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A policy agenda for agricultural development in Kazakhstan

Kazakhstan is now widely regarded as a key player on world agricultural markets, with considerable export potential in the wheat, beef and dairy sectors. Based on unique farm-level data, we offer new insights into the constraints that hamper further economic growth and provide an assessment of the Kazakhstani government's agricultural development strategy. Most managers in the farm survey doubt that agricultural investments deliver a sufficiently reliable return required for credit funding and thus do not take loans. In the cattle sector, there are significant problems in year-round fodder supply. The value chains for beef and dairy are bifurcated into an import-dependent chain for industrially processed products serving urban consumers, and a local chain of raw products serving rural consumers and urban bazaars. The government's modernisation strategy focuses on providing subsidised capital, but underestimates the knowledge and incentive problems inherent to such measures. The government should rather provide impartial and reliable public services to the sector, ensuring that the weakest links in food chain development are identified and private entrepreneurs are incentivised to strengthen them. Our evidence suggests that a bundle of measures designed to improve the local institutional environment of agriculture is more important than massive state funding of certain production lines.

Based on its solid overall economic performance along with relative political stability, Kazakhstan has gained an internationally recognised position among the post-Soviet countries. While much of the economic growth is driven by Kazakhstan's oil and gas sectors, the country has also become one of the top ten global exporters of wheat and flour. International observers see the agribusiness sector as a key investment target, deriving its attractiveness from the country's extensive arable land resources, positive demand prospects in neighbouring countries, growing domestic consumption, and a relatively liberal trade regime. Moreover, with rising incomes, many countries are shifting towards more protein-rich diets, creating opportunities in addition to the export of wheat. Domestic livestock production such as beef, dairy and poultry may well have considerable development potential, thus opening up regional export perspectives as well. Even so, while wheat cultivated in the vast northern cropland area is already one of the country's main export commodities, the inward processing of grain

into livestock products does not yet take place in structures that easily connect to international value chains.

The direction of Kazakhstan's policy response to these opportunities and challenges is codified in a number of strategy documents issued by the president's office and his cabinet of ministers. In December 2012, a new long-term strategy ("Kazakhstan 2050") was announced by the president, followed by a more specific sectoral programme for agriculture ("Agribusiness 2020"). Based on recent empirical research led by IAMO, this policy brief summarises some of the farm-level constraints to the further development of Kazakhstan's wheat, beef, and dairy sectors, and examines the plausibility of the official policy response to these challenges. Most empirical findings are based on farm survey data collected by IAMO in Akmola and Almaty provinces in 2012.

Table 1: Credit rationing outcomes for different farm types in 2011 (% of respondents)

	Households	Individual Farms	Agric. enterprises	Agro-holdings
Took a loan in 2011	7.0	11.1	25.5	50.0
Satisfied borrower	7.0	7.8	17.0	25.0
Obtained smaller loan than applied for	0	3.3	8.5	25.0
No new loan in 2011	93.0	88.9	74.5	50.0
No demand at prevailing interest rate	90.0	81.6	70.2	37.5
Bank rejected application	1.0	3.3	0	0
Returns in agriculture too unstable	76.3	69.4	42.6	25.0
Transaction cost too high	47.7	23.7	14.9	0
Number of respondents in subgroup	300	245	47	8

Notes: Multiple classifications possible among non-borrowers.
Source: Authors' calculations based on IAMO 2012 farm survey.

Farmers hesitant to take loans

A frequently mentioned bottleneck is agriculture's lack of access to finance. Following this argument, subsidised credit is one of the main instruments employed by the Kazakhstani government to stimulate farm investments. However, by far the dominating driver of credit market outcomes is a lack of effective demand given the uncertainty of revenue streams from agriculture. Although subsidised real interest rates are close to zero, most farm managers believe that agricultural investments cannot currently deliver sufficiently reliable returns to service such loans, and thus do not enter a loan contract (Table 1). Only a small minority thinks that the lack of access to these sources of funding or high transaction costs is what ultimately prevents farmers from borrowing.

