

**MONGOLIA****Meat Sector Policy Note:  
Reducing Price Instability in the Mongolian Meat Market****April 2010**

This report was written by Andrew Goodland (Senior Agricultural Economist, EASCS). Meat price data collection and analysis was conducted by Dr Sundui Badarch, Head of the Marketing Department of the National University of Agriculture and Mr Batbold Bulgan, consultant.

## **Summary**

Meat plays an important role in the diets of the majority of Mongolians. Since the economic and political transition in the early 1990s, seasonal meat price fluctuations have become increasingly marked. In parallel, Mongolia is becoming increasingly urbanized, and urban consumers are dependent upon markets to access food, including meat, for household food security. These two trends have meant that a rising number of urban residents are vulnerable to fluctuations of price in one of their main staples. Government has responded to this by trying to influence the price of meat through a price stabilization policy under which public funds support the purchase and storage of meat and the release of these reserves during periods of peak prices. While some public intervention to smooth prices is a legitimate area for policy engagement, this policy note concludes that there is no evidence that the current policy has an impact on prices, and worse still, it may even discourage private meat storage. This is set in a context of relatively low budget allocation (by international standards) to the agricultural sector. What is required is a more comprehensive approach for developing the meat market and the livestock sector more broadly, and with regard to price stabilization, the consideration of a number of alternative policy responses that limits government expenditure and encourage market-based solutions.

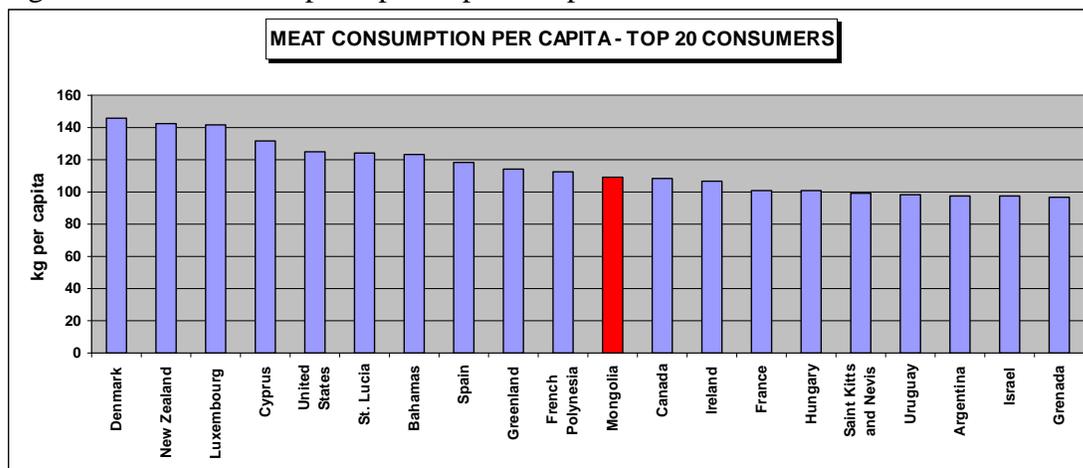
## Objective

1. The purpose of this policy note is to provide policy guidance to decision makers within Mongolia to address the growing issue of instability of food prices and resulting threat to household food security. While there are fluctuations in all food commodities, meat is selected for this study due to its importance in the diets of the majority of Mongolians. As meat consumed in Mongolia is almost entirely produced domestically, mostly by herders in the predominant extensive livestock system, it is also an important commodity for supporting rural economies and livelihoods. Policy that recognizes the inter-linkage between production and markets is required in order for the livestock sector to contribute to economic growth and poverty alleviation.

## Background

2. **Meat is a food staple for Mongolians.** Mongolians traditionally have consumed foods that are high in protein and minerals, relying less on foods like vegetables and fruits. Meat plays an important role in the diets of the majority of Mongolian consumers, constituting 36 percent of overall food consumption. Average annual meat consumption is approximately 110kg per person per year, placing Mongolians as the 10<sup>th</sup> highest meat consumers in the world (see figure 1 below). Furthermore, it should be noted that the countries above Mongolia in terms of meat consumption are middle or high income countries which have far higher food intake per capita, and in terms of meat consumption per capita GDP, Mongolia likely ranks higher still. For dairy products Mongolians have the highest consumption per capita. Meat and animal products are therefore food staples for the majority of Mongolians, even for poorer households. Unlike most countries, which have high income elasticities for meat consumption with lower income groups consuming far less than wealthier households, in Mongolia all wealth quintiles consume meat. Figure 2 below shows the total and breakdown of meat product consumption for urban dwellers in Mongolia, with the poorest quintile averaging around 57 kg per capita and the wealthiest around 84 kg per capita. In rural areas where poverty rates are higher, meat and livestock product consumption is higher still.

