing to move closer to world market levels due to remaining monopoly elements, then Government will need to intensify efforts to break-up remaining monopolies and increase competition.  

2.29 **Budgetary Subsidies:** Government has already eliminated most input subsidies from the budget and has plans to remove the remaining subsidy on fodder in 1995. The removal of these subsidies has squeezed agricultural incomes considerably in face of remaining controls on output prices. Increased Government procurement prices and elimination of trade restrictions should ease the transition considerably and make future input subsidies unnecessary. What must be avoided is the reliance on directed credit at preferential rates to subsidize agricultural production. Such credit has enabled the agricultural sector to maintain output but at tremendous cost to the economy in terms of macro-economic instability and financial sector decay. It has also allowed the sector to avoid the difficult task of restructuring.

2.30 Government also has eliminated all consumer subsidies except for bread products and it plans to phase out the bread subsidy as well. It is considering alternatives to protect vulnerable groups of the population that would be doubly affected by the removal of the bread subsidy at the same time grain prices are being increased. Box 2.2 describes possible options. It would appear that the most effective alternative in the short run given the Government’s limited administrative capacity would be to maintain a limited and self-targeted subsidy by restricting it to inferior bread varieties rather than to a whole range of bread products. Over time this system could be replaced with income supplements to target groups.

**BOX 2.2: Alternative Approaches to Bread Subsidy**

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidy restricted to inferior bread products only</td>
<td>Limited in scope, self targeting to poorest segment of the population, easy to administer</td>
<td></td>
</tr>
<tr>
<td>Income supplements to target group</td>
<td>Transfers real income to all members of vulnerable groups independently of whether they consume bread</td>
<td>Requires considerable administrative capacity. Also requires frequent adjustment in highly inflationary environment to avoid erosion of benefits.</td>
</tr>
</tbody>
</table>

10/ In instances where monopsonistic elements persist, many Governments feel justified in providing additional support to farmers to offset the short-run impact of monopsonistic practices. Such support usually comes in the form of minimum guaranteed price schemes or "deficiency" payments to farmers when market prices drop below a Government established target price. The problem with such schemes is that they are extremely complicated and costly to administer. It is particularly hard to choose the right "guarantee" or "target" price. If it is set too low, it offers farmers limited support but if it is set too high, the cost of the program is impossible to sustain. Also, once established, such programs are politically difficult to eliminate. Thus, a better approach for Government is to focus on removing the imperfections in the market that serve to depress producer prices.
2.31 **External Trade Reform:** Trade liberalization is another important element in the reform process to establish a link between domestic agricultural prices and world prices. Government has made considerable progress in trade reform in the last two years but more needs to be done. Further reforms are required in the procurement of agricultural commodities for bilateral trade agreements, the establishment of export quotas, export licensing requirements, and export taxes. A reform package for external trade should include the following:

- Elimination of bilateral trade agreements
- Implementation of the existing proposals to eliminate all remaining export quotas;
- Phasing-out remaining export licensing requirements for agricultural commodities both at the local and national level; and
- Reduction of export taxes on agricultural commodities.

2.32 **Sequencing of Proposed Reforms:** Implementation of many of the reforms discussed above could begin immediately. The quotas established for the state needs program for this season could be further reduced and the entire program could be replaced in 1995 by a system of open tenders. Arrangements with trading companies to purchase on behalf of the state would need to be finalized and the necessary budgetary and payment mechanisms put in place. The trade reform measures could also be implemented fairly quickly. Export quotas could be eliminated immediately, while licensing requirements and procedures are reviewed and adjusted. With the end of the state needs program, the role of Government, particularly the local administration, in input distribution, credit allocation and output marketing will need to be reassessed with a view to limiting the impact of Government on the development of well-functioning markets. The sequencing of the proposed reforms is shown in Box 2.3.

2.33 The proposed reforms call for a continued Government role in monitoring agricultural price movements and Government should consider establishing an agricultural policy unit in the Ministry of Agriculture to analyze price trends, formulate pricing policy, and oversee Government procurement operations. Donor financing would likely be available for technical assistance and training in support of such an agricultural price policy unit.
### BOX 2.3: Sequencing of Proposed Price Policy Reforms

<table>
<thead>
<tr>
<th>Area of Reform</th>
<th>Immediate Measures</th>
<th>Short-Term Measures</th>
<th>Medium-Term Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>State needs system</td>
<td>Reduce quotas for 1994 state needs program</td>
<td>Replace in 1995 with Non-Compulsory Government Procurement based on competitive bidding procedures</td>
<td></td>
</tr>
<tr>
<td>Producer prices</td>
<td>Announce that Government will stop setting prices beginning with 1995 season</td>
<td>Monitor producer prices to determine impact of price liberalization measures.</td>
<td></td>
</tr>
<tr>
<td>Input prices</td>
<td>Continue to adjust fuel prices</td>
<td>Eliminate administered price for fuel</td>
<td></td>
</tr>
<tr>
<td>Input subsidies</td>
<td>Eliminate fodder subsidies</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Credit subsidies</td>
<td>Delink credit allocations from procurement by State and eliminate interest rate subsidies</td>
<td>Eliminate directed credit</td>
<td></td>
</tr>
<tr>
<td>Role of Government</td>
<td>Limit role of local administration in arranging procurement by state and distribution of inputs</td>
<td>Limit power of local administration to control domestic and export trade by eliminating restrictions on inter-oblast trade and revising export licensing procedures</td>
<td></td>
</tr>
<tr>
<td>Bread Subsidies</td>
<td>Reduce magnitude of subsidy by increasing bread price</td>
<td>Target subsidy to poor by limiting it to inferior products by selectively raise prices on premium quality products</td>
<td>Replace with income subsidies to vulnerable groups</td>
</tr>
<tr>
<td>Area of Reform</td>
<td>Immediate Measures</td>
<td>Short-Term Measures</td>
<td>Medium-Term Measures</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Trade</td>
<td>Eliminate all export quotas and bilateral trade agreements</td>
<td>Review licensing requirements and procedures with a view to strictly limiting products subject to licenses and streamlining procedures for obtaining licenses, Continue to reduce export tariffs</td>
<td>Eliminate remaining export tariffs</td>
</tr>
</tbody>
</table>
CHAPTER III

MARKETING AND DISTRIBUTION RESTRUCTURING

A. AGRICULTURAL MARKETING AND PROCESSING SYSTEM

3.1 The agricultural marketing and processing system in Kazakhstan remains little changed from the one inherited from the FSU. It was designed to procure, process and distribute planned production through vertically integrated, state-controlled marketing channels. These channels dominate the trade in grains, meat and milk products, and are also important for vegetables and fruit. Cooperatives handle a small proportion of marketed supply through a system of stores and markets mostly located in rural areas and farmer's markets handle commodities produced on private plots. More recently a few private trading firms and commodity exchanges have emerged. They are mainly involved in the export trade, most often facilitating barter trade arrangements. Most marketing activities found in market economies such as assembly, transport, storage, processing and distribution are all part of the marketing system. But they are performed in a pre-planned manner with heavy input from government officials with little reference to consumer demand. And perhaps the most important market function - price formation by large numbers of buyers and sellers - is only marginally present today.

3.2 More than 5,000 enterprises operate in the marketing system, including flour and feed mills, slaughter houses, dairy processing plants, and canning and bottling plants. In addition, there are numerous grain storage facilities, vegetable storage bases, bakeries, and retail food outlets. Together, they procure, store, process and distribute farm commodities. Some are also involved in the import and export of agricultural commodities. Around another 700 firms provide farms services including agricultural mechanization, irrigation, and supply of fertilizer and other agricultural chemicals. Most enterprises are grouped into local or national associations or companies. In the past they were controlled by central ministries or were organized under individual ministries with sole responsibility for marketing and distribution of particular products. Recently, the various channels have increasingly being given a legally independent corporate existence through the formation of State Joint Stock Companies (SJSCs). Regionally, some enterprises or their local associations fall under the control of the local administration. Finally, many farms have on-site processing facilities such as flour or feed mills and groups of farms often establish inter-farm processing or service facilities.

3.3 The grain marketing system is illustrative of how agricultural markets in general are organized in Kazakhstan. Astyk sits at the top of a predominately vertically integrated marketing chain. It is a SJSC formed in 1993 to take over responsibility for grain marketing from the former Ministry of Bread and Grain Products. It has wide-ranging responsibility for procurement, storage,
processing, distribution and export of grain products. Astyk's primary function is to procure grain for
the state needs system though, if given the opportunity, it will buy grain over and above state needs
quotas. For example, In 1992, a year of record harvests, Astyk was able to buy 13 million tons when
the state needs quota was 10 million tons. But in 1993 it fell short of quota requirements due to low
prices and a lack of cash that prompted farmers to hold on to their grain in hopes of finding barter trade
opportunities. Still Astyk handled about 6.6 million metric tons of grain in 1993 or about 30 percent of
total production and about 63 percent of total marketed supply.

3.4 Astyk, or its subsidiaries at the oblast level, owns virtually all the grain elevators
in the country and farms must deliver their grain to these elevators even if its final destination is outside
the state needs system. On-farm drying and storage facilities are limited. From the elevators Astyk
directs the movement of grain among its large network of flour mills, animal feed processing plants,
bakeries and macaroni factories and eventually to retail outlets. It also handles the export of grains under
bilateral trade agreements through its export arm.

3.5 Farmers marketing grain outside the Astyk network have limited choice. They
may find local enterprises willing to barter grain for needed inputs or for consumer goods that can be
used as payment in kind for farm laborers. Or they may contract with newly emerging trading firms that
have access to export licenses and arrange barter trade exports. Most of these firms are local level trading
entities that were recently privatized. They most often are run by former government or party officials
with close ties to the local administration. These close ties facilitate transactions but often leave farmers
in a weak bargaining position.

3.6 For meat and milk, a joint stock company, Bereke, has taken over responsibility
for coordinating milk and meat marketing from an organization in the Ministry of Trade. Bereke
oversees the activities of holding companies established at the regional level and is responsible for
procuring and marketing state needs quantities of meat and milk. It also calculates supply requirements
for each oblast and directs the regional holding companies to arrange appropriate contracts with oblast
and city trading organizations in deficit regions. Subsidiaries of the holding companies are the various
large livestock processing combinates. Bereke also manages export contracts with other FSU countries
and directs the various combinates where to ship meat products.