Farmers thus regard an unpredictable stream of revenue as the major reason for low financial investments in agriculture; their reluctance to invest also results from deficient managerial skills. Farmers require advice for preparing investment concepts, business plans and internal planning documents, but professional consultancy services are typically not available.

At the same time, recent ratings of Kazakhstan's financial sector suggest that some of the problems are on the supply side of finance, reflecting both poor liquidity and stability of the banking industry. While it seems plausible that the overall competitiveness of the agricultural sector needs to be enhanced if external funding is to grow, it is a crucial question whether this demand problem can be resolved in isolation from the supply problems of the banking sector. One might argue that lacking competitiveness reflects a lack of money, so better funding options would allow an upgrade of farm equipment, which would lead to higher and more stable returns in agriculture. This seems to be the logic of the governmental credit programme. However, despite low interest rates, penetration into the farming sector has been very modest so far. Among the likely reasons are that operations are very centralised and subject to interference by higher-level bureaucrats, whereas management capacity at the

branch level is low and there is no active involvement of farmers, e.g. as depositors of savings or members of credit committees.

Constraints in land access

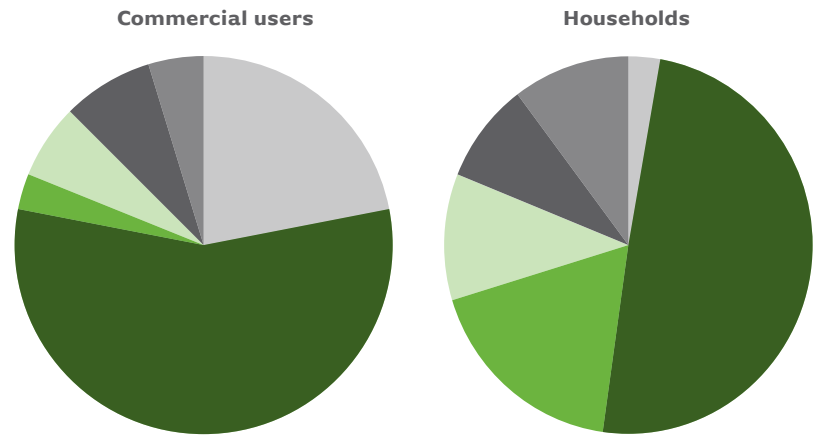
A lack of land supply is now the most cited constraint to land expansion in the northern wheat region of Kazakhstan. Almost all land there is rented from the government at a symbolically low price. There is hence little competition for land based on the economic performance of the land users. Land is rather allocated through other, probably less transparent, mechanisms, in which local land commissions play a key role. Contrary to interest payments, farmers consider annual payment obligations for land to be low and manageable. Furthermore, land users receive annual area payments for higher priority crops. However, wheat producers are further restrained by the market power of elevator companies, the vagaries of trading over long distances in an underdeveloped rail and seaport infrastructure, and the intervention activities of the state-mandated Food Contract Corporation (FCC).

Feeding deficits in cattle production

Domestic beef and dairy chains are currently much less developed than the wheat chain and suffer from atomised production structures with a weak resource base and a fragmented processing and marketing network. Indeed, cattle and dairy producers have significant problems to provide year-round fodder, and a large majority of households depend on communal grazing land, where problems of overstocking are prevalent (Figure 1). In winter, many producers have to rely on fodder purchases, mostly from agricultural enterprises. The sales weight of fattened cattle is low in both household and individual farms, as are the daily gains achieved during the fattening period. Artificial insemination is rarely used among individual farms, although fertility outcomes appear to be acceptable.

