OPEN SOCIETY FORUM

## THE ROLE OF THE GOVERNMENT IN LIVESTOCK BREEDING

## **POLICY RESEARCH**

Ulaanbaatar 2004

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Implemented by B.Erdenebaatar (policy researcher)

Consultant: David Dyer

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ACNOWLEDGEMENTS

#### Introduction

The role of livestock breeding in Mongolian economy and its contribution to it can be illustrated by a few indicators. For instance, over 40% of rural population is employed in livestock breeding sector. As for indicators, which determine economic significance of livestock breeding, produce of this sector constitutes over 80% of total agricultural production, which proves that Mongolia is a livestock breeding country. Livestock breeding sector, which makes up <sup>1</sup>/<sub>4</sub> of the export income, takes second place by this indicator.

The above mentioned few indicators, that determine the present condition and economic situation of livestock breeding, illustrate that social and economic development of Mongolia, its achievements at the final stage of transition to the market economy are in a position of direct dependence from livestock breeding. With regard to this high contribution of the livestock breeding sector to the national economy, the Mongolian government has paid special attention to this sector by taking many economic, social and technical measures to support this sector. A fact that livestock breeding has been always included in priority directions with decisive importance for sustainable economic development of the country is one of the distinctive features of the government policy.

From all aspects livestock breeding has been an important source of income for the majority of rural population and an indispensable form of a herder household's livelihood. However, *if looked at from the need to* draw near to the pace of development of other economic sectors and required level of development, livestock breeding is still underdeveloped and unstable. Although some measures of market orientation have been implemented in livestock breeding, many issues needed for stabilization of this sector and growth of its competitiveness have not yet been resolved and remain unsolved.

It is necessary to notice that the above mentioned problems in present situation of livestock breeding have great importance in order to determine the main directions of research to be implemented on the government policy on livestock breeding, to clarify trends and justification to be followed in the course of the present study implemented with support of the MOSF, to develop recommendations in order to enhance the role of the government in development of livestock breeding.

The majority of policy makers and development economists tend to view development of livestock breeding as being of progressive orientation. However, support of any economic sector development with the government policy requires the balance of duties and upgrading of accountability system. From this aspect, for the government and its partners this issue is quite unclear and vague. It is due to the fact that reaching sustainability in development of a certain economic sector is not just an objective, but a creative activity implemented within certain time period, in other words, it is not the final goal, but a long journey.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Patrick Madden J., Scott G. Chaplowe, 1997. Introduction remarks in: Making the World Agriculture more sustainable. A WSAA publication.

# *WAYS TO SUCCESSFUL SOLUTION OF THE PROBLEM:* TO RESTORE OR TO INTENSIFY?

In the first years of transition to the market economy all livestock and other assets that were owned by the state and cooperatives were divided and distributed to the members of collective and state farms and other legally entitled persons in the process of privatization, so that cooperatives in rural areas were completely disbanded. Unfortunately, it can be claimed that this process, conducted almost without any government policy and coordination, on the basis of the only one legal document, namely, Law on privatization, has changed only the form of livestock ownership, but did not bring any other progress in development of livestock breeding. After the transition of livestock to private ownership, investments made in livestock breeding by the owners, the government and donors, certain measures, taken by them in order to alleviate development backwardness, have failed.

Private owners, the government and donors, were satisfied by the growing number of livestock, but it was only a quantitative change in livestock breeding, which was "free" from its duty for export orientation, that played an important economic role in development of the country. However, their notion that livestock breeding has developed, as it has never done before, did not prove to be correct. An understanding, that with transition of all livestock to private ownership everything will be excellent, has turned to be wrong. Poverty in rural areas has increased, and some acute social problems have emerged, which was called an aftermath of the previous society. An attempt to solve these problems by "market" methods with assistance of donors, providing the assets, has failed. Although it is true, that during the previous system the government support of livestock breeding was quite important, rash privatization and irresponsible owners destroyed everything that was previously achieved, instead of keeping the sector at the achieved development level and its further upgrading. As a result, agriculture, including livestock breeding, has retreated to the economic form of subsistence economy. This was very fittingly called "dispersed to all ditches".