3.7 Vegetable and fruit marketing is overseen by Jemis, an association representing
local level marketing organizations and vegetable and fruit producers and processors. It was formed in
1991 to take over responsibility for vegetable and fruit marketing from the Ministry of Agriculture. Each
oblast has vegetable bases which are owned by local marketing organizations. These marketing
organizations purchase from area farms, store the commodities and arrange distribution through retail
outlets. They are also responsible for securing state needs quotas. Jemis attempts to analyze vegetable
and fruit requirements at the oblast level and seeks to cover the requirements of deficit regions by
arranging trade agreements with marketing organizations in surplus producing areas. Jemis stimulates

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13/ There are approximately 50 meat Combinates in Kazakhstan of which four have very high design throughput. The largest is the
Almaty Combinate covering 20 hectares, employs about 2,000 workers and has a capacity of 8000 head of sheep per shift. It is a newly
formed joint stock company with producers holding 40 percent of the shares. Other shareholders include the workers (20 percent), the
banks (5 percent), and government (35 percent). It has 96 state and collective farms or their successors contracted to it.
this trade by holding annual "wholesale fairs" that brings sellers and buyers together to discuss business and negotiate contracts.

3.8 Input Supply: Input supply channels have changed little since independence with planning decisions on types and quantities made at every node of the marketing chain from the farmer to the national level. The process begins with farm managers who calculate their fertilizer, pesticide, feed supplement, fuel and other input needs for the coming year, based on planned cropping patterns. These estimates are consolidated at the rayon level and then passed to the oblast administration where the estimates are consolidated before being sent to the various national level organizations responsible for input supply. At the national level, shipments of locally produced inputs are organized between oblasts. For imported inputs, quantities must be ordered, received, broken down and shipped to the various oblasts and rayons. The system is cumbersome and often results in delayed shipments and shortages. Local input supply enterprises recently have been given flexibility in directly importing required inputs but few have the resources or capacity to exercise this option. In areas where shortages occur, local administrators often ration supplies, even determining on a daily basis which farms are to receive rationed inputs. Where possible, farms use production not earmarked for state needs to barter for needed inputs not available in sufficient quantities from the formal input supply system.

3.9 Marketing Infrastructure: The marketing infrastructure was basically designed to facilitate the movement of planned production levels to major consumption centers. Storage facilities are often large and located near urban centers. They lack maintenance and are expensive to operate. Similarly, the large, formerly state-owned processing plants are in poor condition with plant and equipment often dating from thirty years ago. Current financial shortfalls and the trade and payment crises in the region have made the situation more acute in the last two to three years. Plant and equipment often comes from other FSU Republics, and lack of parts and material now result in frequent shut-downs. Moreover, many agro-industries are also facing serious liquidity and debt problems. Also, the location of storage and processing in or near urban centers is a problem. As urban land values rise with the emergence of land markets, storage of low-value agricultural commodities will increasingly be a poor use of expensive urban land. The location of meat processing plants is often far from producing areas requiring the transport of live animals over long distances on hoof, by rail or on trucks. The result is high animal mortality, excessive weight loss and poor meat quality.

B. RECENT REFORMS OF THE MARKETING SYSTEM

3.10 Government reforms in the agricultural marketing and input supply system have focused on privatization. The government’s privatization program has gone through two distinct phases. According to the State Property Committee (SPC), 292 state owned agro-enterprises involved in marketing and processing activities were privatized in phase one, which lasted from 1991 to early 1993. Some of these were large, intact units including about two-thirds of the large meat processing enterprises. The majority were small units, some of which were hived-off larger concerns.

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14/ Mortality rates average 10 percent for animals shipped 100 kms and go up to 20 percent for animals shipped further. Weight losses are as high as 25 kg per animal.
3.11 The first phase was characterized by a cumbersome case-by-case approach to privatization often undertaken through local initiative. In most instances the process did not result in a majority of shares passing to private hands but instead the state maintained majority share holding either directly or through shares held by other state enterprises. In most instances the enterprises became joint ventures between the state and their work force, with the State’s share fragmented across a number of different state enterprises and the SPC. The result has been that effective control of the enterprise was ceded to management with little, if any, shareholder oversight.

3.12 The second phase began in March 1993 to speed the process and correct problems identified in the first phase. The most sweeping changes were made in the process for the industrial sector, excluding agro-enterprises. The changes were intended to create quickly effective governance of the firms, introduce competition in the sales process, broaden the participation by the population, and improve fairness and transparency. Sales without restrictions on how the owners would subsequently operate the business is another feature of phase II. Three key measures of phase II for industrial firms are (i) a consistent formula to be applied in place of the case-by-case approach; (ii) a limit of 10 percent of shares allocated to employees; and (iii) overall direction and control of the process to be centrally maintained. The general methodology turned around a classification of “small”, “medium” and “large firms”.  

3.13 Enterprises in the agricultural sector were singled out for treatment outside the small-scale, mass, and case by case privatization apparently on the basis of a perceived need to protect farms by ensuring continued supply of inputs and giving them greater negotiating power vis-a-vis agro processing and trading firms. Unfortunately, the program for agro-enterprises contains a number of anti-competitive elements and in many respects is similar to the flawed pre-1993 privatization program (Box 3.1). It remains largely a closed process with shares of the agro-enterprises distributed between the suppliers of the enterprise, the employees, and often the state. It also locks-in existing business arrangements and limits competition through long-term contracts between the enterprise and its suppliers/share holders.

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15/ Small firms were basically defined as employing less than 200 people, medium employing between 200 and 5,000 and large employing more than 5,000.
BOX 3.1: Privatization of Agro-Enterprises under Phase II

The privatization program for agro-enterprises in Phase II will certainly not take the majority of firms into full private control, even in those cases in which there is likely to be a nominal majority of privately owned equity. The process is prescriptive and standardized with a complex set of rules to be applied to various sub-branches. The key principals of the process are:

- Overall management by the state is to be preserved during the transition;
- The privatization process is linked to contracts to be agreed between farms and agro-enterprises with which they trade and will involve farms purchasing equity in the agro-enterprises on heavily discounted terms;
- In the case of agro-enterprises which are judged to be monopolists, the state will retain a controlling share holding. In those not deemed to be monopolists then the majority of the equity may be owned by farms thus giving them the possibility of control;
- Ten percent of the equity will always be transferred for free to the work-force;

The agro-enterprises undergoing privatization will first be corporatized, then contracts will be signed with the farms with which they trade before shares are distributed. The basic model for share distribution allows for 10 percent shares to the employees and between 40 to 50 percent distributed to farms entering into supply contracts depending on whether or not the enterprise is considered to be a monopoly. Up to 10 percent of the shares are also reserved for secondary suppliers such as electric utilities or in some cases foreign investors. The remaining shares will be held by the state. In the case of non-monopolists these shares may be retained or put into the mass privatization program. For the monopolists the shares are retained by the state and provisions are made to ensure that they represent a controlling interest.

The farm/agro-enterprise contract will govern the relationship between farms and those agro-enterprises from which they purchase inputs or services, as well between farms and those firms to which they sell their output. The functions of the contract will be to freeze - or at least to attempt to freeze - existing market linkages and to ensure the continuity of farm production activity both in terms of product and quantity. The main terms of the contract are:

- The farm will purchase shares in the agro-enterprise and this purchase is explicitly linked to economic transactions between them;
- The farm undertakes to supply or purchase an agreed annual quantity of goods or services (based on previous year's quantities);
- The price to be paid for the goods/services will be determined in the future by the enterprise's shareholders.
3.14 **Progress in Agro-Enterprise Privatization:** The SPC spent most of 1993 compiling lists of enterprises and working through the administrative procedures of corporatization and registration. Of the 1652 enterprises listed by SPC, the breakdown is as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privatized Under Phase I</td>
<td>292</td>
</tr>
<tr>
<td>Excluded from Privatization</td>
<td>53</td>
</tr>
<tr>
<td>Corporatized in Phase II</td>
<td>1174</td>
</tr>
<tr>
<td>No action taken yet</td>
<td>133</td>
</tr>
</tbody>
</table>

There is apparently no clear timetable for completion of contracts and the subsequent distribution of shares to supplying farms.

3.15 **The Creation of State Joint Stock Companies:** Another key element of phase II has been the establishment of holding companies to ensure state regulation of basic branches of the national economy. Initially holding companies were not permitted in the processing of agricultural commodities. But in mid-1993 ten State Joint Stock Companies (SJSC) were established to take over the functions of the central marketing ministries and associations that until then had managed the various branches of the agro services, procurement and input supply sector. These SJSC's have many characteristics in common with holding companies and are basically intended to maintain an active and prominent role for the state in agricultural marketing, processing and other services.

3.16 The most prominent of the new companies is Astyk. Other holding companies in agricultural marketing and input supply include Tagam for sugar, edible oils, and alcoholic beverages, Kournarlilik for supply of inputs, Kendala for agricultural materials and technical supplies, Kazagroremmach holding for machinery spares and repairs, and Togan for irrigation services and hydro-technology. In addition regional-based holding companies have been established for cotton in one oblast and for meat and milk in several oblasts. In the latter case, oversight of the regional holding companies for meat and milk is exercised by Bereke which acts to coordinate trade in meat and milk between surplus and deficit producing regions.

3.17 The structure and size of the groups of companies controlled by each of the new SJSCs varies from case to case. There are second tier, sub-holding companies being established at the regional level in the case of grain, agricultural machinery and agricultural chemicals, each of which is to have third level companies as subdivisions. In each of these branches there are also operating companies that have been designated as critical or strategic and have been placed under the direct ownership and control of the primary national holding company.

3.18 The operations of the SJSCs are overseen by special observance committees which represent the interests of the state. Representatives from the Ministry of Agriculture, the SPC, the Ministry of Finance, and the National Bank sit on the oversight committee. The president of the SJSC is also a member. In the process of converting the previous marketing organizations into the SJSCs a

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16/ The remaining holding companies in agriculture encompass companies providing agricultural services such as construction or are engaged in specialized activities such as poultry production, and livestock fattening.
few minor managerial changes were made but the president of each company and the basic structure remained the same.

