

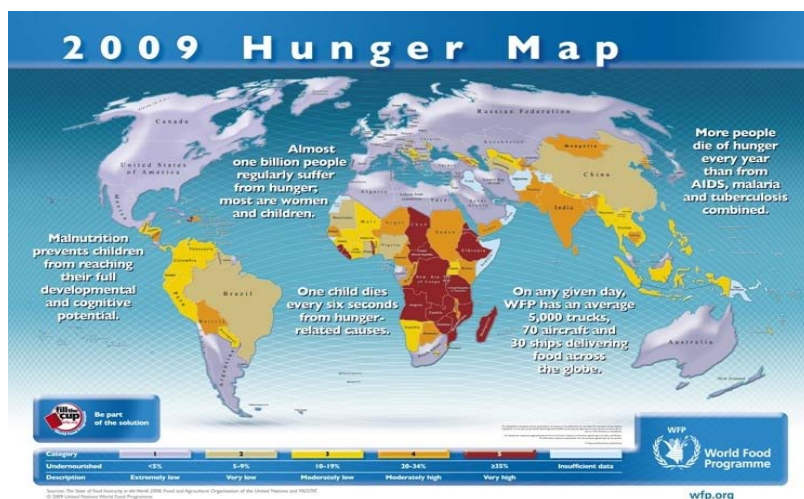
Food Demand and Supply of Mongolia

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1. Introduction of Global food crisis

Today the Global food crisis, hunger and malnutrition has become one of the most important and crucial issues. Nowadays hundreds of people in the world are dying from starvation and suffering because of food shortage. The recent news of FAO of the United Nations tells the number of undernourished people worldwide has reached over one billion which is equal to one sixth of the world's population.



Even though the attention on the world food supply is growing and aid efforts by many organizations are expanding, the world food crisis continues with daily hunger and malnutrition. Especially in Ethiopia, Zambia and elsewhere in Africa there are many people who are on the brink of famine. So there is a question: “Can the world food supply keep pace with population growth?”

Since Mongolia still can not supply its food demand, we are much dependent on global economy so restoring a balance of food supply and demand is not just a Mongolian problem. It became a global job to do.

2. Brief history and current situation of Mongolian agricultural system

Mongolia has broad and wide territory which covers an area of 1.5 million square kilometers and a dense population of 2.7 million people. It is situated in central Asia and shares borders with Russia and China. The climate is continental with four seasons a year.

In discussing about Mongolian food supply, we should talk about 2 main sectors:

- *Agriculture*
- *Animal husbandry*

There are 5 strategic products of our country which come from 2 of the above sources:

- | | |
|--------------------|---------------|
| - <i>Wheat</i> | - <i>meat</i> |
| - <i>Potato</i> | - <i>milk</i> |
| - <i>vegetable</i> | |

❖ *Agricultural sector*

A half century has passed since Mongolia has owned arable land in 1959. The first expedition observed an area of 1.7 million hectares which could be used for planting. Until 1989 Mongolia used 76%, 1.3 million hectares, of the eligible land. During the first 3 decades the use of Agricultural land was very effective and beneficial, but after 1990s it has decreased dramatically due to different influences, such as social, economic, climate etc.