Despite all this, in the last decade herders became private owners and have acquired certain experience of running business under strict market laws. Moreover, drought and dzud of the last 3-4 years taught severe lessons on unreliability of conducting private business without basis of sustainable development and commerce. In order to intensify livestock breeding we need to decrease its dependence on external negative conditions; livestock growth should be coordinated not simply by biologic reproduction, but by economic strategy and tactics; production should follow the correct path of progress and development, when its volume and quality is determined by demand and is based on business objectives and solutions. As talks about intensification of subsistence economy may lead to misunderstanding and mistakes, we need to relate other factors providing a basis for intensification, its sources, links to livestock breeding and make them work, which is of decisive importance in developing and intensifying livestock breeding in our country.

To be brief, in reality, it is impossible to conduct intensive livestock breeding in unstable, highly risky way with undiversified product output. However, livestock breeding in our country has retreated from previously achieved positions and slipped into extensive mode, it is highly risky, has not been renovated technologically and the market mechanism has not been fully formed. The main problem is a fact that such a big group as herders are not able to use their full capacity and emerge as the basis of private sector. To sum up, there are some grounds to say that there exist several problems and conditions, which are obstacles for intensive development or intensification of livestock breeding.

We can say that such situation is caused by various reasons and is an effect of different factors. The frame of coordination and socio-economic ethical standards, duties and responsibilities of all subjects engaged in livestock breeding activities, starting with the government and ending with the herder household and herders is not yet in place, such as when and who should do something, or have something done, who should cooperate with whom, who should get and give support, get and give assistance, take over certain responsibilities of the state. An attempt to solve the problems with political or other ineffective methods in a way, that takes into account only temporary interests and the present situation without considering the future, became widespread. These events, which lead to abandonment of livestock owners – the herders beyond the frame of society life, have brought alarming consequences.

We consider it important to think thoroughly about rebuilding of livestock sector, to take well thought- up measures, to implement policies and strategies in order to introduce intensification on rebuilt ground, to give support in order to help them strengthen in economic aspect and in this frame we need to determine responsibilities of the government, the private sector, community organizations and other subjects. As the above mentioned subjects will not unite by themselves or find easy ways to coordinate their efforts, the primary goal of the government and its main duty to implement is to support individuals engaged in livestock breeding in order to help them develop a capacity to get necessary support from the government, to make a strong basis of the private sector and to get real assistance from community organizations. Before discussing the role of the government in livestock breeding we need to identify correctly the most important problems in the present situation of livestock breeding development and its perspectives in order to seek answers to these questions.

## PART ONE SUBJECT OF RESEARCH AND METHODOLOGY

### **1.1. ATTITUDES AND PRINCIPLES**

The main goal of this policy research is to conduct a study of multilateral problems related to development of policy recommendations aimed at upgrading the role of government in development of livestock breeding. In order to successfully carry out policy research in the above mentioned frame, we needed to define in detail attitudes and principles to follow, to examine urgent and common problems, to check data and information taken from various sources. As for attitudes and principles suitable for the goal and objectives of policy research, the study should be:

- Based on participation and consensus. Livestock breeding sector is considered one of the most complicated sectors due to the problems it needs to solve and its development perspectives, and it requires contribution of many subjects and beneficiaries related to this sector and their ability to implement certain duties jointly or independently. Since livestock breeding is a basic source of livelihood for about 180 thousand herder households and the dominant economic sector, problems of its development attract attention of business and social groups, which offer different views and opinions and constantly discuss this subject. The researcher views that in order to select the best views among these pluralistic attitudes and examine them further, the principle of participation, based on views and ideas of the majority, has an important significance. In order to implement the participation principle, the management of the central and local government, representatives of private sector, persons engaged in livestock breeding, community organizations and groups, individuals were covered by the study.
- Of development orientation. A fact that livestock breeding is one of the most important economic sectors, which has decisive significance for prosperity of Mongolia and Mongolian nation, is accepted by all. The understanding that concept grounds and ways of solving problems in livestock breeding will affect many issues directly and indirectly, is behind this. If we look at some late examples, one of many new problems, that emerged in the process of transition from the centrally planned economic system to the market oriented system, is a need to upgrade the stage of livestock breeding development. Therefore, a certain part of the present policy research is dedicated to determining urgent issues, which become obstacles for development, finding possibilities and advantages for alleviation of development backwardness.
- *Taking into account climatic and development peculiarities of the country.* A pessimistic view, that due to low capacity for meeting market demand and overcoming natural and environmental difficulties, pastoral livestock breeding has exhausted its possibility for further existence, can