3.19 The expressed intent of establishing the SJSC’s is to ease the transition to a market economy. However, it is difficult to regard this action as a major step away from central planning and control and toward a market economy. Most of the same structures and people from the old state organizations are still in place and still functioning as they always have. And some of the new SJSC’s dominate the market. For example, enterprises under Astyk purchase more than half of the marketed grain supply, bake 50 percent of the bread and provide 80 to 100 percent of the pasta and macaroni products produced in the country. This dominate position, coupled with the methods of privatization used for the agro-enterprises that are subsidiaries, serves to lock-in existing structures and practices and threatens to block changes required to allow markets to emerge.

C. POLICY RECOMMENDATIONS

3.20 The phase II program addresses some of the problems in phase I. It replaces the ad hoc, case-by-case negotiations on privatization with relatively clear procedures and it increases the power of the SPC to guide the process. However, despite these improvements, it is doubtful that the privatization strategy now being pursued will fulfill the objective of developing free and competitive markets for farm inputs and outputs. Too many anti-competitive elements have been incorporated into the program including:

- contracts binding producers to specific buyers that lock in existing production patterns and marketing arrangements and make it difficult for alternative marketing channels to develop;

- the establishment of state joint stock companies based on structures from the former command economy that retain considerable control of market functions on behalf of the state; and

- a privatization process that often will result in complex and diffuse pattern of ownership of firms that threatens to dilute oversight responsibilities and limit change in management structures and operating procedures.

3.21 Given these anti-competitive elements, a fundamental redesign of the privatization program for agro-enterprises is required. Key elements of the program include: (i) an appropriate enterprise reform environment; (ii) a rapid, transparent, open and competitive ownership transfer mechanism; and, (iii) post-privatization restructuring.

3.22 The Enterprise Environment: For enterprise restructuring to succeed, the basic policy reforms described in this report in the area of pricing, subsidies and trade must proceed. Controls on output prices and interest rates, and remaining subsidies, including the implicit subsidies provided by directed credit, all must be eliminated. Domestic trade restrictions through the state needs program and local-level controls as well remaining export restrictions must be removed to ensure that privatization leads to increased efficiency and improved competition. Moreover, an appropriate legal and
administrative framework is required including implementation of proposed bankruptcy legislation, improved sanctions for breach of contract, and effective limits on monopolies.

3.23 Ownership Transfer: In redesigning the privatization process, Government should reconsider its decision to treat agro-enterprises outside the framework of the ongoing industrial privatization program. Government should instead use the small scale, mass and case-by-case approaches to privatization to begin breaking up the existing monopoly structures and introducing increased competition at all levels of the marketing and input distribution chains. The basic approach should include two elements: increased competition at the farm gate, and demonopolization of major agricultural commodity and input supply markets.

3.24 Competition at the Farm Gate: As a general principle, an objective of the transition process in agriculture must be to introduce competition at the farm gate so that farmers may choose the enterprise with which they wish to trade and possibly make contracts. If this objective is to be achieved, alternatives need to be found to the contracting arrangements currently proposed between agro-enterprises and producers. One such alternative would be to sell individual local units of farm input supply or farm product procurement enterprises in share, enterprise, or asset auctions and allow the new owners and farmers freely to negotiate whatever contracts they see fit. Another approach would be to encourage groups of farmers to bid in the auctions on units that could form the basis for farm service or marketing co-operatives. (A more detailed discussion of such co-operative organizations is included in the following chapter.) Among the activities that could be privatized in this manner include: rural grain storage facilities; milk collection and dairy processing units; rural meat processing plants; input and equipment supply depots; and rural transport companies.

3.25 Demonopolization of Agricultural Commodity and Input Markets: Competition at the farm gate will not bring about the desired results if commodity markets are dominated by monopsonists and input supply markets by monopolists. In order, to create a competitive environment the reform strategy must strive as rapidly as possible to break-up all State Joint Stock Companies and regional holding companies in the agricultural sector. One approach is as follows:

- Activities undertaken at a national level could be divided vertically into competing pan-regional companies and privatized in accordance with established criteria on the small scale, mass and case-by-case criteria.

- Activities undertaken regionally could first be split horizontally from the parent company followed by further divisions into competing regional units and privatized as above.

- In those residual cases where units are not amenable to sub-division and a monopoly cannot be avoided, regulatory boards could be established to oversee their operation and ensure there are no obstacles to the entry of new competitive firms.

3.26 In order to increase the economic efficiency of newly privatized enterprises by allowing owners to pursue profit, and make commercial choices between alternatives on the basis of relative risk and return, and objective in any assets sale would be to increase flexibility for new private
owners. Thus, no restrictions should be imposed on the type of activity, the use of assets, or employment when enterprises are offered for sale.

3.27 **Post Privatization Restructuring**: Government is currently formulating a program of post privatization restructuring that actively involves current creditors in the restructuring efforts. The restructuring process is complex and difficult and will only be accomplished firm-by-firm over the medium term. Moreover, as restructuring requirements are likely to vary from firm to firm the process, by necessity, will have to be decentralized. Key elements of the program include: (i) special arrangements for the restructuring of large loss-making public service enterprises such as public utilities and public transportation that can not be privatized soon and can not be liquidated; (ii) budgetary and financial control of the 50 largest non-strategic loss making enterprises to be passed to a special temporary institution that will undertake to restructure or liquidate the firms; (iii) work-out units to be established in the banks to start restructuring other debtor enterprises with non-performing loans; (iv) pilot program to test the feasibility of privately owned and profit-oriented turnaround funds; and, (v) a restructuring advisory unit in the SPC to assist viable enterprises to prepare restructuring plans.
CHAPTER IV

LAND REFORM AND FARM RESTRUCTURING

A. INTRODUCTION

4.1 Prior to the start of land reform and farm restructuring in 1991, the land tenure structure was dominated by the 2055 state farms and 430 collective farms. The average amount of cultivable land per worker was about 20 hectares on state farms and about 15 hectares on the collectives. The collective farms began as groupings of previously independent land holders during collectivization prior to World War II. In theory, they are considered to be independent enterprises who manage their own affairs without direction from the state. The state farms were mostly established to manage the new agricultural lands first cultivated in the virgin lands campaign or from new irrigated areas. They are managed by the states and all workers are state employees. Despite the historical differences between the two types of farms they are now quite similar in the way they are managed, how they are organized and in their marketing arrangements.17

4.2 Despite the domination of land tenure by state and collective farms, the population has maintained direct ties with the land and food production through small garden or orchard plots. Even before privatization began, 742,000 families had orchard plots, about 500,000 families had garden plots on state and collective farms and about 1.9 million families had dacha gardens and the numbers have grown considerably in the last three years.

B. PROGRESS IN LAND REFORM AND FARM RESTRUCTURING

4.3 Phase One: The Land Reform Law of 1991 began the reorganization of the land administration system. The law required the re-issuing of all past grants of land, including all agricultural land. Two basic types of grants are being issued that specify the rights that are transferred to the holders: (i) life, inheritable tenure for individual private farms and small plots, and (ii) permanent usufruct for state farms and collectives. In addition, several other important changes in ownership structures were introduced often at local initiative. Perhaps the most visible change was the establishment of private farms (see para 5.11). Some individuals farm workers were given the opportunity to establish private farms most often on land that the managers of the state farms and collectives viewed as not being central to their operations. Land funds were also created out of surplus public lands for the establishment of private farms. Understandably most of the land so allocated was marginal and consisted mostly of pastures.

4.4 In terms of size, the most significant type of privatized farm enterprises were worker co-operatives and joint stock companies, both formed by the workers on parts or all of the assets

17 Both farms usually have a hired management and technical staff who oversee work most often organized by brigades. Workers are paid from revenues from the farm or from loans and both types farms have responsibility for the maintenance of the retired population, housing, local schools, health clinics, farm roads and other farm infrastructure. They are both highly mechanized and each type includes farms that are integrated into local processing and distribution enterprises.
previously held by the state farms and collectives. By the beginning of 1993 nearly 920 cooperative farms, joint stock companies, and small enterprises had been established, holding 21.6 million hectares of land. These enterprises were privatized using various paths, including: (i) most often a nominal change in ownership of the farm into cooperatives or joint stock companies without a fundamental reorganization of the property rights or responsibilities of workers and with the same management and organization; (ii) sub-units of the previous state and collective farms, usually organized around former brigades, but still operating as group farms; and, (iii) brigades taking ownership of processing or service functions of former state farms or collectives.

4.5 **Phase Two:** Government, faced with widely varying approaches at the local level, the tendency for privatization to result in a change in names only, and the overall slow pace of the process, launched an accelerated phase II of the program in March 1993. The objectives of phase II were to speed the privatization process, and to develop a common approach to the transfer of ownership. The key policy goal of phase II is the recognition of individual rights to land and assets of the farm. Theoretically, each state farm worker is allotted the rights to an identifiable piece of land on the basis of a life, inheritable lease. This land may be farmed individually or it may be grouped into larger units and farmed co-operatively if the holders of the land so desire. For some specialized farms such as livestock breeding or poultry farms, land is not physically subdivided. Instead the land is allotted to a cooperative or other organizational form created by the farm workers, but with the rights and responsibilities of the owners clearly identified. The policy of the state is to ensure that a rule is included in the organization's statutes that a member of the group desiring to leave would be able to so with an identifiable piece of land with a lifetime lease.

4.6 The Government intends that for each farm, the workers will debate the advantages and disadvantages of each management and ownership form and decide which one is best for their conditions. The only requirements are that a non-state model of ownership and management be selected and that the worker's rights to land and property be personified. While the Government does not intend to influence the debate on farm structures, it anticipates that many individuals securing land will eventually chose to farm individually. To prepare for this eventuality, the Parliament approved the Family Facility Act in April 1993. This act defines the rights and responsibility of the family farm. Under the act, the head of the farm is free to determine production structures, marketing arrangements, and other aspects of management and may own dwellings, other farm structures, crops, livestock, machinery, and inputs. The family farm is the sole owner of production and income produced by the farm. However, important restrictions were stipulated in the act. Farm plots were not to be subdivided and the land, water and other natural resources were not to be bought, sold, granted, mortgaged or otherwise exchanged. Plots can only be inherited by family members or revert to the state. The authorities also may terminate land rights when the land is used for other purposes than agreed in the lease or when land is used inefficiently or subjected to environmental degradation. Such restrictions do not allow for the development of land markets and retain important powers for authorities to dictate who owns land and how it is used.