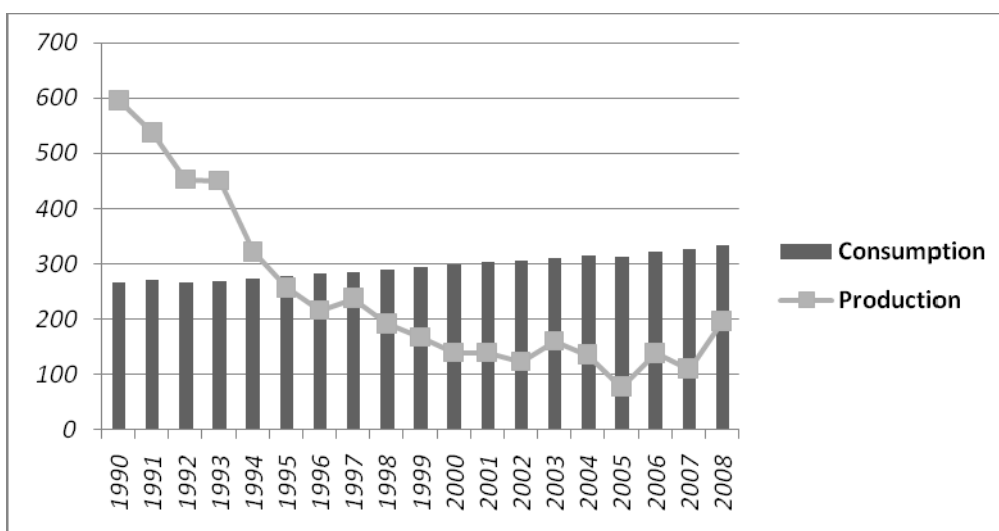
Throughout the Mongolian agricultural history the “Agrarian campaign” was organized twice, in 1959 and again in 1976 to increase the food support. As a result of this work Mongolia was able to provide completely for its food need with domestic products and even to export wheat to other countries. Despite these achievements, over the last 10 years the Mongolian agricultural sector is in a terrible situation. By 2007 Mongolia could offer only 24.9% of wheat, 86% of potato, 47% of vegetable need and used just 30% of Agricultural land.

As a result of those bad consequences, the Mongolian government has announced the 3rd Agricultural campaign last year, in 2008, which will last three years (2008-2010).

❖ **Wheat**

Mongolians are not the only ones who is facing a wheat supply trouble. It became a worldwide problem to solve. Wheat production plays a very big role in the Agricultural division as well as cereal grains are humankind's major food. Until the middle of the 1990s Mongolia was self sufficient in wheat and an occasional exporter. Wheat production has declined steady since 1994 and commercial imports, food aid of wheat have increased. Wheat is the main crop in the country and wheat flour is the major food staple, covering approximately 59 percent and 52 percent of the daily caloric intake in urban and rural areas respectively. In particular, wheat flour is essential in the diets of the extreme poor populations of the cities who could not afford to buy meat and milk products. Therefore, there is Government’s concern about the role of domestic production in assuring food availability and in reaching higher levels of self-sufficiency.

Figure 3
Wheat balance



❖ Potatoes and Vegetables

Mongolia also produces potato and vegetables, but the planting areas are very small related to wheat crop. Similar to wheat, potato and vegetable's growing is concentrated in the Central provinces. Along with the most other food industries, the sub-sector collapsed in the middle of the 1990s. While recovery in production has been considerable in recent years, far more impressive have been the increase in the imports of potatoes. Concern about the quality and safety of the imported potatoes and vegetables is widespread in the country and there is a clear market preference for locally grown products, despite their higher prices.