Figure 1: Problems with communal grazing land by type of user in 2011

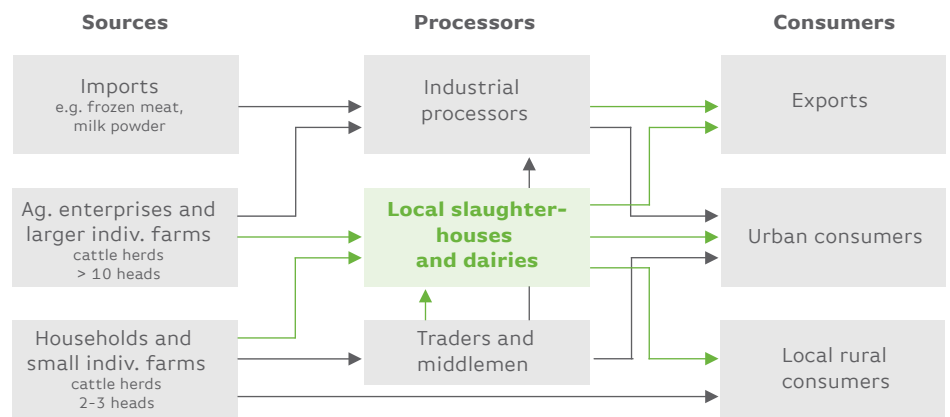
■ No problems
 ■ Intermixing of livestock
 ■ Lack of herdsmen
 ■ Mismatch of yields and stocking
 ■ Spread of livestock diseases
 ■ Other problems
 Multiple answers possible.



Note: Statements provided by communal range users.
Source: IAMO 2012 farm survey data.

Figure 2: Value chains of beef and dairy production in Kazakhstan

— to be developed
 — existing



Source: Authors.

Fragmented processing chains

Most households keep one or two cows solely for their own consumption or otherwise sell directly to consumers in their vicinity. The typical herd size of individual farms exceeds that which is necessary for subsistence consumption, so these farms commonly have a commercial orientation. The most widespread marketing chain for individual farms runs through local intermediaries who collect the milk and deliver it to the dairy processor for a certain monthly rate. Seasonality and milk quality are important issues for this chain, since appropriate cooling and sanitary production conditions are not necessarily a given. Transporting fresh milk over large distances increases transaction costs for producers and processors. Agricultural enterprises that keep dairy cows are often directly linked to a dairy processor, possibly even under the umbrella of the same company. However, many existing large-scale dairy processors are also undersupplied and depend on milk powder imports or source their raw milk from Kazakhstan's southern neighbour countries (e.g., the Kyrgyz Republic).

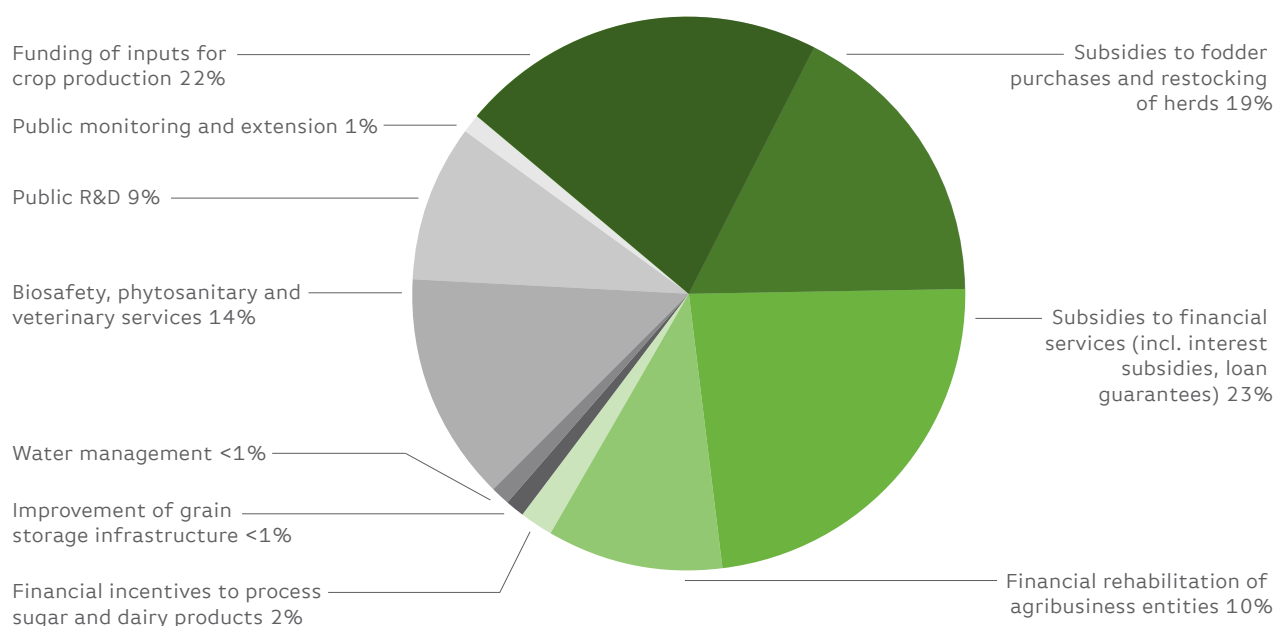
Both beef and dairy value chains are subject to a problematic bifurcation that prevents small-scale producers from integrating with high-value processing and outlets (Figure 2). Existing industrial