4.7 The design of the phase II program is a clear improvement over phase one. It replaces the often ad hoc and locally initiated efforts that characterized the first phase with a uniform and consistent framework that while centrally managed allows for local input into the process. It also recognizes the rights of individual farm workers to establish private farms. Phase II only got underway
in earnest after the 1993 harvest so it is early to draw firm conclusions about the results. However, it appears that the process is still leaving the farm sector fundamentally unchanged. Only a handful of farms undergoing the process have chosen to break-up into individual units. Only about two percent of the private farms are reported to have been established in this way. Simply put, large inefficient state farms are becoming large inefficient cooperative farms. The new collective enterprises of various forms look and behave much as did their predecessors. The new "owners" of the farms often think of themselves as salaried workers and not co-owners. Managerial behavior appears to be little different from farms which did not reorganize and production patterns and trading relations are by-in-large the same. Not surprisingly, in terms of efficiency and profitability the new farms are faring little better than their predecessors.

4.8 Several factors explain this lack of restructuring. First, and perhaps most importantly, is the fact that, while the right to break-up farms into individual holdings or some other ownership structure is recognized, it is not necessarily encouraged. Many officials responsible for farm restructuring hold the view that the majority of state farms undergoing restructuring will emerge essentially intact as large producer cooperatives with the same management and organizational structure as before. Moreover, continued operation of the states needs program and the new system of contracting farms to the processing firms they supply help to lock in the existing structures. The lack of change is often compounded by insufficient information about alternative structures. In the absence of information about alternative choices, those undergoing the process re-create what they know best, albeit with a new name. Restructuring also is taking place in an increasingly hostile economic environment. Few individuals are willing to strike out on their own in face of low farm prices, limited access to inputs, non-existent marketing channels and a lack of basic social services and even housing. Finally the existing farm management has little incentive to pursue farm restructuring very aggressively as they benefit from continued access to Government support, mainly through directed credits from the banking system. 

4.9 Reluctance to encourage farm restructuring is based on several legitimate political, social and economic concerns. The rural population almost all reside in state or collective farm villages and rural politicians draw most of their support from these villages. As in many countries the result is a strong and vocal farm lobby that uses its power to resist change. Social concerns center on how to adapt the social infrastructure currently supplied by the state and collective farms to new farm structures that could well lead to a the dispersal of the rural population away from existing large farm centers into many far flung individual farms. The economic concerns center largely on the perceived consequences of a rapid transition of the rural landscape to one dominated by private individual farms. Among the concerns are: (i) the potential for a catastrophic collapse of production as old structures are destroyed and new ones are slow to emerge; (ii) the high cost of adapting physical infrastructure such as rural roads and irrigation works; and, (iii) the potential loss of administrative control over production and marketing decisions.

4.10 While these issues are indeed important, it must be recognized that the costs of maintaining the existing farm structures in terms of continued inefficiencies, and the need for subsidies

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18/ In recognition of this problem a Presidential Decree was issued in March 1994 that was intended to build support for farm privatization among state farm directors. The decree outlined a procedure to distribute shares of non-land assets of a farm to long-serving farm directors as an inducement to restructuring.
will be difficult to sustain over the long-run. Evidence from other countries shows conclusively that producer owned and operated cooperatives are in most cases inefficient, unprofitable, and prone to disintegration. They also tend to hire less labor than individually owned and operated farms. Nor does there appear to be any justification based on economies of scale for maintaining such large units. Economies of scale in farming appear to be exhausted at much smaller farms than are common in Kazakhstan, due mostly to the high costs of managing labor on such large units. Economies of scale are often limited to what an individual owner operator can manage with existing technology. In farming areas in Canada similar to those found in Northern Kazakhstan, family farms are often quite large (up to 4000 ha) but they never approach in size the farms presently prevailing in Kazakhstan.

C. CURRENT STATUS OF PRIVATE FARMING

4.11 The term ‘private farming’ refers to the agricultural activities of independent private farmers and gardeners or small groups of such individuals. There are four types of private farming in Kazakhstan. The first includes the cultivation of crops, mainly horticultural produce, and livestock activities on small dacha plots and in small gardens located near individual houses. The second is crop and livestock production on somewhat larger plots assigned to State and collective farm workers. These types of private farming have been permitted in Kazakhstan for several decades. The third form of private farming takes place on land rented annually from state and collective farms. Such activities have been allowed since the early 1980’s. The fourth form, which began soon after the country’s independence, involves the long-term leasing of usually much larger land areas to individuals, mainly State and collective farm workers and retirees, and other rural officials.

4.12 In late 1993 there were over 4.4 million dacha, garden, and farm worker plots on 333,400 ha of land (0.2% of all agricultural land). By September 1994 the number of private farms with long-term leases had reached approximately 20,000. Their farms included about 7 million ha of land under leasehold and 1.5 million ha of land rented annually, or 3.9 percent of Kazakhstan’s agricultural land. Of the total land leased to private farmers, 13 percent is cultivable in field crops, less than one percent is in tree crops and vineyards, and 85 percent is classified as hayfields and pasture, including desert and other non-cultivable areas.

4.13 In early 1994 private farms averaged 423 ha, although there is a wide range of farm sizes between and within oblasts. The farms are smallest in the southern zones, where farmland is largely irrigated—in the three southern oblasts, the average farm ranges from 24 to 56 ha. In the arid central region, the farms average 3747 ha of pasture and desert, while in the north the average size ranges from 80 to 676 ha. However the size of the actual units farmed is often much larger than these averages suggest, since several relatives may obtain leases to contiguous land parcels and manage the group of leaseholds as a single farm.

4.14 Private farmers show considerable diversity in terms of age and ethnic origin, and a significant proportion are women (Box 4.1). However it appears that the individuals receiving leases are usually the more senior or educated members of the state farms. Most farmers cultivate a variety of crops and maintain several types of livestock, largely with the aim of achieving self-sufficiency in food products. However most consider themselves to be specialists in one particular crop or groups of crops which are marketed off-farm, with the other crops grown mainly for family and worker consumption.
Many farmers directly market their output, and some also serve as wholesalers or retailers for other farmers. Some farmers also own small non-farming enterprises which provide various products and services, such as food processing and storage. Most farmers would like to expand or diversify their farming activities, start small ventures, or diversify existing enterprises. There is particular interest in small-scale food storage and processing ventures.

4.15 In 1992 it was estimated that individual plot holders produced 35 percent of Kazakhstan’s agricultural output, including half of all livestock products and 14 percent of all crops. For individual products, the contribution of plots to output is: potatoes, 67 percent; melons, 51 percent; fruits and berries, 47 percent; vegetables, 38 percent; milk, 55 percent; meat, 44 percent; wool, 37 percent, and eggs, 33 percent. Moreover, during the past decade the yields of individual plot farmers have consistently exceeded the yields of state and collective farms (Table 4.1). Yield data for the private farmers are not yet available but it is likely that similar trends will hold for them as well.

4.16 Private farms are much less mechanized than State and collective farms, due partly to the smaller private plots and difficulties in obtaining farm equipment. Also, Government data for 1993 in Alma Ata Oblast suggest that labor intensity on private farms may be 2-3 times that on equivalent land areas on public farms. Thus private farms appear to have created a significant number of new jobs and, as the number of private farms increases, they can be expected to generate considerable new employment opportunities.

4.17 During the past three years, many private farmers have obtained credit from Agroprombank or, in some cases, from commercial banks. Government data indicate that close to 50 percent of new farmers have received agricultural loans and 75 percent have bank accounts. About 60 percent of this credit was from Agroprombank, while the remainder was from other commercial banks. The amounts received were relatively small—an average of 7,800 Tenge, which in 1993 was half the price of a tractor. Data on repayment rates are not available, but field interviews during the mission suggested that most loans to private farmers are repaid and that they understand the responsibilities of timely loan repayments. Farmers also understand and have successfully used the guarantor system with past loans, and many appear to own sufficient assets to use as physical collateral for credit. Finally, farmers also appear to understand and be receptive to the possibility of group credit schemes, whereby the group would guarantee loans for group members.
TABLE 4.1: Comparison of National Yields for Selected Crops with Yields on Individual Plots

<table>
<thead>
<tr>
<th>Crops</th>
<th>1985</th>
<th>Indiv. as % of National</th>
<th>1990</th>
<th>Indiv. as % of National</th>
<th>1991</th>
<th>Indiv. as % of National</th>
<th>1992</th>
<th>Indiv. as % of National</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potato (tons/ha)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National</td>
<td>11.5</td>
<td>112</td>
<td>11.3</td>
<td>106</td>
<td>10.0</td>
<td>106</td>
<td>10.4</td>
<td>105</td>
</tr>
<tr>
<td>Individual plots</td>
<td>12.9</td>
<td>12.0</td>
<td>10.6</td>
<td>10.6</td>
<td>10.0</td>
<td>10.9</td>
<td></td>
<td></td>
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<tr>
<td>Vegetables (tons/ha)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National</td>
<td>16.1</td>
<td>107</td>
<td>15.4</td>
<td>113</td>
<td>12.1</td>
<td>103</td>
<td>11.4</td>
<td>100</td>
</tr>
<tr>
<td>Individual plots</td>
<td>17.2</td>
<td>17.4</td>
<td>12.5</td>
<td>12.5</td>
<td>11.4</td>
<td>11.4</td>
<td></td>
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<tr>
<td>Melons (tons/ha)</td>
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<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>National</td>
<td>8.1</td>
<td>278</td>
<td>8.4</td>
<td>189</td>
<td>7.9</td>
<td>175</td>
<td>7.2</td>
<td>175</td>
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<tr>
<td>Individual plots</td>
<td>22.5</td>
<td>15.9</td>
<td></td>
<td>13.8</td>
<td>12.6</td>
<td>12.6</td>
<td></td>
<td></td>
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<tr>
<td>Fruits (tons/ha)</td>
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<td></td>
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<tr>
<td>National</td>
<td>1.8</td>
<td>133</td>
<td>4.2</td>
<td>110</td>
<td>1.5</td>
<td>187</td>
<td>2.2</td>
<td>94</td>
</tr>
<tr>
<td>Individual plots</td>
<td>2.4</td>
<td>4.6</td>
<td>2.8</td>
<td>2.8</td>
<td>2.1</td>
<td>2.1</td>
<td></td>
<td></td>
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<tr>
<td>Milk (kg/year/cow)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National</td>
<td>1961</td>
<td>84</td>
<td>2367</td>
<td>70</td>
<td>2265</td>
<td>73</td>
<td>1943</td>
<td>73</td>
</tr>
<tr>
<td>Individual plots</td>
<td>1653</td>
<td>1679</td>
<td></td>
<td>1675</td>
<td>1639</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wool (kg/year/sheep)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National</td>
<td>2.3</td>
<td>274</td>
<td>2.6</td>
<td>215</td>
<td>2.5</td>
<td>220</td>
<td>2.3</td>
<td>222</td>
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<tr>
<td>Individual plots</td>
<td>6.3</td>
<td>5.6</td>
<td>5.5</td>
<td>5.5</td>
<td>5.1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Goskomstat

1 National yields include yields from State and collective farms only.

4.18 Most private farmers have encountered a variety of problems in initiating and sustaining their operations. In addition to problems with low prices, delayed payments and input shortages that plague the entire sector, private farmers must contend with:

- Frequent obstructions in obtaining land, inequity of land allocations and insecurity of tenure, despite legal leases;
Marketing problems including lack of outlets, export restrictions, extractions of cash or produce by roadside officials, market administrators, and racketeers, as well as frequent pressure to assist state farms in meeting state needs, often without compensation;

Lack of access to farm equipment and services and lack of liquidity to purchase these items and inputs, such as seed, and veterinary supplies, or to hire labor;

Limited access to working capital and medium-term loans; from the banking system;

Lack of housing, farm buildings, and other basic infrastructure such as power, heat or telephones or adequately maintained farm roads; and,

Lack of appropriate farm equipment and technologies.