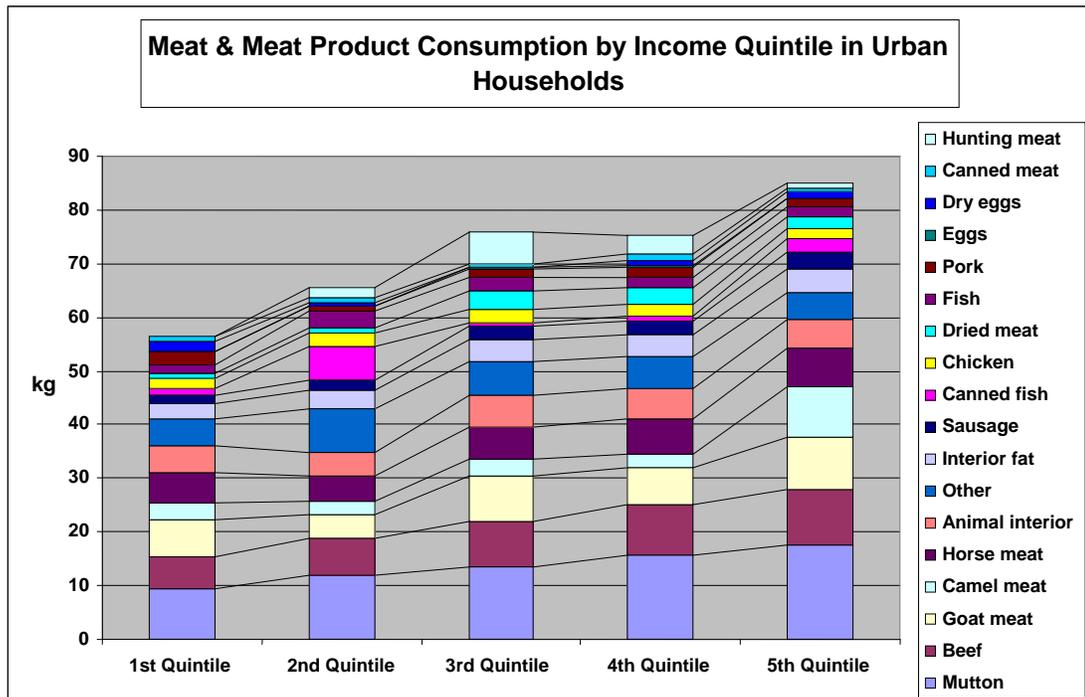
Figure 1: Meat Consumption per Capita – top 20 consumers



Source: Marlow (2007), based on figures from FAO<sup>1</sup>.

<sup>1</sup> Note, while these figures are useful for comparison, they are inconsistent with figures from recent Household Income and Expenditure Surveys, which are used in the rest of this analysis.

Figure 2: Meat and Meat Product Consumption by Income Quintile in Urban Households



Source: Marlow (2007)

3. **Fresh meat still dominates in meat retailing.** Traditionally, meat was consumed primarily in winter and dried for consumption in summer. Mongolian consumers value meat for its high nutritional value and flavour that results from the diverse diet and level of exercise involved in animals herded in free pasture. It is understood to be considered wasteful to slaughter an animal before it has reached maturity and therefore in general the meat is consumed from older animals. Although the tradition of consumer meat primarily in winter is changing, particularly with young consumers in urban areas, what has not changed is the continued importance of meat in the diet and the general acceptance of meat from older animals.

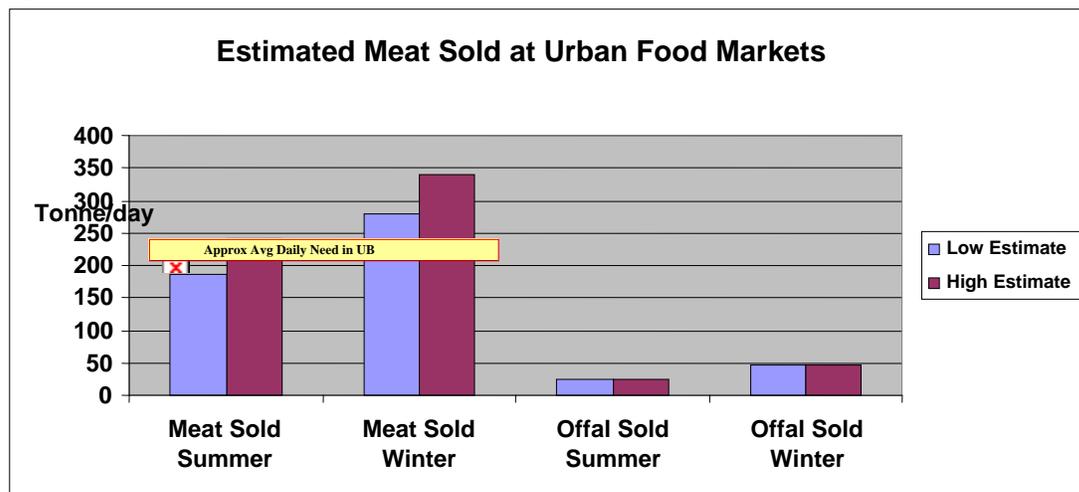
**Meat market.**

4. **Demand:** The majority of herding households are self-sufficient in meat, however, with increasing levels of urbanization, especially in the capital Ulaanbaatar, the demand for meat is increasing driving the development of a market for meat. On the basis that consumption is already high, it might not be expected that meat consumption will increase as economic conditions improve in Mongolia. In fact as economic conditions improve it is likely that consumers will move to a more diverse protein intake and it is likely that beef and mutton intake will decrease as pork, poultry and fish capture market share, at least amongst the wealthier parts of the population. However, it is interesting that the data from the 2003 Household Income and Expenditure Survey show that higher quintiles actually increase consumption of all categories of meat products, which suggests that actually there could be a continued increase in meat demand from urban consumers as the economy grows. There are limits to this growth, however, as consumption is

already so high, and it would only take a 25 percent increase for Mongolia to be the highest meat consumers in the world.