processors supply urban consumers with higher incomes, but they depend on imports for their raw material. Significant export channels of domestically produced livestock are not developed. On the other hand, small producers mostly produce for local consumers, with at best some limited connection to high-value markets through semi-professional intermediaries. Local slaughterhouses and dairies do exist but are often very small, not regularly in use and not able to meet the hygiene standards required by larger meat processing plants. Furthermore, as long as veterinary inspections tolerate livestock products at local bazaars that originate from small butcheries not fulfilling basic food safety standards, selling their livestock to those butcheries will remain more profitable for smallholders than selling to a larger slaughterhouse. Bearing in mind that 70–80% of the livestock is located in households, developing local slaughterhouses will not lead to a remarkable increase of raw material at the larger processors' gate.

The government's development strategy

In the "Kazakhstan 2050" strategy, the government expressed a firm commitment towards improving the competitiveness of the economy by an ambi-

Figure 3: Budget priorities of the "Agribusiness 2020" programme



Source: Authors' calculations based on Agribusiness 2020 policy document.

tious and comprehensive modernisation and innovation programme. With regard to agriculture, this is clearly visible in the "Agribusiness 2020" document, where a hitherto unprecedented budget volume was earmarked for boosting the sector's productivity. The document emphasises a series of measures defined by the following four policy objectives:

- The financial rehabilitation of agribusiness.
- Improving access to material inputs and services.
- Developing a governmental service supply system for agribusiness entities.
- Improving the effectiveness of government regulation in the sector.

Together with a statement of indicative budget allocations for each of the actions, the "Agribusiness 2020" programme boils down to a plan with clearly visible priorities (Figure 3). As can be seen, the largest part of the budget is earmarked for capital subsidies or direct capital transfers to agribusiness entities (shaded in green).

The Kazakh government plans to allocate an aggregate of KZT 3.1 trillion (USD 21 billion) over the eight years of the programme's duration (2013–2020), of which 80% will be provided from the national budget, 7% from local budgets, 10% through the emission of government securities, and 3% from the state KazAgroHolding and its daughter companies, such as the Food Contract Corporation. A significant part of the overall budget, including fuel and input subsidies and livestock upgrading, will be spent under the responsibility of the provincial administrations (akimats).

The government seems determined to upgrade crop and livestock production to the technological frontier, thus making a clear step beyond existing production systems, rather than just preserving

them. One perceives a willingness to engage in uncompromising benchmarking of the programme's success by providing a catalogue of performance indicators. The administration has shown that it is ready to abandon approaches that did not yield the desired results, and thus to "let losers go". Moreover, the Minister of Agriculture is responsible for the success of the programme at a high and visible political level. We are sceptical that bureaucracies can efficiently steer the development of an economic sector, but at least these factors create incentives to make productive use of public funding, rather than to simply pour money into an ailing sector.

A key problem with this agenda is that successful agribusiness entrepreneurs, who detect business opportunities, create value and put the country's resources to productive use, require more or even something else than cheap access to inputs and capital. First, entrepreneurs need the freedom to discover and seize the business opportunities they perceive to be profitable in their given local environment. The relevant information and knowledge to pursue this business goal successfully is highly dispersed and requires efforts in trial and error on the side of the entrepreneurs. Moreover, entrepreneurs must be flexible and adjust to local market conditions. If the government makes costly and long-term financial commitments towards specific activities the entrepreneurs are expected to perform, these commitments may be misguided given the specific circumstances of businesses. As a result, the involved subsidies may turn out to be a waste of money. Furthermore, the subsidies may crowd out private initiatives designed to provide the necessary resources in an economically more sustainable way.