To help with these problems, a few NGO programs for private farmers have been established. The largest of these is AGRO, the National Private Farmers’ Association. Although AGRO is partly funded with Government money, much of its funding is generated privately from member dues and the sale of member produce both locally and abroad. AGRO serves as a national lobbying group, is establishing a savings and loan bank for its members, and conducts a radio and television agricultural extension series for private farmers.

Many of Kazakhstan’s private farmers have been quite successful, despite the difficult circumstances which they face. Through hard work, skill, and a little luck (in obtaining good land and acquiring farm assets) their farming activities have enabled them to be largely self-sufficient in food products, generate some additional cash, and, in some cases, even prosper. On the other hand some farmers have already failed. However, in most market economies the majority of start-up small businesses do, in fact, fail. The fact that, under the incredibly difficult circumstances, the majority of Kazakhstan’s start-up farmers have not already failed is a positive indication of the future potential of private farming. If a "reasonable" level of services could be provided--services which are normally provided to farmers throughout the world--private farmers in Kazakhstan could become a viable alternative to the present large co-operative farms and provide a growing share of agriculture’s contribution to Kazakhstan’s economy.
BOX 4.1: Profile of a Tractor Driver Turned Entrepreneur

Private Farmer, Crop Wholesaler and Retailer, Wheat Miller, Producer of Textile Products and Paint Brushes

Woman, 53 years old, widowed. Former tractor and combine driver on sovhoz in North Kazakhstan; then studied for Master’s degree in economics and agronomy in Moscow. Subsequently returned to Alma Ata oblast, where she was assigned to serve as a manual laborer on a sovhoz. Has managed a farm of 45 hectares of irrigated land for 3 years; the land was assigned to her and 12 relatives, and they designated her to serve as Farm Manager. The farm is located about 70 km from Almaty. Also owns and operates a small enterprise which produces canvas combine covers, work clothes and gloves, various other textile products, and organic paint brushes. Presently many of these items are sold to a local government shop for retail sale, although the combine covers are produced under contract with a sovhoz, which compensates her with fuel.

Employs full-time 45 predominantly single women (former sovhoz workers)—in summer they work in agricultural production and marketing, and, in winter, they produce the textile products and paint brushes. They are paid both cash wages and in-kind payments of food products.

Her crops include potatoes (5 ha), wheat (11 ha), sugar beet (4 ha), vegetables (mainly tomatoes, cucumbers, radishes, and onions) (5 ha), and lucerne, millet, and barley (15 ha) for animal feed. She also has a small apple orchard. Her livestock herd includes 4 cows, 30 sheep, and 30 chickens; they provide eggs, milk and meat, mainly for consumption by her family and work-force.

She owns a tractor, trailer, and a truck. The trailer was purchased several years ago at a very low price, but the other equipment was purchased recently from the earnings of her enterprises. She purchases seeds locally, has a private contract for the provision of irrigation water, and uses no facilities or inputs of the local sovhoz, other than the contract to trade combine covers for fuel. For the textile operations, she owns a building and 24 sewing machines.

The farm produces almost all of the food products used by the family and the 45 workers (35% of output), and about 20% of her produce is sold in the Almaty city market. Another one-third of her output is sold to private traders who come to her farm from South Kazakhstan (Chimkent) and North Kazakhstan (Karaganda and Kustanai). In addition to her own production, she also buys, sells, and barters other crops, including this year 25 tons of wheat and several tons of onions, the latter of which she received as payment from a private farmer who used her tractor.

She has never applied for credit, partly because she believes that the available credit has been reserved for officials and others with special contacts. She considers the lack of credit her main problem, especially the lack of medium-term credit for the purchase of agricultural equipment, vehicles, and small-scale processing equipment. If credit were available, she would be particularly interested in establishing a small-scale sugar processing facility, a bean processing facility, and a small facility to produce organic manure.
D. Agenda for Further Reform

4.21 In view of the difficulties arising in the Government’s farm privatization program, it should consider adopting a more pro-active approach to restructuring. Given the evidence accumulated elsewhere about the poor performance of large-scale co-operative farm enterprises and the promising emergence of private farms, the ultimate objective should be the restructuring of the existing farms into private farms structures including individual family farms, partnerships, joint ventures and corporate farm entities. As with agro-enterprise restructuring, a fundamental pre-requisite for successful farm restructuring is successful macro-economic adjustment. The design and implementation of a stabilization program that imposes adjustment throughout the economy through price and trade liberalization, subsidy reduction and elimination of directed credit will promote farm restructuring as well by increasing financial pressures on state and collective farms. The macro-economic process is painful and will likely give rise to predictions of agricultural collapse and calls for more subsidies or fresh credits. The solution is not subsidies, but restructuring for greater efficiency in response to market signals.

4.22 Beyond macro-economic adjustment a consistent and transparent program to transform the ownership structure of the farm sector and initiate post-privatization restructuring should be developed and implemented as quickly as possible. Key measures are discussed below and include:

- further land reform that clarifies and solidifies the rights to use and transfer land;
- improved capacity for land administration;
- refined mechanism for the transfer of ownership of state farms and collectives;
- post privatization assistance
- provisions to handle social service

4.23 **Land Reform:** Much of the legal basis for private use of land already exists. The family farm act already provides for life-time, inheritable leases but it prohibits the sale, sub-leasing or other types of transfers of these leases. A further step in the direction of allowing land markets to develop was a Presidential Decree issued in April 1994 that established the right of individuals or other non-state farm organizations to sell, lease, or grant their life-time leases to other individuals or non-state farm enterprises. The decree also directed the State Committee on Land Relations and Land Tenure to define the procedures for the sale or transfer of leases and the development of necessary contractual and administrative procedures. Moreover, appropriate legislation is being prepared for submission to Parliament.

4.24 The decision to allow trade in farm leases is an important step in the development of private land markets. It is important that the conditions attached to the sale of leases be kept to a minimum and that the role of the state be restricted to establishing the legal framework for such transactions, and providing a system to record and maintain a register of such transactions. Any provisions providing for approval of particular transfers or regulation of the price of a particular sale by local authorities should be avoided.
4.25 **Land Titling and Registration System**: Implementation of a comprehensive land reform program requires development of a uniform land registration system that recognizes rights to private use of land and development of land markets. Components of such a program might include:

- upgrading existing cadastral mapping capacity;
- standardizing land registration procedures and documentation to facilitate title issuance and market transactions in land;
- immediate support for interim arrangement in areas undergoing rapid privatization while more comprehensive systems are being developed and tested; and
- institutional support and training in land registration and titling.

4.26 **Revised Ownership Transfer Mechanisms**: The mechanisms of ownership transfer adopted under phase II provide a framework for allocating land and farm assets to individual farm workers and establishes the right for these individuals to set-up independent farms. However, two aspects of the current process seem to limit the impact of the exercise. First, is the lack of information available about the options regarding restructuring. Farm workers need information on internal restructuring issues, options for withdrawal, and possible organizational structure as well as information on how to run an individual farm so that informed decisions can be made. Too often, the decision making process is guided and perhaps unduly influenced by local officials and farm managers who perceive their self-interest as being best served by preserving the status-quo. Second, the individual right to a specific plot of land is "theoretical" and is only realized when that individual leaves the cooperative structure. The choice of which plot to allocate remains with the co-operative which has every incentive to preserve the best land for itself. Therefore, those opting to establish farms face the daunting task of starting a new farm on poor land, a task made more difficult by the harsh economic environment and the lack of supporting infrastructure and services.

4.27 In order to speed the process, and encourage significant farm reorganization that fosters improved efficiency, Government should develop, test, and begin implementing more pro-active approaches that encourages the break-up of existing farms and the distribution of land and assets to new private entities. One such approach, tested first in Russia’s Nizhny Novgorod Oblast is described in Box 5.3. It is designed as a "bottom-up" approach to privatization which is consistent with the decentralized design of Kazakhstan's program. The scheme essentially allows for the creation of new private farms and farm businesses by allocating entitlements to the land and non-land assets of the farm to existing members of the farm including pensioners. Each member can use the entitlements to bid on land and property assets in auctions. They can also sell, lease, bequeath or swap their entitlements.

4.28 It is recommended that Government test a similar approach to farm restructuring in different areas of the country and for different type farms to assess its feasibility under Kazakh conditions. Farms willing to undergo restructuring in different oblasts could be chosen for the pilot. To test the approach on different farm types, it is recommended that a mixture of farms such as large grain or mixed grain and livestock from the North, irrigated farms, and livestock or diary operations be included in the pilot. Guiding principles for the design of the pilot should be:
• voluntary system based on the farm's decision to reorganize;
• a choice driven process where farm members decide what farm activities to pursue;
• the division of the state or collective farms into a number of private partnerships or farms;
• a transparent process for trading entitlements, organizing enterprise structures and resolving disputes;
• a public information system to inform farm members about the program and guide them through the process.