5. **Supply:** The majority of meat is supplied from the domestic livestock sector, with imports restricted to high quality cuts serving high-end consumers, restaurants and international hotels. The country produces enough meat to be self-sufficient, and arguably there is the potential for Mongolia to export meat in greater quantities than it currently does. Meat exports are held back by a combination of factors, including trade restrictions resulting from phyto-sanitary standards, and other quality concerns, poorly developed trade logistics and high transport costs, and weak and poorly coordinated marketing chains. As such, the meat market is driven by local supply and is therefore relatively insulated from the global market. Fluctuations in prices can therefore be largely explained by local changes in supply and demand. In contrast, for other food commodities such as wheat and rice, Mongolia is dependent upon importation. The food price spike in 2008-09 was felt strongly in Mongolia, especially for imports of wheat, flour and rice. Although meat prices also increased during the food price spike, this can be largely explained by the the general trend in the increase of meat witnessed over the past 10 years and to “normal” inter-seasonal price fluctuations driven mostly by seasonal fluctuations in the domestic supply of meat.

Figure 3: Estimated Meat Sold at Urban Food Markets



Source: Marlow (2007)

6. **Price trends:** Overall prices for meat have increased over the past ten years. Focusing on beef, prices increased significantly the first half of the decade (2001-2005), but have leveled off in recent years. (see figure 4 below for prices of beef since 2002). There is no clear picture on what is driving this pattern in prices for beef. A reduced supply of beef can certainly explain some of the movement, with the number of cattle in the country falling to historical lows during the same period that prices were quickly increasing. The rapid drop in cattle numbers can be explained by the sever winters (Dzud) experienced between 1999 and 2002, which devastated cattle numbers. Cattle are particularly susceptible to dzud, and the slow recovery in the cattle population could be explained by herders being more risk adverse in the composition of their herds. Also,

with favourable cashmere prices, there has been a tendency to increase the numbers of goats, which compared to cattle, provide a relatively quick profit for herders.

Figure 4: Average real price of beef in Ulaanbaatar (2002-2008)

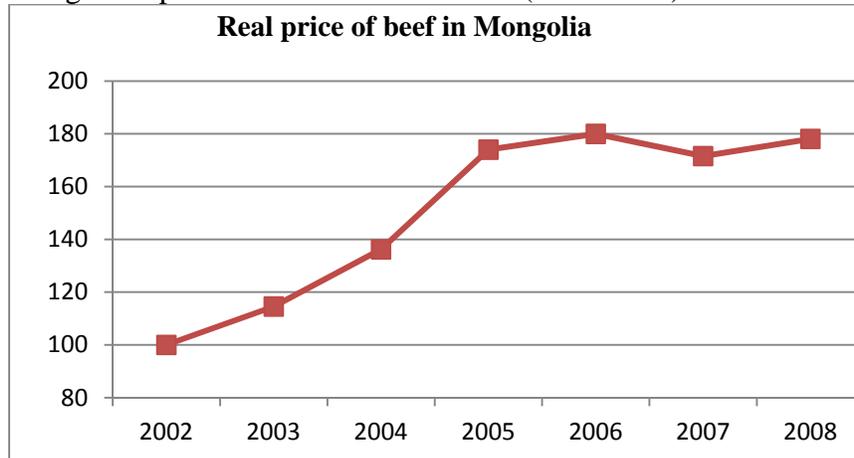
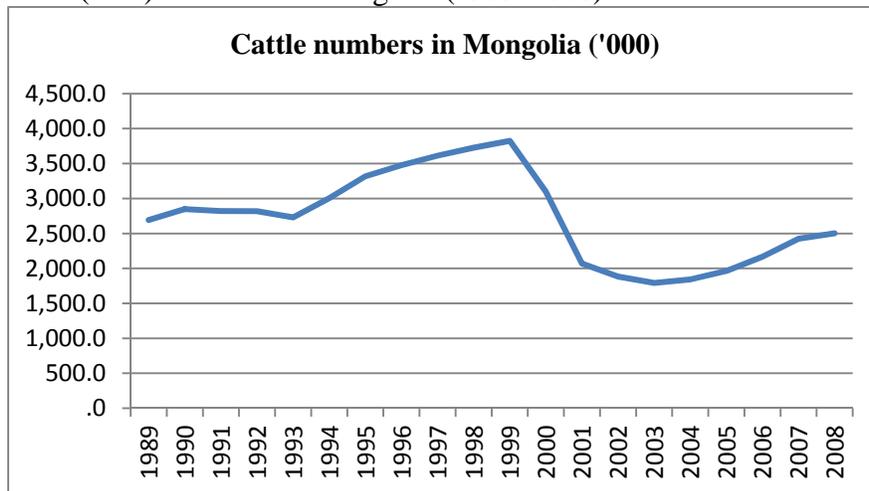


Figure 5: Cattle (beef) numbers in Mongolia (1989-2008)



7. **Intra-annual price fluctuations.** Intra-annual prices<sup>2</sup> for meat fluctuate considerably, and this has also increased over time. Seasonal fluctuations in the price of meat for consumers are significant (see graph for both beef and mutton prices). Figure 6 shows the monthly deviations of prices from annual averages which provides an indication of the scale of the instability of prices. Presented in another way, table 1 present standard deviations of prices variability within a year, and also the variation between rural and urban areas. From this, the following observations can be made:

<sup>2</sup> A note on prices: Meat prices while different between species are at this stage little affected by grade or cut type (only by bone-in vs boneless). Meat prices are consistent within and between markets due to dominance of the food market activity and the highly competitive nature which is inherent in the clustering together of many small retail enterprises in the meat retail halls.