be observed lately. The study paid special attention this issue in order to prove that pastoral livestock breeding should exist in the future development of Mongolia without losing its economic and social capacity and its nature, to find hidden reserves for economic and social development of the sector on the basis of determining its development perspectives. In the last part of the research the author views that by correctly determining future development perspectives of pastoral livestock breeding and finding accurate justification for the policy, we have an opportunity to define special measures to be implemented further, and roles of the government and other parties and subjects in this frame.

- Problems of sustainable development should be reflected with ecologic orientation. One of the important components of development policy and strategy implemented by the Mongolian government is the issue of sustainable development. Attention is paid to strengthening of capacity of individuals engaged in livestock breeding, to providing them with long-standing development orientation by supporting them with the government policy, and implementing programs at national level. However, as sustainable development is viewed in general, without relating it to distinctive features of the sector, the researcher aimed to examine issues of sustainable development with regard to the issue of environment safety.
- To examine pastoral and intensive livestock breeding separately. As pastoral and intensive livestock breeding, which are the two main subsectors of Mongolian animal husbandry each have more distinctive features than common features between them, it is inappropriate to have the same kind of development policy and strategy for them. Along with preserving a unique system and composition of pastoral livestock breeding and nomadic civilization, there is an urgent need to implement a policy of bringing this sector in the mainstream of sustainable development and formulating the role of the government in more detail. It can be observed that developing settled and semi-settled forms of intensive livestock breeding is a correct trend.

## **1.2. HYPOTHESIS**

Common strategies used by individuals engaged in livestock breeding and conflicts between various market factors have different reasons, but with the present conditions of market economy relations, it is impossible to run livestock production with policies and coordination, which attempt to make up for passive position taken by private sector by government involvement. In order to upgrade the level of development of livestock breeding sector we need to solve the main question of coordinating the roles of the government, the private sector and sectors other than livestock breeding. Therefore, following issues were examined in the frame of the hypothesis suggested by the researcher:

- To develop ways and mechanisms for solving this problem by transferring some duties, taken up by the government and implemented by it directly, to the private sector and other subjects and decentralization.
- To accept actually that livestock production is an economic activity based on private property, and on this basis to direct and support the role of the government according to a special policy, to determine the level of its appropriate involvement.
- To change the present situation, when natural and biological resources, which are the basic source of the growth and development of livestock production are not used effectively, under joint or combined management.
- To accept that relating global concepts of development with unique features of Mongolia gives a real opportunity to view the present situation and future trends of livestock breeding in a wider frame and is a basis for formulating development policy.

## **1.3. SCOPE AND METHODOLOGY OF RESEARCH**

As it is described in the research task, the role of the government in development of livestock breeding should be viewed in three dimensions - in the past, present and future. In doing so, we need to analyze the reasons why implementation of the government role is unsatisfactory and relate it to possibilities of sharing and transferring some of its responsibilities with the private sector, NGO and donors. Work on study of concepts and views on measures taken by the government in livestock breeding sector included numerous issues such as legal environment, structure, organization, state participation and commitment, lessons from the past and present, social security, ecological situation and livelihood, and was conducted with management and executive government agencies, private sector, international organizations and other groups.

- Selection of objects of study and their number. Apart from conducting research in rural areas on the issue of the role of the government and collecting data, we had to prepare the survey of the press on certain policy directions and on achievements or problems with the role played by the government in livestock breeding sector.
- Figures, materials and data related to the livestock breeding policy and its implementation in the beginning and at the end of transition period, including the last 3-5 years, were collected and analyzed.
- According to a specially developed program, a study was carried out in 2 soums of each of 4 aimags, which represent objective present condition of natural environment and ecology in our country and modern economic development.
- The number of individuals and groups involved in discussions, interviews and questionnaires and other forms of study was determined according to

the methodology of conducting participatory research (B. Erdenebaatar, and others 2001).  $^2$ 