4.29 The Government should also work to identify and test other possible approaches to farm restructuring. One possible approach could be competitive sales, perhaps through auctions, of entire state farm to private investors, either foreign or local. Several farms have been sold in this way in North Eastern Kazakhstan at the initiative of a former oblast administrator. A decree issued by the SPC in March 1994 also specified guidelines for the sale of the approximately 200 farms designated as "chronic loss makers" to local private investors. The decree, however, contains significant conditions on the qualifications of potential bidders and on the use of the assets. Considerations should be given to expanding the scope of the exercise to include farms not considered to be chronic loss makers and to reducing the number of conditions pertaining to the sale.

4.30 Another possible pilot approach would be to provide support to farms which have been privatized but whose owners have chosen at least initially to maintain the farm intact. This approach would likely be most applicable in the Virgin Lands area, where the remoteness of the farms and basic lack of infrastructure in some instances may preclude the immediate break-up of farms into smaller units. The focus of the support would be on enhancing the sense of "ownership" among farm workers receiving shares and improving management accountability and performance. The new owners could be required to appoint a board of directors who would be responsible for hiring management and providing oversight on farm operations. Donor assistance also could possibly be provided to finance management expertise to help improve farm performance in the short run and design longer term plans for further farm restructuring, including breaking the farms up into smaller units, or living off non-core activities such as on-farm processing facilities, and equipment hire and maintenance services.
4.2 Farm Restructuring in Nizhny Novgorod

Legislation and regulations have been prepared in Russia which effectively allow both state and collective farms to be dismantled and auctioned to farm workers and residents. Guidelines based on this legislation were prepared and tested on six farms in Nizhny Novgorod region. Due to the apparent success of the trial, the Russian Cabinet recently decreed that the system be implemented nation-wide.

Under the guidelines, a series of steps are specified including: subdivision of land and property into suitable lots; preparation of lists of eligible farm members; distribution of land and property entitlement certificates to farm members; the trading of entitlements between farm members; the submission of applications for business by individuals or groups using entitlements they have acquired. The auction of land or assets where farm individual members or groups act as bidders using their entitlements as auction currency, and final registration and issuance of property and land entitlements.

Entitlement holders may form several different legal forms including: mixed partnerships; limited liability partnerships; family farms; and individual farms. Each entity has different management structures and rules for distributing profits. Entitlement holders may organize their own farm or alternatively lease their land and sell and invest their property entitlements to someone else forming an enterprise.

Prior to the auction bidders must indicate the lots on which they propose to bid. If more than one party bids on a lot then it is auctioned to the highest bidder (round 1). If only one party is willing to bid on a particular lot and that party has adequate land entitlements, the lot is not auctioned and the party wins the lot for the advertised value (round 2). Lots not acquired during the auction process are finally offered at auction to all applicants who have entitlements remaining (round 3). Property auctions are held in a similar fashion.

The pilot exercise provides an example of the type of farm structures that emerge from such a process. One farm had a total area of nearly 3600 hectares to be divided among 634 land entitlement holders and 750 property entitlement holders. The process resulted in the formation of ten farming groups ranging in size from 5 hectares to 915 hectares, and two farm service organizations. Of the twelve, eight became limited partnerships, three became family farms and one chose to operate as an individual.

4.31 Post Privatization Restructuring: As with agro-enterprises, assistance will be required for the new farms undergoing restructuring. Strategies for dealing with the outstanding debts of the farms undergoing privatization will need to be devised. Business and farm advisory services will be important to provide new farms with information and training on business plans, accounting, finance and marketing as well as technical information on farm practices. Provision of financial services within the context of the proposed financial sector reform will also be an important component of the restructuring exercise.

4.32 One important aspect crucial to the success of the farm restructuring exercise is the provision of farm services. The privatization of agro-enterprises at the farm level as outlined in chapter four should help create alternative and more competitive input distribution and output marketing.
One option to support the development of farm services could be the promotion of rural service co-operatives. In contrast to the poor record of performance for producer co-operative, such rural co-operatives have been successful elsewhere in providing basic farm services. Rural service and marketing co-operatives are usually formed by individual farmers who farm their land independently but who combine their resources with other producers to jointly purchase inputs and to undertake output marketing. Service and marketing co-operatives fill niches in market economies where services provided by private traders and entrepreneurs are sometimes inadequate, often due to high risks and uncertain profits. Co-operatives are part of the private sector. They are owned by their members and are oriented to providing services to their member owners. Oversight is provided by democratically elected representatives and day-to-day management is often provided by salaried managers. Among the services provided by co-operatives are input supply and output marketing including assembly, storage, transport and processing. They also often provide financial services such as savings mobilization and credit.

Just as Government has embarked on a program to encourage private enterprise development, it can also play an important role in the initial development of rural co-operatives. Government support is required to provide the basic legal and policy environment conducive for co-operative development. In most countries, a comprehensive co-operative law is the vehicle used to foster such an environment. Such laws incorporate universally recognized co-operative principle's including member ownership, democratically elected leadership accountable solely to members, and equitable profit sharing. Cooperative legislation also, usually include provisions for registration of co-operatives, supervisory and regulatory requirements, and financial oversight including audit requirements.

In addition to a legal and administration environment, Government should consider actively promoting co-operative development, as part of its on-going farm restructuring effort. It could either establish an organization for this purpose or incorporate cooperative promotion activities into the functions of the existing farmer's organizations. Such an organization could work with farmers emerging out of farm restructuring in transforming informal groups into formal cooperative structures. It is expected that such groups would be active in assuming responsibilities for farm services formerly provided by the state farm such as machinery and plant hire services, and farm based processing. Other groups might be promoted to provide rural financial services, output marketing and input supply. There is considerable experience in co-operative development and promotion in Western countries and donor grant funding could likely be obtained for technical assistance to support co-operative development.

Provision and Maintenance of Social Services: The state and collective farms currently undergoing privatization have traditionally provided a wide array of social services including health facilities, kindergartens and primary schools and recreation and cultural facilities. Moreover, state and collective farms have responsibility for maintaining physical infrastructure such as farm roads, employee housing, central heating and electricity. The farm privatization program provides for the transfer of responsibility for social assets and physical infrastructure to local government authorities. However, the capacity of local government to operate social assets is extremely weak. In many instances, the state farms provided all social services and no local municipal or village administration exists to assume responsibility for the services. Thus, considerable assistance will be required to improve local
Government capacity. Moreover, funding of social services is a serious concern and the key is to strengthen local tax administration, local budget management, and possible arrangements for revenue sharing between the central Government and local authorities. Finally, the burden on local Government and public financing could be eased by developing alternative approaches to the provision of services. Some "social" services such as canteens, vacation retreats and recreation facilities could be privatized or operated under co-operative arrangements under associations of users. Such arrangements could also be extended to the provision of child care and pre-school. Moreover, arrangements to handle social assets should be sufficiently flexible to allow newly private firms the choice of continuing to provide social services to their employees as part of the overall compensation package, provided that the choice is freely made.
CHAPTER V

PUBLIC ADMINISTRATION IN AGRICULTURE

A. INTRODUCTION

5.1 This report attempts to articulate an agenda of reform and restructuring that will speed the transition of the agriculture. Changing the role and function of Government to meet the needs of an increasingly market-oriented sector is a critical element of the transition process. Traditional functions held over from the command economy will need to be abolished and legitimate tasks of the public sector in a market economy will need to be strengthened. Such tasks include policy analysis, formulation, and implementation; collection and dissemination market information; support for education and research; and enforcement of standards for environmental protection, health, safety and product quality. To ensure that these functions are undertaken and that old structures designed to control production and marketing are eliminated, a comprehensive review of the structure and function of both local and central government administration will need to be undertaken.

B. EXISTING STRUCTURE FOR PUBLIC ADMINISTRATION IN AGRICULTURE

5.2 The existing organizational structure for public administration of agriculture demonstrates the still pervasive role that Government plays in the agricultural sector (Chart 5.1). The central Ministry of Agriculture is the key institution in the sector and maintains links to individual farms through a vast network of oblast and raion offices. In addition to the Ministry a number of semi-autonomous bodies operate in the sector. The State Committee on Land Relations and Administration reports directly to the Cabinet of Ministries and is responsible for implementation of land policy in the country and maintenance of land registries. Similarly, the State Committee on Water Resources is in charge of the irrigation networks. Both maintain branch offices at the oblast and raion level. The Kazakh Academy of Agriculture Sciences is responsible for agricultural and livestock research and oversees the work of an extensive network of research stations. Finally, there are many state joint stock companies and regional associations with direct links to the Cabinet of Ministries that are largely responsible for marketing, input distribution, and mechanization (see paras. 3.15-3.19).

5.3 The Ministry of Agriculture: The Ministry of Agriculture has undergone some reorganization since independence but the structure of the ministry still perpetuates many elements of the old command structure (Chart 5.2). The Minister of Agriculture is assisted by two first deputy ministers and seven deputy ministers. Major divisions of the ministry are responsible for economics and finance, crop production, livestock production, agricultural education and training. Other departments focus on machinery, power supply and material inputs for the agricultural sector, and disease and quality control. Much of the focus of the ministry's work traditionally has been on establishing production targets, negotiating state needs quotas, estimating material and input requirements and overseeing input distribution. The ministry also tracks performance on each state and collective farm and is responsible for hiring state farm directors. The Ministry also provides veterinary services and employs 21,000 veterinary workers including 8,700 fully qualified veterinarians. Most veterinarian staff are assigned to veterinary offices in each oblast and raion or serve directly on state and collective farms.
CHART 5.1: Existing Organizational Structure of the Agro-Industrial Complex of the Republic of Kazakhstan
CHART 5.2: The Existing Structure of the Ministry of Agriculture of Kazakhstan
5.4 **Research and Extension:** The Kazakh Academy of Agricultural Sciences, which is autonomous from the Ministry of Agriculture, is responsible for co-ordinating a diverse research system. It oversees the operations of 27 research institutes and 21 research experiment stations. The system includes regional and commodity specific centers as well as institutes undertaking research in mechanization, economics, and labor and ecological issues. The research system has traditionally employed a well-trained and highly skilled cadre of research personnel. But budget cuts and the erosion of salaries has caused many staff to leave and as a result the number of projects and research results has declined. An extension service as known in the West does not exist in Kazakhstan. There is, however, a system in which farm management, farm agronomists, and livestock specialists receive information on new varieties and farming techniques. Visits to demonstration sites are organized and refresher courses are arranged in the various research institutes. The Ministry of Agriculture is responsible for basic agricultural and livestock education and training and maintains a network of training institutes.