- i. Price fluctuations have varied considerable year on year since 2002, especially in urban centers. The highest minimum to maximum fluctuation was the 89 percent difference experienced in 2001 (a year of very high livestock deaths due to bad weather); the lowest was 23 percent in 2002.
- ii. There is no significant change in the level of fluctuations seen through the period, despite the intervention of government to try to control prices in recent years (see below);
- iii. Prices fluctuate more in urban areas than in rural. This suggests inefficiencies in the marketing system and the poor transmission of prices to rural areas.
- iv. The gap between rural and urban prices has fallen significantly in recent years, suggesting that there have been improvements in the performance of markets and possibly a reduction in transportation and other marketing costs.

Figure 6: Monthly price movements – Beef (2000-2008)

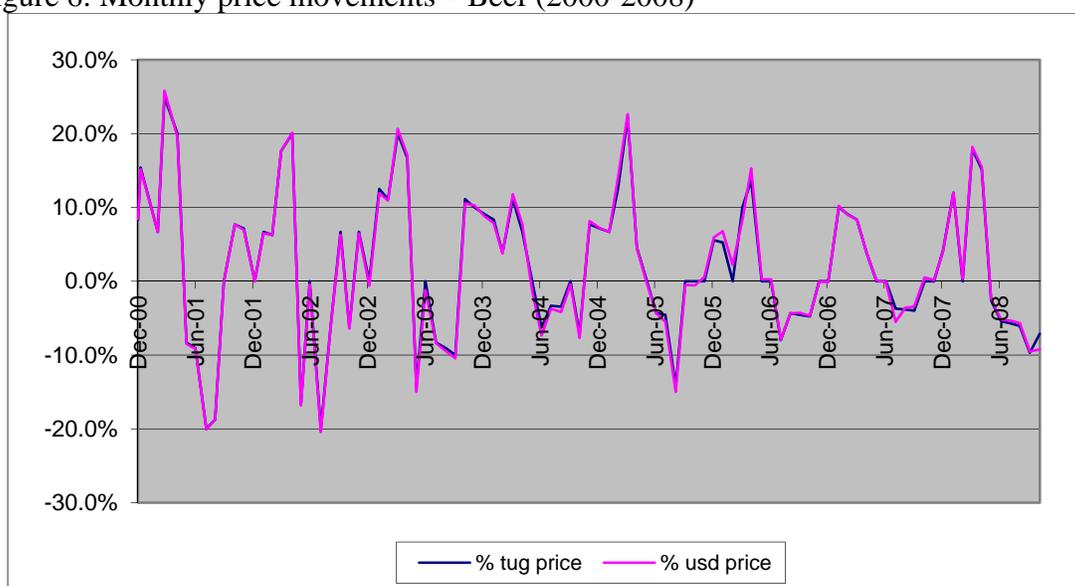


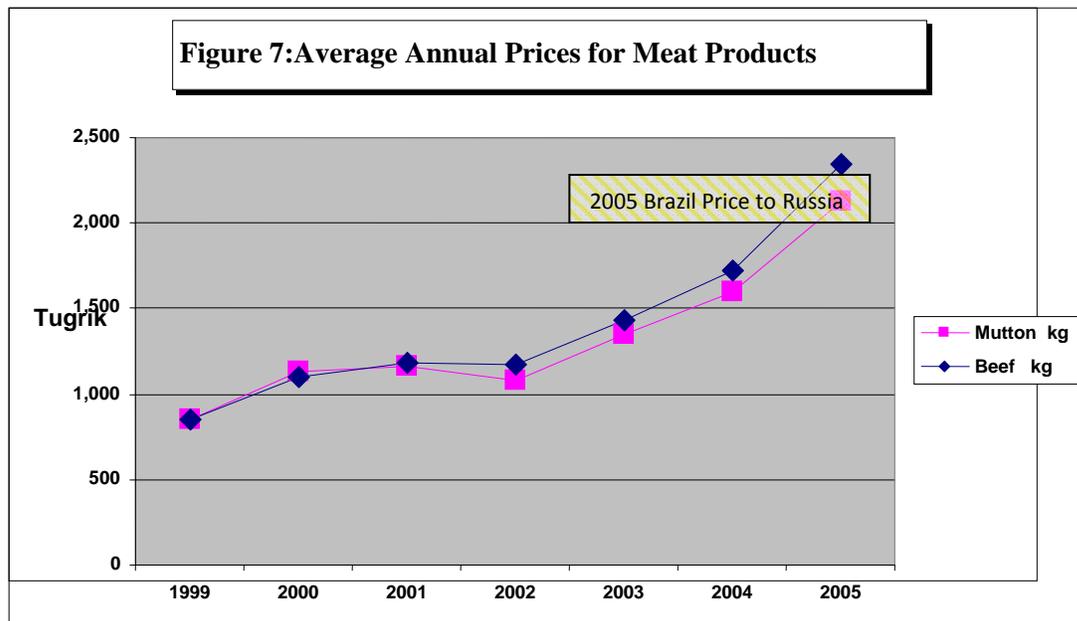
Table 1: Beef price fluctuations – 2001-2009