Figure 4
Potato balance

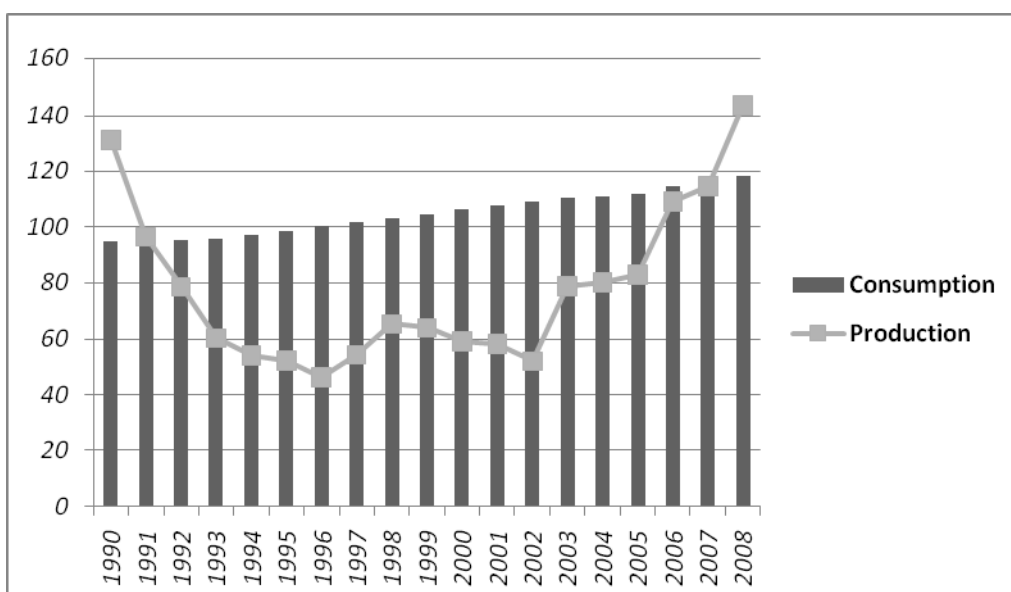
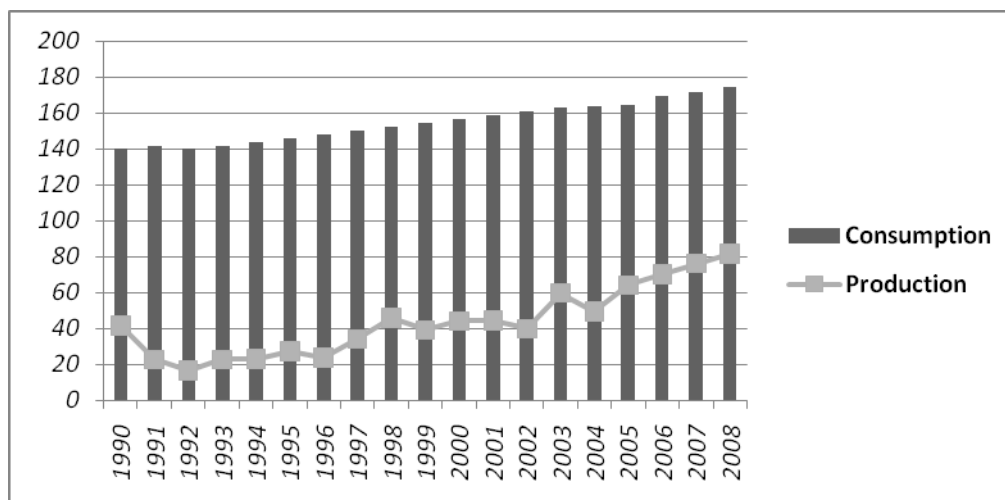


Figure 5

Vegetable balance



❖ *Animal husbandry*

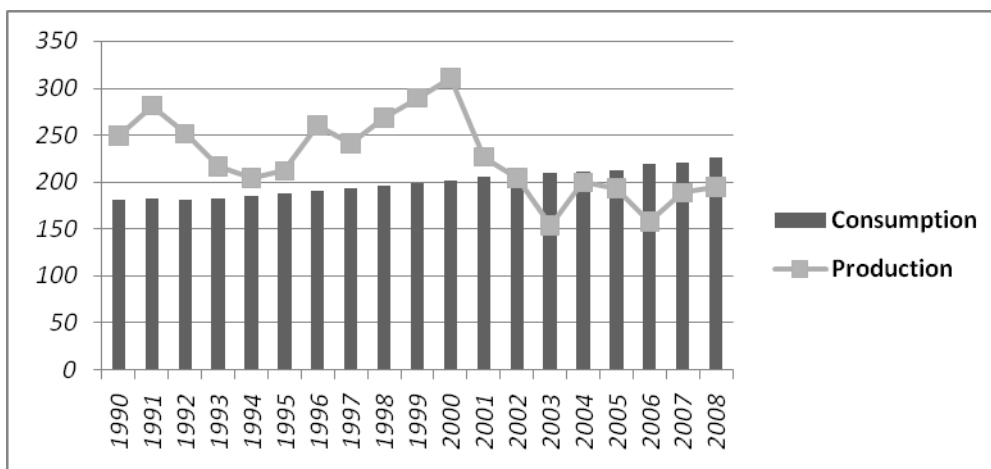
We can almost say Animal husbandry is an old traditional custom of Mongolian life. Our main livelihood source and the wealth is livestock. The main foundation of Mongolia's economy, pasturing livestock husbandry still plays an important role in our economy, employment and export revenues. Today in the livestock sector the main producer is a herder household who handles livestock activities year round for the purpose of livelihood and source of income. Also Animal husbandry has a lot of benefits and two of them are meat and milk which are included in our country's strategic products. Mongolia is one of the leading countries of livestock per capita. By January 1st 2009 the number of livestock in Mongolia has reached 42.2 million heads. In this case we should think about Mongolian population of 2.7 million people. About 40 percent of total labor force of the country is engaged in the animal husbandry and animal originated products form around one forth of the export income.