5.5 **Local Government Administration:** The majority of staff working in the public administration of agriculture are assigned to oblast and raion level offices. These staff are recruited by the Ministry of Agriculture and are nominally employees of the Ministry. But they are administratively under the day-to-day control the local Government officials in the oblast or raion where they are assigned. Moreover, farm management, trading enterprises and input suppliers at the local level still are under the jurisdiction of local administrators who continue to play major roles in decisions on production, distribution of inputs, pricing, and marketing. In many instances, farm managers must seek permission from local authorities before altering production patterns or entering into sales contracts. Local authorities are also actively involved in negotiating quotas for state needs and often seek to control all trade activity between local farms and outside markets through restrictions on inter-oblast trade and control of export licenses. In many instances, virtually all decisions by farm managers or local agricultural trading enterprises must be cleared by local administrators. Such authority leads to large efficiency losses and precludes the emergence of well-functioning markets. In some instances local authorities have slowed implementation of market reforms and farm restructuring as they perceive the reform process as a threat to their power base.

5.6 **Seed Industry:** The seed industry remains almost exclusively in the public sector. Research farms produce elite seed which is multiplied by state farms and collectives. The seed industry is poorly managed, highly subsidized, operates well below capacity and often produces substandard planting material. Varietal research is undertaken entirely by public research institutes which develop and test varieties. These organizations also import germplasm and test it in adaptive trials. A national seed policy and supporting legislation is under preparation but the lack of such a policy and legal framework until now has limited prospects for the development of a private industry or the entry of foreign plant breeding and seed companies into Kazakhstan.

5.7 **Agricultural Finance:** Most agricultural lending has traditionally been undertaken by Agroprombank which is the specialized bank for agriculture. Agroprombank, which became a joint stock company shortly after independence with its former clients as its major shareholder, has an extensive network of 230 branches. Its lending activities to agriculture were supplemented in 1993 by lending from Turanbank and several of the more than 200 recently established commercial banks, which directed loans to the sector to finance harvest activities.

5.8 Most agricultural financing is in the form of directed credits financed by the rediscount facility of the National Bank of Kazakhstan (NBK). Over 40 percent of 640 million Tenge in directed credits in 1993 was allocated to finance cultivation, harvesting and marketing of agricultural
commodities. More than 60 percent of Agroprombank lending in 1993 was financed by NBK's rediscount facility. Lending activities financed by the rediscount facility are rarely based on an assessment of the financial viability of the activities being financed or the credit worthiness of the borrower. The funds are essentially channelled to the sector to help compensate for Government pricing and procurement practices. The Banks that channel these resources essentially treat them as grants and are rarely very aggressive in pursuing repayments. Not surprisingly, repayments of these funds are infrequent, and the loans are commonly rescheduled (para 2.11).

C. AN AGENDA FOR IMPROVED PUBLIC ADMINISTRATION IN AGRICULTURE

5.9 The shift to a market economy and the severe budgetary pressures facing Government call for an in-depth review of the Government's role in the agricultural sector. A number of current functions will no longer be needed as the transition proceeds while other activities in support of a well functioning market economy will need to be added. Given the extensive nature of public involvement in the sector, a review and restructuring of public administration will likely yield a much smaller ministry of agriculture and associated agencies and a more focussed set of activities.

5.10 The Ministry of Agriculture: The ministry of agriculture should remain the central institution in charge of public administration for agriculture. It should take a leading role in the debate on reform and restructuring in the agricultural sector in the context of the overall adjustment process. To undertake this role, the functions and structure of the ministry need to be critically reviewed. Functions in support of the transition to a market economy need to be identified and the ministry realigned to undertake these functions. Key functions include: policy analysis and formulation; land reform and farm restructuring; dissemination of information; support for research; extension and training; and the provision of technical services.

5.11 For policy analysis and formulation, consideration should be given to establishing an agricultural policy unit in the ministry of agriculture. An important function of the unit would be to monitor the impact on producers and consumers of proposed reforms in Government procurement practices and the restructuring of the agricultural marketing system. The policy recommendations in this report related to farm prices are based on the assumption that competitive markets for agricultural commodities will emerge rapidly and move farm price towards world levels. To ensure that this happens, the ministry will need the capacity to monitor producer price trends, identify areas where monopoly elements remain entrenched, and, if necessary, formulate further steps to encourage competitive markets. Capacity should also be developed to monitor macro-economic developments and to analyze the potential effects of changes in macro-economic policies (exchange rate, interest rates and trade and tax policies) on the agricultural sector. Finally, such a policy unit would need the capacity to analyze domestic and international market trends, and to assess Kazakhstan's comparative advantage in cropping, livestock and processing activities. Results of such analysis could then be used to develop sectoral policies, identify research priorities and focus efforts to attract foreign investment and donor support.

5.12 A closely related function to price policy analysis is the dissemination of marketing information including information on prices (producer, wholesale, retail, and world market), production, and marketed supply. Such information is important for the development of well-functioning competitive markets. It increases market transparency, improves producers' bargaining position, stimulates competition among traders, and alerts buyers and sellers to potential marketing opportunities.
5.13 Although land reform and agricultural privatization fall under the jurisdiction of the State Committee on Land Relations and the State Property Committee, the Ministry of Agriculture is playing an important role in the implementation of reforms in these areas. This report has recommended the development and testing of pilot models for farm restructuring and the Ministry will need the capacity to oversee these activities, analyze the results, and identify and adapt promising approaches for implementation on a wider scale. A similar capacity will be required for supporting development of competitive agricultural marketing, processing and input distribution systems.

5.14 Another key area of policy analysis concerns the potential impact of the Government’s reform program in agriculture on the environment. Since independence Government has displayed a heightened concern for environmental issues in agriculture as demonstrated by its efforts to improve regulations on pesticide use and to limit cultivation of marginal lands. Moreover, many of the reforms already implemented such as the elimination of input subsidies and the establishment of water user charges in irrigated areas will likely contribute to more sustainable and efficient use of resources. Prices for inputs such as fuel, pesticides, and fertilizers and for output that more closely reflect world market levels should help Government achieve its objectives of increasing efficiency in input use, reducing cultivation on environmentally susceptible areas, and improving water quality through reduced run-off. Finally, Government is emphasizing rehabilitation of the existing irrigation system, including investments in canal lining and improved drainage, to help address problems of excessive water loss, water logging and salinity. The Ministry of Ecology and Bio-resources requires the preparation of an environmental impact assessment for each of the sub-projects to be financed under the Government’s rehabilitation program.

5.15 To assure that environmental concerns continue to be adequately considered, Government will need to strengthen its capacity to identify and, where possible, quantify the environmental effects of its reform agenda and investment priorities. Among the issues that will need to be addressed are:

- the impact of privatization on farm management, including on-farm investments in soil erosion controls, water management, and drainage;
- incentives and constraints to achieving greater efficiency in the use of water, and other inputs;
- the impact of pricing, subsidy, and trade policies in agriculture on fertilizer and pesticide use and on surface and groundwater quality; and,
- the impact of marketing and pricing reforms on crop diversification and its implications for water and input use.

5.16 Research, Extension, and Training: Given the transition of the agricultural sector to a market oriented system and the fact that budget resources will continue to be tight, there is a need to undertake a review of research priorities and the organization and structure of the research system. A key component of such a review would be how the system should be adapted to meet the needs of the emerging private sector. Research priorities should focus on developing technologies better suited to emerging private sector farms and which not only enhance productivity but are environmentally sustainable. Similarly, while the present system of agricultural education and training is perhaps adequate for a state farm and collective network, it is not really suitable for the growing number of private
farmers. Government should review the current system with a view to developing an extension and farmer training system better suited to the needs of the changing farm sector using mass media, short training courses as well as extension visits. One particularly important area for a reformed extension and training system is the promotion of environmentally sound farm practices. For instance many new farmers will require training in appropriate handling, storage and care of agricultural chemicals. In reviewing both the research and training functions emphasis is needed on strengthening the communication links between producers and the research establishment to ensure that priorities areas for research are identified. Responsibility for research is currently with the Kazakh Academy of Agricultural Sciences which is independent of the Ministry of Agriculture while responsibility for education and training is with the Ministry. This structure appears to have functioned well under the state controlled agricultural system. But, under an increasingly market oriented structure the linkages between research and extension and training activities may need to be strengthened. Thus one area of review should be on the links between the research system, the Ministry of agriculture and ultimately the producer. Moreover, where possible, as private firms become involved in input supply and marketing, they could supplement the research and extension activities provided by Government.

5.17 The Ministry currently has wide-ranging technical functions including registration and regulation of agricultural chemicals, plant inspection and quarantine services, range land management and soil conservation functions, and veterinary and livestock disease control services. The ministry is also responsible for meat and milk inspection services. Each of these functions need to be carefully reviewed and strengthened if necessary. As elsewhere, opportunities should be explored for the provision of these services by the private sector. For agricultural chemicals, the legislation regulating the use of pesticides needs to be completed and the necessary regulatory framework needs to be established. The range land management and soil conservation functions will also need to be carefully reviewed and possibly restructured and strengthened to assure that sustainable range land and soil management practices are being utilized by the growing private farm sector. One particularly important function that needs to be included in the review of agricultural services is the Government’s livestock disease control programs, particularly for brucellosis and tuberculosis. Testing and eradication programs may well need to be strengthened. An enhanced disease control program for tuberculosis would include a campaign of expanded testing and slaughter of TB reacting cattle. If the reactor level of diseased cattle is as high as reports suggest then a significant slaughter campaign will be required which is consistent with objective of reducing the size of the cattle population. For burcellosis an expanded vaccination campaign would be required. Major benefits of a disease control program include: (i) a reduced transfer of disease to humans; (ii) improved livestock productivity, including higher weaning rates, faster growth rates, and higher milk yields; (iii) reduced cattle numbers which should reduce pressure on pasture; (iv) access to markets outside the FSU which are now unavailable due to the prevalence of disease.

5.18 **Local Government:** A priority for review is the continuing role of local government administration at the oblast and raion level in all aspects of economic management in the agricultural sector. Local authorities should be explicitly precluded from interference in production and marketing. Farms should be removed completely from the administrative jurisdiction of local agricultural officials in matters of economic management. The focus of local administration should shift to implementation of reform programs, and delivery of farm services, including information services and extension activities.