<b>BEEF</b>		2001	2002	2003	2004	2005	2006	2007	2008	2009
RURAL	stdev	189.6	142.2	167.0	121.2	274.1	220.9	214.6	443.7	
	min	650	750	800	1200	1500	1900	2000	2500	
	median	775	800	1,050	1,400	1,800	2,150	2,450	3,100	
	max	1200	1200	1400	1600	2300	2500	2700	3800	
UB City	stdev	314.7	96.6	258.2	145.3	264.5	182.9	264.9	548.8	319.2
	min	900	1,058	1,147	1,450	1,863	2,222	2,311	2,956	2,900
	median	1,050	1,176	1,369	1,715	2,392	2,467	2,838	3,636	3,357
	max	1,700	1,298	1,871	1,965	2,780	2,869	3,300	4,725	3,725
Price % ub: rural	min	38%	41%	43%	21%	24%	17%	16%	18%	
	median	35%	47%	30%	23%	33%	15%	16%	17%	
	max	42%	8%	34%	23%	21%	15%	22%	24%	
Rural pr.	min:max	42%	8%	34%	23%	21%	15%	22%	24%	
UB price	min:max	89%	23%	63%	36%	49%	29%	43%	60%	

### What is driving meat price fluctuations?

8. As already mentioned, nearly all meat consumed in Mongolia is produced domestically. Consumption of meat is now year round, especially in urban areas, rather than the traditional practice of primarily eating meat from late summer through to winter. This change in demand patterns reflects the urbanization and growing wealth levels within the society with a willingness to pay for meat even during the low season (spring and early summer). With this flattening of demand and limited imports, the real driver of price fluctuations is supply. Peak supply occurs in the early winter period (September-December) as this is when the animals are in peak condition following grazing on summer and autumn pastures, and in late November and December meat can be slaughtered and stored frozen in ambient conditions. Low supply occurs in early summer (April-July) when animals are in poor condition following difficulty accessing good feed during winter conditions. Prices are therefore driven by herders' decisions on when to sell animals or meat, consumer demand and supply chain bottlenecks.

9. **Limits to price fluctuations.** Without significant imports or exports of meat it is difficult to establish the limits to price fluctuations. The price floor should be set by the cost of exporting meat from Mongolia when prices are low in the main supply season. However, as noted above, due to a number of constraints such as SPS concerns, there are only limited exports and therefore no clear floor price. Even for markets which do accept Mongolian meat (such as Russia), preliminary analysis (Marlow, 2007) suggests that Mongolia is not competitive against other exporters such as Brazil. Similarly, Mongolia has never traditionally imported meat during the spring-summer shortage season and the cost of importing during this season is not known. The best estimate is the cost of meat imports in Russia, though it should be assumed that costs into Mongolia would be higher, given the less developed trade infrastructure and relative isolation. From Figure 7, it can be concluded that there now made be some scope for importation of meat during peak prices, and that this case will become stronger if meat prices continue their recent climb.



## **Meat market development**

10. In a situation of market price fluctuations and assuming that the market is working efficiently, the extent of price fluctuations should be explained by the cost of storage and / or importation. In other words, prices should not increase from month to month more than the cost of storing that product for that time period. The maximum price should be set be the cost of importing that product from the international market. In practice, there is only negligible amounts of meat imported into Mongolia, which may be to serve high-end restaurants and hotels. The key factor determining the level of price fluctuations should therefore be storage, assuming the market is working efficiently.

11. Storage: fresh meat is perishable and requires refrigeration to be stored for short periods and freezing for longer periods. No data is available on commercial storage costs, though commercial storage can be assumed to be expensive (though the sub-freezing temperatures in Mongolia from November to March lower these costs). There are several value chain analyses of the meat sector that have been conducted in recent years<sup>3</sup>, though none were able to quantify the costs and profit margins at different levels of the marketing chain. This in part reflects the undeveloped nature of meat processing and storage in Mongolia. Personal communication with meat traders suggest that the main constraints to meat storage are lack of working capital and also uncertainty about the benefits from storage. This is consistent with the large year to year variability in the level of price fluctuations. Also, the level and impact of government action creates additional uncertainty in the movement of prices and may increase the reluctance of traders to store meat.

12. Appropriate marketing channels and organization models linking small and medium sized herding households to food processors remain to be established. A large majority of the rural producers with small herds produce for home consumption or sale on local informal markets where demand and prices remain low. Despite the average under-developed state of development of livestock marketing channels, some recent and positive developments are taking place. A recent phenomenon is the rapid rise of supermarkets, serving mid to high level income groups of consumers with distinct requirements of quality and packaging. Implications of these developments on the livestock sector and rural development are largely unknown.

13. Urban markets for livestock products are growing and changing. The main urban centres of Ulaanbaatar, Darkhan and Erdenet continue to grow, and now comprise about one half of the national population, and their households' consumption patterns and retail food purchasing preferences are beginning to follow the paths trail-blazed by other Asian cities, including the emergence of an increasingly affluent urban middle class. Demand is growing for dairy products and beef in particular, along with higher quality cuts and better presentation for all meat. Supermarkets have entered onto the scene with both domestic and foreign ownership, and specialty meat wholesalers and retailers are emerging and serving both the high-end retail market as well as restaurant and hotel clients.