❖ **Meat**

The country is self-sufficient in meat and has an exportable surplus. Most of the meat consumed in the country is processed in rural households using traditional techniques. The formal meat industry collapsed with the privatization of livestock in 1991 and while production of meat increased steady until 2000, exports of meat fell by one-third. Following the severe loss of animals in 2000-2002, meat output declined sharply from 2001 to 2003. Despite some recovery in the past years, production of meat has remained well below the levels of the 1990's and exports are very limited. As a result of the lower meat availability in recent years, production of meat in 2008 supplied about 85 percent of total consumption.

Figure 6

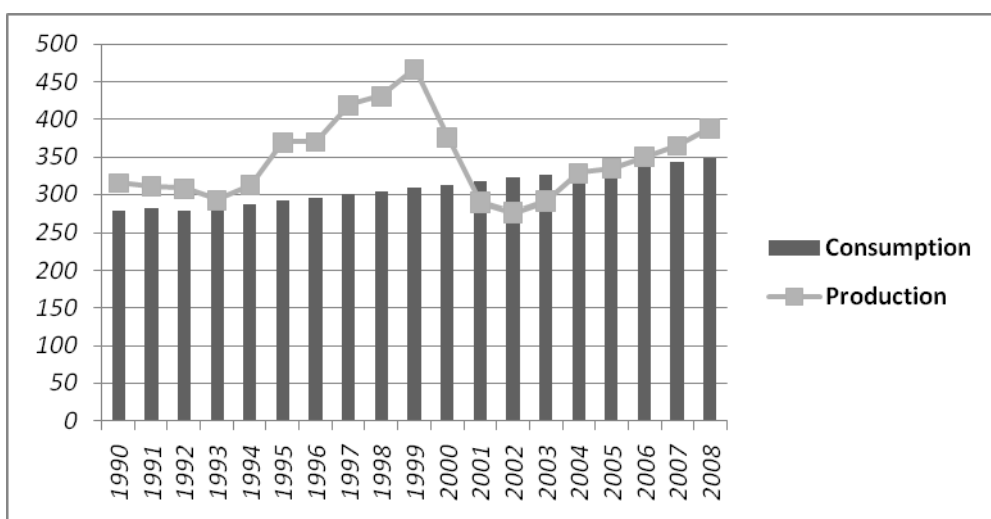
Meat balance



❖ Milk

The bulk of the milk consumed in rural areas is in the form of customary milk products. Similar to meat, only a small proportion of the total milk produced in the country is processed by the formal dairy industry. Mongolia used to be self-sufficient in milk in the socialist period and even a small exporter. Similar to the rest of the food sector, the dairy industry collapsed during the abrupt transition from State to private ownership in the early 1990s but from the middle of the 1990s until 2000 Mongolia had an enough milk supply for the population. The decline of the national herd from 2000 to 2002 resulted in the plummeting of the milk production and the import of almost all the milk sold in the urban areas. Total milk production has been recovering since then.

Figure 7
Milk balance



3. Challenges

Now we have been briefly introduced to Mongolian food supply. So why was there a fall in the agricultural sector, especially in wheat production? As well as there is always a reason for something I would like to mention some of main factors that influenced food decrease.

❖ *Economic*

➤ *Economic system transform*

As we know there was a big change in the Mongolian economy and society during the 1990s. Our economic system shifted from central planned economy system to a marketing economy. This transfer was one of the reasons which led agricultural production to decrease noticeably because many farms were privatized and these private entities were lacked technology information, farming management and experiences.

➤ *Inflation*

Although it is almost impossible to pinpoint the exact cause of soaring food prices, many people agree that the food crisis is a result of imbalance of supply and demand. They explain this inflation by following concepts: rising fuel costs, lower agricultural production, weather shocks, poverty, limited production capacity etc. Food shortage and sky-high prices led to inflation. Thus worldwide growing price influenced our economy, especially by the time we could not provide our need by domestic products.