5.19 **The Seed Industry:** A program to improve seed production should focus on the development of private seed enterprises out of the existing state and collective farms that are currently producing seed and involvement of foreign seed companies. The role of the state should focus on seed
testing and plant variety protection as well as completing the seed policy and supporting legislation. Improvements in seed production for grain, pasture and oil seed crops would yield substantial benefits, including: (i) improved yields; (ii) improved grain quality; (iv) better disease control through the development of resistant varieties and seed treatment processes; (v) a reduction in weed contaminated fields; and, (vi) reduction in seeding rates due to poor germination.

5.20 Reform of Agricultural Financing: Government is implementing wide-range financial sector reform. A key feature of the reform effort is an attempt to limit directed credit. New NBK credit to the banking sector is increasingly being allocated through periodic credit auctions with the refinance rate for remaining credits from NBK set in reference to the auction rate. The proportion of new NBK credit subject to auction has increased from 20 percent at the end of 1993 to an expected 50 percent for the second quarter of 1994. Further steps are to be taken to make interest rates fully market determined and to strengthen NBK’s regulatory and supervisory functions as an independent central bank. Also, prudential standards, and licensing equipments are being established for commercial banks and detailed diagnostic studies are getting underway for the ten largest banks, including Agroprom. Additional donor assisted work to ascertain requirements for further restructuring is also under way including measures to deal with the bank’s problems of non-performing loans.

5.21 The reforms being undertaken by Government are important steps to the development of a effective rural financial system. Liberalization of the interest rates, elimination of directed credit, strengthened central bank functions and commercial bank restructuring are key elements of the program. This program should lead to an emergence of a financial system better able to provide for rural financial services including deposit mobilization, short term financing for working capital requirements and medium term financing in support of capital investments. Ideally, reform should aim at the development of multi-channel financial system including commercial banks, non-bank financial institutions and special initiatives to meet the needs of emerging private farms. Commercial bank restructuring should focus on creation of a core group of international standard bank and enhancing their technical capacity to appraise lending opportunities, assess lending risk and to manage assets and liabilities. Specific training will be required in the identification, preparation, appraisal and supervision of investments. For Agroprom bank one option would be to break-up the bank into smaller units based on the existing branch network. The rural banks emerging from the Agroprom branch network could be locally owned and managed perhaps by rural co-operative organizations, and focus on deposit mobilization and lending activities in specific rural areas.

5.22 Along with banking reform, development of non-bank sources of financing including venture capital companies, investment banks, and securities markets should be encouraged. Initiatives may also be required to help meet financing requirements for restructuring enterprises and newly emerging private farms and agro enterprises in rural areas while the financial sector and capital markets develop. Restructuring funds or loan facilities, possibly with Government involvement, could be considered as long as they finance economically viable activities, loans are repaid, and they do not impede development of the financial sector. Moreover, commercial banks often do not provide financing directly to small scale producers or rural enterprises because of high transactions costs and greater degree of perceived risk. Thus, special approaches such as group sharing and lending mechanisms and cooperative lending institutions could be encouraged, perhaps with the support of non Government organizations.
CHAPTER VI

EXTERNAL ASSISTANCE

6.1 Kazakhstan has begun the formidable task of transforming its economy from a centrally-planned to a market-based system. The Government remains committed to reform in face of numerous political, social and economic challenges and some progress has been made in the agricultural sector. But much remains to be done in reforming the policy, legal, and institutional framework. The process will not be easy, nor will it be quick and invariably it will be accompanied by economic, social and political setbacks. External assistance can help in the transformation by providing international expertise and finance to help in the design, implementation and monitoring of reforms and to provide resources for strengthening agricultural institutions and services and restructuring farms and agro-enterprises. A number of bilateral, multilateral, and non-Government organizations are supporting agricultural reform, mostly through technical assistance. They are, however, providing only a fraction of what is required and further assistance is needed. Key areas of support include:

- Price and Food Policy Analysis and Formulation;
- Land Reform and Farm Restructuring
- Agro-Enterprise Restructuring
- Farms Services Development and Support
- Review and Restructuring of Public Administration in Agriculture

6.2 Price and Food Policy Analysis and Formulation: This report argues that a key component of a strategy for the agricultural sector is price, subsidy, trade and marketing reform. Many difficult issues in these food policy are arising and the necessary skills are in most cases not available in Kazakhstan to undertake the required analysis and formulate policy options. One particularly difficult issue is managing the trade-off between easing the cost price squeeze on agricultural producers and protecting vulnerable groups from large food price increases. Both technical assistance and training in pricing and targeting subsidies are required. Specific areas of focus should include: (i) support for formulation of Government market, price, subsidy, and trade interventions that are consistent with macro-economic stability in the short run and economic restructuring in the medium term; (ii) assistance in developing alternative approaches to protecting vulnerable groups than the existing subsidy on bread; (iii) help in assessing the impact of macro economic policy on the sector.

6.3 Land Reform and Farm Restructuring: While much of the legal basis for private holding and utilization of land already exists, further review and adjustment is required of the legal and regulatory structure, particularly in developing a framework for allowing trade in leases and hence a land market to develop. Short-term technical assistance and study tours designed particularly to draw on experiences being built-up in other areas of the FSU could help in the review of the legal and regulatory framework for land in Kazakhstan. Support in the form of technical assistance and institutional strengthening will also be required for the development of a comprehensive land management system which includes development and maintenance of a land cadastre and a land information system.
6.4 The Government's farm restructuring has focused on the transfer of ownership of the farms from the state to new organizational forms. Government has rightly left the decision on how the farms are to be organized, operated, and managed to the local participants in the process. But, the process of developing new management structures, such as private farms, group farms, and partnerships, is impaired by the lack of information of those going through the process about alternative farm structures. Extensive support is required at the farm level to enable participants to make informed decisions about farm restructuring, and alternative management structures. Assistance will also be needed to support the development of group or cooperative structures, especially agricultural service and marketing cooperatives. In the longer term, as farms restructure assistance could be provided for investments in new technologies and capital requirements. Finally, farm restructuring will impose new responsibilities on rural communities for the provision of social services and rural infrastructure, such as schools, health services, and roads. Assistance to build the administrative and financial capacity of local administration to handle expanded rural services will be required.

6.5 **Agro-enterprise Restructuring:** Large amounts of technical assistance are supporting the industrial privatization program in Kazakhstan. But, agro-enterprises are being treated separately from the industrial privatization effort and little, if any, external assistance is being provided in support of agro-enterprise privatization. This report argues that the privatization program for agro-enterprises needs to be reformulated and where possible incorporated into the broader industrial privatization program. Such a move will require additional technical assistance to accommodate the expanded work program. In addition, assistance will be required to explore the scope of establishing rural cooperatives to take over marketing and processing or other farm service functions located at or near the farm gate from existing marketing and processing monopolies.

6.6 **Government Agricultural Services:** Government agricultural services will need to adapt to the transformation of the agricultural sector. The current system of direct links between farm technical staff and the research and training network will need to be adapted to the needs of the growing numbers of private farms. Technical assistance and institutional support will be needed to develop an extension, training and information systems suited to the needs of the private farm sector in Kazakhstan and which promotes environmentally sustainable agriculture. Support will also be required to analyze the agricultural research system and to develop possible programs to improve its operations. One key area of possible support where the research system plays an important role is seed development and dissemination. Other areas where support for government services is crucial is livestock disease control and improved range-land management. In addressing government services, analysis will be required first on the appropriate mix of public and private sector participation and then on the design of programs to achieve the desired mix.

6.7 **Review and Restructuring of Public Administration in Agriculture:** The transition of agriculture to a market-based system requires a comprehensive review of the Government’s role, functions and responsibilities in the agricultural sector. The review should cover the Ministry of Agriculture as well as other government bodies which function in the sector. It should include both central government agencies as well as local government bodies and the focus should be on identifying activities that are no longer needed and functions that need to be adapted or added to support the transition to a market economy. The review should be primarily the responsibility of Government but technical assistance and funding for study tours would be helpful in providing examples of how public support services for agriculture are organized in other countries.
6.8 **Role of the Bank:** The Bank aims to support Kazakhstan’s reform efforts through analytical work, lending, and aid coordination. Four areas have been identified as the focus of the Bank’s work including (i) support for policy reform to restore macro-economic stability and arrest the slide in output (ii) help for private development, (iii) assistance in rehabilitation of physical infrastructure, and (iv) aid in the social sphere, particularly assistance programs that would facilitate re-deployment of unemployed workers, and strengthen local government capacity to assume responsibility for social services.

6.9 The Bank’s immediate priorities in agriculture will be to support reform of the Government’s agricultural procurement, pricing, and trade policies in the context of the proposed Economic Reform Loan. Other key policy reforms to be considered in the context of the proposed loan are reforms in land tenure to support the development of land markets through making leases tradable, and adjustments in the privatization program for agro-enterprises to increase the prospects for competition to emerge in the provision of farm services including input supply, marketing and pricing.

6.10 Investment lending in support of agricultural privatization will focus on farm development for farms undergoing privatization. Elements of such an approach would include:

- development of a modern land cadastre in support of land registration and titling and strengthening land management and information systems;
- testing alternative models for farm restructuring on a pilot basis for farms desiring to restructure in different agro-climatic zones to develop effective restructuring approaches that can be replicated on a larger scale.
- creation of support services for private farming on a pilot basis, possibly including support for development of rural service and marketing cooperatives, training, agricultural extension, and information services for farmers and emerging agri-business entrepreneurs, and rural financial services including credit;
- investment in improved technologies on restructured farms
- assistance with the possible transfer of responsibility for social and physical infrastructure such as rural roads to local Government authorities; and
- support for the privatization of rural-based farm service, processing and marketing enterprises including farm service activities previously undertaken on state farms as well as services provided by state-owned transport, storage, and processing firms.

6.11 Other possible lending operations for agriculture would include support for rehabilitation and improved operations of Kazakhstan’s irrigation system. Support would focus both on the rehabilitation needs for the system of canals and improvements in the drainage systems. The proposed project possibly would also address the issues of reclaiming lands affected by salinity build-up, delivery of water to newly privatized farms emerging from privatization and the implementation of a system of water charges. Also lending could include support for strengthening Government services such as research, extension and training, and information systems. Finally, assistance could be considered to support improvements in the livestock sector, including disease control, improved range land management, and strengthened livestock services.