---

<sup>3</sup> World Bank (unpublished, 2005) Assessment of Domestic Supply chains of Mongolian Meat Industry;

### **Government intervention in agricultural markets.**

14. Since the early 1990s, Mongolia has operated a relatively liberalized market system, which extends to food products including meat. There are some notable exceptions to this, however, in both the productive and marketing sectors for both meat and grains. In the wheat sector (and crop production sector more generally) the government is driven by a desire to reach self sufficiency in many food stuffs, including grain. To achieve this, the government has launched an aggressive policy to have more land under crop, encouraging producers by providing heavily subsidized credit.

15. Prices of meat are rightly a concern for government, both the overall upward trend of prices and also the intra-year price fluctuations. Meat is an important part of the food intake in Mongolia, including for low income households and therefore the price of meat and any shocks to meat prices can have a significant and serious impact on household food security and well being. This is becoming increasingly important as a higher proportion of the country's population is dependent upon markets to meet their household food needs. This includes vulnerable groups in urban areas, in particular in Ulaanbaatar, many of whom are recent migrants from rural areas living in the city's *ger* areas.

### **Meat Supply and Price Stabilization Resolution**

16. As noted in the recent Public Expenditure and Financial Management Review (World Bank, 2008), government intervention in the meat sector has become significant in recent years. With an objective to stabilize prices in the main urban centers, government has annually issued a Meat Supply and Price Stabilization Resolution. This resolution results from recognition by Mongolian authorities that fresh meat supply to urban areas is insufficient during the summer period (March-July) and as a result the price of meat for urban consumers rises. The resolution allows the development of triple agreements between administrative offices, meat processing and storage companies and supermarket outlets to store frozen meat a release the product during the period of fresh meat supply shortage. Support finance is provided by the Government of Mongolia to assist with the costs of financing and storing the product in storage.

17. The policy was introduced in 2005 under the Government's 211th resolution "Measure on meat supply stabilization" (September 29, 2005.) In 2006, this was followed up with the 178th resolution of Government with a stated purpose to stabilize the meat supply for Ulaanbaatar, Darkhan and Erdenet City's population and regulate relations related with promotion from Government to corporate to prepare, store and sell according to the price included in agreement. This selling price was established between the government, meat industrial companies and supermarkets. A specific window for releasing the reserves was set between March 15 – July 10 of every year according to approved schedule of province and city mayor. All agents involved must have certification from the State Inspection Agency, as well as being accredited by the Ministry of Food, Agriculture and Light Industry. Following conditions have to be included in contract with the meat storage agents:

- reserving, storing and selling meat type and quantity,
- location and situation of storage facilities,
- required stamp reference number of veterinary on meat,

- percentage and quantity for selling as dismembered and the whole meat. (in 2005, 20-30% of meat sold as a whole carcass, remaining sold in meat cuts.),
- selling schedule (by month and week),
- meat price on supplying from industry, selling price for consumers on store,
- schedule for promotion.

18. Table 1 depicts the actual level of meat reserves under this policy since it was introduced. For the first two years, 3300 tonnes of meat were reserved, rising to 7000 tonnes for 2008 and 2009. This represents approximately 3 percent of the total urban market. In terms of the cost to government, data is only available from 2007, when the policy accounted for 7.5 percent of capital expenditure in the sector. Note that this likely increased with the doubling of the amount under reserves from 2008 and 2009.

Table 1. Meat Supply and Price Stabilization Interventions 2006-2009

Year	Reserving meat, /ton/	Contractor	Meat storage as % of total meat market (urban and rural)
2006	3000	11	1,75
2007	3300	8	1,75
2008	7000	13	3,13
2009	7000	6	Not available
Total	20300		

**Observations on current policy:**

19. The policy has not led to any significant reduction of price fluctuations. Figure 8 below plots the intra-year spread of meat (average of beef and mutton) prices between 2001 and 2008, and calculates a simple best-fit line using least squares method. The data between 2001 and 2008 shows a decline in intra-year variability, however, if 2001 is excluded, the trend is reversed and increasing trend is apparent. As noted above, 2001 was an exceptional year with an extremely severe dzud which cause very high rates of livestock mortality. This year shows the highest variability of prices, which was likely caused by a sudden glut of meat on the market to severe shortages. The conclusion from this data is that it is not possible to definitively say that prices have been stabilized by the government policy and intervention in the market.

20. The approach also seems to be hindered by the limited scale at which it operates. Although the level of investment is significant, the amount of meat put into reserves is relatively small, considering that the intention is to cover a four month period when prices have historically peaked. By reserving greater volumes the impact on prices may be increased. Clearly, however, the more meat that is reserved the larger the drain on government expenditure (under the current approach). Also, by purchasing more meat from the market in the peak supply period may cause prices to increase earlier in the year than before.

Figure 8: Trends in annual meat (mutton and beef) price fluctuations



### Alternative approaches

21. The justification for public intervention is to stabilize markets. Even where markets are working efficiently, a case can be made for intervention if fluctuations are large. For meat in Mongolia, the nature of seasonal supply combined with high storage costs inevitably lead to price fluctuations. Some seasonality in prices is needed in a market economy. In general, consumers have to pay a price which covers cost of production, cost of transport, costs of and storage and any other cost. Hence, prices of meat in months after the main slaughter period should be higher than prices during the main slaughter period. As nobody can exactly forecast how seasonal prices on the market will develop, keeping stock is a highly risky investment. Hence, it may well be that the seasonal swings of prices are significantly larger than storage costs. This is the main reason why governments in many countries intervene in order to reduce uncertainty for stock keepers.