❖ *Social*

By 2008 about 38 percent of labor force in Mongolia worked in the agricultural sector. Even though it seems like much, 30 percent of this force works in animal husbandry and only 8 percent works in agrarian field. That shows that almost no one wants to work in crop planting. Especially after the economic system shifted to marketing economy, the value of agrarian division decreased noticeably and everyone wanted to become a lawyer, economist, programmer, manager or an accountant and most of youth dreamed working in an office rather to working in the field. Of course one outlying cause for this was hard work with small salaries. Since the agrarian job wage is the lowest in Mongolia, who would want to work in this sector?

❖ *Climate*

Of course climate is one of key factors that influence agriculture. Global warming shows its harms. Water shortages and limited surface water resources such as rivers, lakes and ponds are a major issue for food consumption. However global warming and climate change affect crop production such as wheat, potato, vegetable yield while there is still coherence with livestock originated products. Because Mongolian livestock owning is based on pasturing animal husbandry and

we do not feed livestock by fodder crops fully. Climate change will lead to the poor production and at the end result would be the higher the temperature the lower the harvest.

❖ *Technology*

Nowadays there are uncountable new discoveries and technical developments on the world. One very important tool in agriculture is machinery and equipments. But in Mongolia agricultural machines are mostly old and we do not have enough like highly developed countries. In most cases we just rely on weather, so we need an introduction of new technology adaptable to the global climate change to decrease soil moisture loss.

4. Government policy

Since providing the nation with natural, ecological and healthy products is one of the government's responsibilities, the Mongolian government is paying attention to undernourishment and planning to improve the food supply.

The 3rd Agricultural campaign was announced in 2008 which is aiming at affordable domestic needs completely by the end of 2010. With the help of that work accomplishment we can stop annual outflow expenses of wheat, potato and vegetable import which amounts to 60.0-80.0 billion togrogs.

According to this project, government is planning many effective programs, such as increase the usage of agricultural land, enhance irrigation, improve seed quality, fertilize soil, prepare more fallow land, develop agricultural machinery, train more professionals etc.

5. Conclusion

Today the role of the food supply and demand is tightly related to the sustainable development of the Mongolian agricultural sector. We face many challenges as well as opportunities.

Even though we had some hard times in the agricultural division after the 1990s when the economic and social transformation occurred I feel optimistic about the Mongolian food supply perspective because there are various kinds of possibilities for us to improve it in the future.

Without any doubt food supply is one of the main government policies because it proves national independency, sustainable economy and society. So I believe the nearest and biggest goal is to become a self sufficient country in food supply and stop import outflow expenses. Thus continuing substantial investments and contributions from the government in the food sector is essential. Also the ardency of the people will lead to the sustainable development in the agricultural sector.

6. Recommendations

❖ *To intensify and integrate crop and livestock production*

The integration of both sectors, crop and livestock, will make much better use of natural resources which will provide more supply for the population and export. Besides the most important aspect would be crop farmers and herdsmen will get more profit.

❖ *To provide favorable condition for crop planting and animal husbandry*

As well as agriculture is one of basic sectors of our economy and forms one forth of export income, food supply is seriously discussed topic so Ministry of Food, Agriculture and Light Industry should pay more attention by providing favorable economic and law environment for sustainable development of food and agricultural sector.

❖ *Enhance the labor force*

We came to the conclusion that many youth do not choose profession in the agricultural sector because of low salary and hard work. However it is important to let people know about how their food is being produced and reach them. Also to make them understand the importance of food supply is essential. By entertaining more people to the agriculture we can motivate youth's interest in agricultural sector and enhance the labor force in this sector.

❖ *Improve agricultural machinery*

Agricultural machines and equipments have a huge aspect for the effective crop planting and food supply. As we observed before agricultural machines are relatively old in our country, we see the demand to renew and recover it.

❖ *Enhance soil fertility*

Besides it is profitable to prevent soil erosion and enhance its fertility. Contemporary highly developed countries use the organic farm technology which reduces soil erosion so it is important to enter such technologies to Mongolia and use in the agricultural sector.

❖ *Using wise managements and strategies*

We feel it is really needful now to process and formulate strategies, wise managements and tactics on both, crop planting and animal husbandry, because private farm owners and herdsmen are lack of information, experience and financial ability.

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