- Studies in rural areas followed the principle of representation of climatic zones and economic regions.
  - Uvs aimag (Tarialan, Baruun turuun soums) from the Western region, Dundgovi aimag (Undurshil, Ulziit soums) from Gobi and steppe zone, Arhangai aimag (Ih Tamir, Ulziit soums) from the Hangai region, Tuv aimag (Zaamar, Bornuur soums) from the Central region were selected for the study.
  - We worked with up to 20 individuals and groups from each soum. 76 herders, members of their families, local administration and experts were involved in the survey, of which women took up 22.3%, which gives a basis for estimating gender balance as normal.
  - Questionnaires were administered to over 60 individuals, the management of the local government, workers of banks and other service institutions operating in soums.
- *Research methodology*. Different methodologies were used for research and data processing and analysis, depending on the kind and unique features of research.
  - The matrix, which is a basic form of participatory research methodology and a method of ranking by score were used in determining and evaluating the main reasons for certain processes, their conditions, importance, position of various organizations and individuals, their responsibilities on the basis of answers, assessment and evaluation given by respondents in the course of study on livestock breeding issues.
  - Individual and group discussions were organized in order to evaluate responsibilities and participation of central and local administration, private sector and owners with regard to their responsibilities and capacity.
  - Quantitative and qualitative indicators, reflecting results of activities, implemented by the government and other sectors in livestock breeding development, were processed with use of the statistical analysis method.
  - 12 sets of questions for the questionnaire to be used in rural areas were developed and on the basis of results of a pilot survey in Uvs aimag in February 2004, amendments were made in order to merge some questions and make 8 sets of questions.

<sup>&</sup>lt;sup>2</sup> Erdenebaatar,B., Batjargal N, Amarsanaa B., 2001 Participatory method: Theoretical and practical justification and methodology of use. "Golden eyes", Ulaanbaatar

## PART TWO STUDY RESULTS AND POLICY ANALYSIS

There is no need to prove that issues of Mongolian livestock breeding development are a new subject that is being discussed only at present. On the contrary, development of livestock breeding has always been not only a national problem, but also an important issue of foreign relations. The reason why development of livestock breeding has been in the focus of attention from the government and producers is related to its substantial contribution to the national economy and its historic role.

The main direction of its development is provision of raw materials and produce of such quantity and quality as to meet demand and technological requirements of food processing industries and consumers. A fact that livestock breeding as a production sector itself has unfavorable effect on ecology and environment can not be left without notice. A well-thought strategy needs to be developed for persons engaged in livestock breeding to achieve their main goals and business objectives. In order to implement the strategy we need to change the situation when herders look for support from other parties and their participation, especially making an attempt to benefit from the government assistance and make them take their own responsibilities as owners of livestock and start running the business according to the market laws. The above mentioned does not mean complete refusal from the government participation, but means balancing responsibilities taken by both sides.

With regard to effect of and pressure from such numerous factors as great differences between ecological zones and economic regions in Mongolia, seasonal character of livestock production and its output, markets and weather conditions, the study objectives are divided into groups and shown separately in special sets as follows.

## PRESS REVIEW

# Analysis of the government policy, legal environment, program activities: achievements, experience, urgent issues and shortcomings.

We put an objective to analyze the government policy of developing livestock breeding and implementing it as a political and economic direction, so this part is completed in a form of an analytical survey in the below directions.

1. <u>The present condition of livestock breeding development</u>. Livestock breeding has been a basic source of livelihood for rural population, the main economic sector of the country and has had a decisive role as a sub-sector in agricultural sector. It is necessary to mention briefly that the government policy on livestock breeding formulated short- and long- term goals of the sector as strengthening its position at domestic and foreign markets, increasing and maintaining its social and economic role and significance.

A. Proof of positive effect and contribution of livestock breeding to agricultural production and its development. A fact that livestock breeding has been a dominant sector with principal significance and an important responsibility to provide raw

materials and produce to processing and light industries and providing urban and rural population with food and ingredients of livestock origin determines contribution of this sector and its role in the national economy. 80-87% of total agricultural produce is provided by livestock breeding (figure 1).