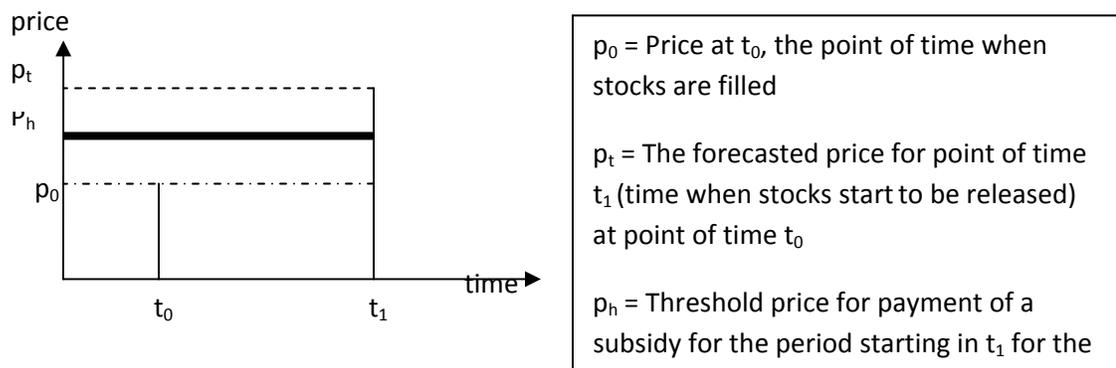
22. Trade-based market mechanisms exist for reducing the degree of price fluctuations, however as noted above, trade (both import and export) is not well developed in the country. Trade, in theory, should set the ceiling and floor price of prices – when prices are very low following the main slaughter season opportunities for export may exist, and similarly when prices peak, imports could become viable. Figure 7 indicates that the feasibility of importing should be explored. Exports continue to be hampered by a range of barriers, in particular weak trade logistics and bans from importing country due to animal health concerns. Though trade may ultimately play a role in price stabilization, this is not a short term option.

23. Financial mechanisms for dealing with instability, such as forward buying and financial derivatives, and also not developed in Mongolia and no formal agricultural commodity exchange exists. If markets were to function well, private businessmen would buy at times of low prices and sell at times of high process. If the private sector has not overtaken this business it may well be due to the high risk. Of course, at the time of purchase the selling price in the future is not known. Lack of market information is one important determinant for the inactivity of the private sector in storage of meat. However, even with a reasonable market information system the remaining risk might be too high

for private traders. There is a strong presumption of market failure. The present system has the drawback that the risk for private traders may be even enhanced if the activity of the state is not predictable. For instance, there seems to be no information about the prices at which the Government may buy and sell the meat. So the risk for private traders, slaughter houses and meat processors may be even enhanced and the evolution of a private market for meat storage is suppressed.

24. One alternative to the current policy which would reduce uncertainty for private stock keepers is as follows. The government could establish threshold prices (for example forecast import and export prices of meat) in advance of the period of time when the government used to release stocks (point of time  $t_1$ ). Depending on the internal market situation for the specific type of meat under consideration the forecasted export- or import price arrived at Ulaanbataar could be used as a benchmark. The forecast should be made public and should be updated at least on a weekly base. The government could announce a threshold price about 20 percent below the first forecasted price. If the actual price is lower than 80 percent of the forecasted price at the time when stocks start to be released stockkeepers should qualify for a subsidy to make up for the difference between the two prices. This scheme would lower the risk for private stock keepers and would limit the financial involvement of the Government. Note that  $p_t$  would be reset for each year depending on the forecasted price.

Figure 9: Establishing price bands for price stabilization (from Koester, 2007)



25. To move forward on this policy amendment, further work would be required to research to find out how such a system would have worked in the past (using historical data) and how it may work in the future if applied. The advantage would be that a forward market for meat would quickly emerge. Traders and processors could sell at any point of time, say  $t_n$  at a price set at  $t_n$ , but paid at a predetermined point of time  $t_{n+1}$  when the meat would also be delivered. However, it should also be noted that this approach still has potential pitfalls including potential market distortion and possible large fiscal exposure, and therefore should only be considered following a close examination of the risks.

### **Developing a policy framework**

26. Price stabilization is not a unique issue to Mongolia, in fact it is common to many countries. What is slightly unusual for Mongolia is that meat is the target of government's price stabilization policy (as meat is generally not considered a staple in other countries, which generally target grain for market interventions). Storing meat is generally more expensive than storing grain, so this has implications for any program which involves storage. The Mongolia meat market is also unusual in that imports are negligible, due in part to high transport costs. As such it is not clear what price meat would need to rise to in the domestic market before significant imports would be sensible (thus setting a ceiling to prices). At the same time, the independence from global markets does protect the Mongolian consumer from movements in international markets for meat.