Recommendations

There is a role for the Kazakhstani government to coordinate and monitor the modernisation process of agribusiness. This means providing impartial, reliable and high-quality public services to the sector, ensuring that the weakest links in food chain development are identified and private entrepreneurs are incentivised to strengthen them. This typically requires effective institutional arrangements at the local level. Such public services should be endowed with the necessary human, financial and political resources to support entrepreneurs in a flexible and timely manner without overly interfering in their individual decisions. Our empirical analysis helps to pinpoint a number of areas the government might thus reconsider as its priorities:

- The know-how of individual farmers should be improved, particularly with regard to managerial skills, business planning, fodder management and livestock fertility. This requires well-functioning extension services, as well as a network of private consulting companies that provide farmers with the advice to plan and implement long-term investments.
- Constraints in the access to land and its relative immobility should be tackled by gradually lifting the rental price of state land, monitoring land use based on minimum land use standards, and further liberalising the land market.
- Although investment costs are tremendous, especially for private investors, competition in grain transport and storage infrastructure should be enhanced; extending private storage capacity should be promoted.
- Distortions inherent in government support of larger agricultural enterprises and agrohholdings should be removed. Examples of biased access to production factors include higher transaction costs for smaller loan applicants and uneven access to agricultural land.
- Local governments should be encouraged and empowered to play a facilitating role in the sustainable management of public grazing land. They should also support investors in downstream processing who have an interest in more stable, high-quality sources of raw products.
- The government should use a tightened and impartial introduction of food quality and safety standards to promote structural change in livestock production. This can be done by linking investment support to basic food safety standards. Further, investments that receive governmental support should fulfil certain hygienic and food safety standards.
- Overall banking sector recovery and reform to increase the liquidity and stability of the financial sector in general should be continued. If deemed necessary, public funding should be made available through the existing networks of commercial banks rather than through state agencies.
- The transparency of state agencies towards the private sector and the general public should be further improved; appropriate platforms for pursuing this goal should be installed. Salaries in public agencies should be competitive with the private sector.
- The transparency of budget allocations across various layers of government should be increased and accountability for spending decisions clearly assigned.
- Public policy should encourage private investment in human and physical capital. In the government's support portfolio, direct capital subsidies should be only one element of many. Area payments coupled to the production of certain crops should be phased out.

Further Information

The findings are documented in detail in the following publications:

Petrick, Martin; Oshakbaev, Dauren; Wandel, Jürgen (2014): Kazakhstan's wheat, beef and dairy sectors: An assessment of their development constraints and recent policy responses. Halle (Saale): IAMO (IAMO Discussion Paper 145). <http://www.iamo.de/dok/dp145.pdf>

Petrick, Martin (2013): Competition for land and labour among individual farms and agricultural enterprises: Evidence from Kazakhstan's grain region. Halle (Saale): IAMO (IAMO Discussion Paper, 141). <http://www.iamo.de/dok/dp141.pdf>

Petrick, Martin; Wandel, Jürgen; Karsten, Katharina (2011): Farm Restructuring and Agricultural Recovery in Kazakhstan's Grain Region: An Update. Halle (Saale): IAMO (IAMO Discussion Paper, 137). <http://www.iamo.de/dok/dp137.pdf>

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Wandel, Jürgen (2009): Kazakhstan: Economic Transformation and Autocratic Power. Arlington, VA: George Mason University (Mercatus Policy Series Country Brief, 4). <http://mercatus.org/publication/kazakhstan>

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The Leibniz Institute of Agricultural Development in Transition Economies (IAMO) analyses economic, social and political processes of change in the agricultural and food sector, and in rural areas. The geographic focus covers the enlarging EU, transition regions of Central, Eastern and South Eastern Europe, as well as Central and Eastern Asia. IAMO is making a contribution towards enhancing understanding of institutional, structural and technological changes. Moreover, IAMO is studying the

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