Although in the last years livestock breeding suffered substantial losses due to droughts and dzud, it has maintained it domineering position in total agricultural output. Its shows that livestock breeding plays an important role in agricultural sector and has a decisive role in economic life of the country, no matter whether the weather is favorable or natural disasters have happened.

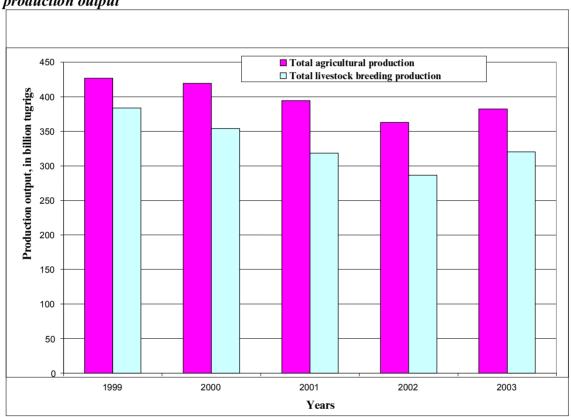


Figure 1. Share of livestock breeding production in total agricultural production output

#### Source: Statistical yearbook of Mongolia, 2003

Statistical data show that goat cashmere has remained one of the few main export products and there exists a good perspective for expanding meat export to some markets and bringing it to the level of strategic product, if incidents of contagious diseases of livestock can be stopped.

Due to weak economic capacity of domestic processing industry a situation, when income from export of livestock breeding production declines, is still in place. Great amounts of such important products as hides and skins, wool and cashmere, other raw materials are exported to China without processing, which serves their interests of artificially regulating prices on domestic and foreign markets and keeping their dominant position on them. Herders, producers of livestock breeding products, do not pay attention to quality and sanitary requirements to their produce and attempt to enter the market individually, on their own, which leads them to a situation when they become an easy prey to big buyers.

The only condition for establishing and maintaining economic and social value and significance of livestock breeding is productivity and efficiency of livestock. In this aspect a dependence of product output on changes in the number of livestock has not changed, so when the number of livestock increases, the output goes up, but with decrease of the number of livestock the output goes down. The situation in the last two years shows that although the number of livestock has declined substantially in the last 3-4 years of successive drought and dzud, there is an opportunity to reestablish the previous number of livestock, if the weather is favorable.

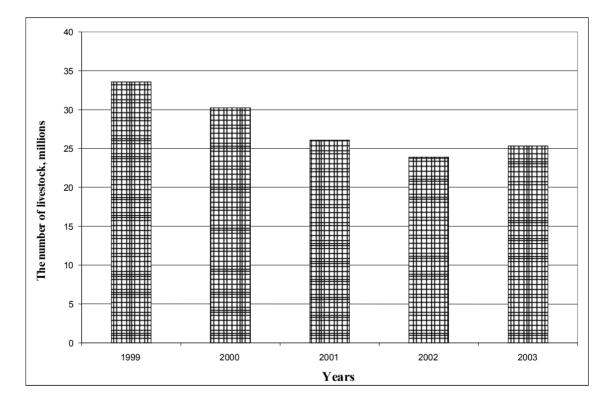


Figure 2. Growth of the livestock number, 199-2003

#### Source: Statistical yearbook of Mongolia, 2003

Livestock breeding remains the main source for meeting demand of population for food and providing processing industry with raw materials, and it is an important export sector. According to the national statistical data, 80-90% of food products of animal origin per capita is provided by domestic production. Raw materials output by livestock breeding sector, which provides employment for over 40% of total population at constant or subsistence level, follows mining, knitwear industries, processed cashmere, hides and skins production by its total financial result.