27. The literature on the justification for state intervention in markets to stabilize prices is mixed. One school of thought strongly endorses the removal of the state from all markets, with the reasoning that a well functioning private sector in a market oriented food system would be the best option to develop stronger markets which would minimize price fluctuations through a combination of storage and imports / exports. Furthermore, it is argued that if the funds that are used for price stabilization are channeled to other public support programs, the returns are higher than for price stabilization. For example, if government invests in research and extension, productivity could be increased thereby increasing the supply of the commodity in questions, which itself may help to lower and stabilize prices. The worst of both worlds – a half-way policy where the private sector is given primary responsibility, while the government continues to intervene – is least desirable, as it is both expensive for the public purse, and state intervention crowds out private investment. Consumers and producers lose.

28. Mongolia already has a relatively liberal market system, including in the meat sector. However, there are concerns that the market has not developed as much as would have been hoped in the past 20 years since the transition began. This is not only for meat but for other agricultural commodities including cashmere (the main income generator for the majority of herders). Productivity in the agricultural sector is declining. Quality of product is declining. No strong market chains are developing. There is a strong argument that government needs to become more involved in the livestock sector, reversing the broad decline of support seen since the early 1990s. Expenditure allocations to the sector have actually increased in recent years, in particular capital expenditure for the rehabilitation of wells, though more resources need to be devoted to ensuring public money is allocated and utilized to achieve desired outcomes. For instance, it is unclear whether the additional spending on wells is having a positive impact on productivity, or a negative impact (through increasing stocking densities and putting additional pressure on pastureland).

29. While this policy note will not go into detail on the spectrum of policy options that could be considered for the sector (see Livestock Sector Study for a more detailed discussion), broadly, policy aims in the area of food security should be to:

- i. Increase the productivity of livestock;

- ii. Support the development of domestic markets and enhance opportunities for export; and
- iii. Protect poor and vulnerable households

30. Pursuing these aims require a more strategic consideration of the appropriate roles of the public and private sectors in the livestock and meat sectors aimed to build the capacity of private actors in the market.

31. Byerlee et al (2006) provide a useful list of the elements of an effective food security strategy that is market-led:

- Defining a “tolerable” level of price variability – it is much easier and cheaper to remove extreme prices than to stabilize prices completely;
- Defining the roles of domestic production, imports [which may not be relevant in the case of Mongolia meat sector], and reserves in stabilizing food prices and supplies, and the role envisioned for the private sector and government in carrying out each of these functions;
- Minimizing the distortion to long-run market equilibrium prices, defined in terms of border parity prices;
- Utilizing scarce public resources in activities that offer high returns in the form of pro-poor growth and market development;
- Protecting the interests of the poorest and most vulnerable and ensuring they are the major beneficiaries of any subsidies directed at household food security; and
- Minimizing the risks of unexpected fiscal impacts

### **Conclusions.**

32. Government is rightly concerned about fluctuations in food prices, and policy intervention in the meat sector is therefore appropriate to protect the food security of vulnerable households. However there is little evidence that the current intervention to stabilize market prices for meat is having any impact, while it is sucking up valuable resources in the sector. There remains a gap within government (including the Ministry of Food, Agriculture and Light Industry) to conduct policy analysis which can provide decision makers in government and Parliament, with the necessary information to make resource allocations.

33. Of course, information is always incomplete. However, any decision maker could try to get accurate information about the expected effects of measures and the costs involved and on the actual effects after the measures have been applied for some time, such as in the case of the meat price stabilization policy. Hence, a policy analysis is needed ex ante and ex post. The task of the policy analysis is to quantify as much as possible the expected impacts of policies and the efficiency. It seems that policy makers in Mongolia do not have this information at the point of time when the decisions are made. There is no policy analysis unit in the Ministry or somewhere else which could provide this type of information. It would be a real surprise if the actual lack of information of policy makers in Mongolia has led to “best” decisions in the past. However, there is always a certain amount of uncertainty concerning the effects; an ex post policy evaluation should inform on the actual effects. Policy makers could use this

information to redesign policies, making public expenditure more efficient. Unfortunately, such analysis is not systematically done in Mongolia leading to inadequate information of the policy makers.

34. This note concludes that fluctuation of meat prices are inevitable given the seasonality of supply and the high storage costs. Pure market based approaches to stabilize prices (though not eliminate fluctuations) such as international trade and financial derivatives are not available. Revision to the current intervention, for instance by introducing price bands, could be explored though some of the original concerns about market distortion remain. Ultimately, the most viable way to reduce fluctuations may be to look more at the supply side. More intensive models of meat production which are less reliant on extensive pasture grazing, offer the potential to provide meat during the traditional off-season. This would require, inter alia, the development of a stronger feed sector. This is one of the priorities of the government, as expressed in the recent National Livestock Program.

### **References**

Byerlee, D., Jayne, T.S., Myers, R. (2006) Managing food price risks and instability in a liberalizing market environment: overview and policy options. *Food Policy* 31, pp 275-287

Goodland, A., Sheehy, D., Shine, T. (2009) *Livestock Sector Study*. World Bank

Koester, U. (2007) *Livestock Sector Study Working Paper 4: Livestock Public Expenditure Review*. World Bank.

Marlow, J. (2007) *Livestock Sector Study Working Paper 2: Urban Market Consumer and Retailing Dynamics*. World Bank

Poulton, C., Kydd, J., Wiggins, S., Dorward, A. (2006) State Intervention for food price stabilization in Africa: Can it work? *Food Policy* 31, pp 342-356.

World Bank (2008) *Mongolia: Public Expenditure and Financial Management Review*