The role played by the government in supporting development of livestock breeding in order to increase its contribution to economic and social progress, and its effect varies due to diverse reasons and conditions. For instance,

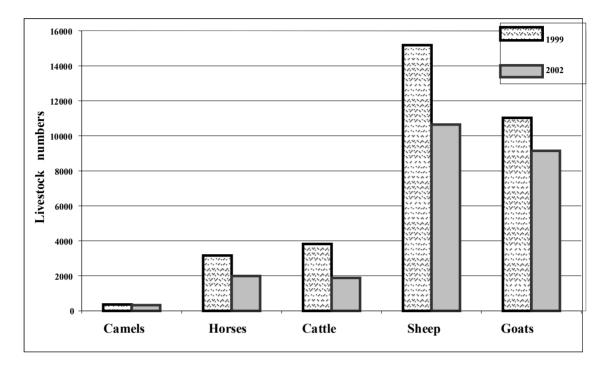
- 1. There is lack of well-coordinated policy to provide favorable legal and operational environment for activities, but attempts of the central and local administration to directly intervene and instruct are widespread.
- 2. Initiatives, aspiration and effort on improving their activities and realizing their responsibilities have been insufficient at the middle level government management and herders' level. However, attempts to transfer all responsibilities to the government instead of supporting it and cooperating with it have not ceased.
- 3. Support of capital investment in livestock breeding by representatives of private sector and other economic sectors is not satisfactory.
- 4. No substantial measures have been taken to decentralize and strengthen horizontal coordination by transferring fully or partly responsibilities of the government in livestock breeding development to the private sector.
- 5. The role and participation of the government was not directed towards support of effective cooperation and stable trade and exchange between herders.
- 6. Strategies and effective ways to support persons and groups engaged in livestock breeding in their attempts to introduce complex measures on thrifty use of resources, environment- friendly technologies and equipment, to bring together such efforts have not yet been developed or implemented.
- 7. There is still a trend to regard provision of implementation of present laws and regulations as a duty of the central and local government agencies at all levels, with them trying to take all power to themselves and act as if they were doing all the work.
- 8. There is a lack of ways to implement new policies and activities in order to encourage active participation of private sector and community and lead them in more market-oriented direction. Due to these numerous reasons the role and participation of the government is unstable and such abnormal issues as improper allocation of tax payers' money for benefit of herders, who are private owners, interest in instructing and commanding, using methods of control from the top level in administrative form are still observed, when addressing herders' problems.

**B.** Negative effect of the livestock breeding sector in agriculture. As a basic economic sector, livestock breeding has had a defining role in economic and social development of the country. A conclusion was made that slow-down of the GDP growth in the last 3-4 years is due to the sudden long-term decline in livestock breeding production / Statistical Yearbook of Mongolia, 2003/. As weather conditions in 1999-2002 were extremely unfavorable to agricultural development, it slowed down development of other sectors. Situation in livestock breeding has contributed negatively to the above mentioned situation.

In order to answer the question about the proof that livestock breeding slowed down development of the whole agricultural sector, it is necessary to make some conclusions on the basis of some official statistics.

A fact that the country faced droughts and dzud, which continued for several years, when government agencies and institutions at all levels, other organizations, herders and other social groups were extremely unprepared for disaster and did not take any measures to strengthen their capacity, led to sharp increase in number of perished livestock. These events caused sharp decline in the growth of livestock and the situation in livestock breeding took a step back in quality and quantity. The system of prevention from natural disasters with its militarized structure and organization proved incapable of taking effective measures in times, when all conditions for possibility of serious risks and warning signs were in place as well as in times, when natural disasters took place. As there was a lot of talk about the government being able to take necessary measures in case of droughts, dzud and other natural and climatic disasters, and some temporary measures that were taken were promoted greatly, it gave an impression that livestock breeding is guaranteed a sure protection from the government, but on the other hand, some signs of psychological impoverishment of the society, such as distrust and despair have been observed.

Figure 3. Changes in share of different kinds of livestock in total herd, in thousand animals, 1999 in comparison with 2002



Source: Statistical yearbook of Mongolia, 2003

When the last year of successive years of natural disasters (2002) is compared to the year before them (1999), it can be seen that shares of different kinds of livestock in total herd have changed totally. While the number of goats has declined only slightly, the loss of horses, cattle and sheep was the greatest. When the share of different kinds of animals in the herd changes, livestock production output and herder household income change as well. During the recent survey herders, who lost the most animals during dzud, noted that goats are relatively more profitable than other livestock, as other livestock is used mostly for household consumption and rarely for sale. As a great number of cattle and horses perished, herders "had no milk to put in the tea and no horse to go after the herd", which reflects the general picture of harmful consequences of dzud in 1999-2002.

Although the number of livestock will grow again if the weather is favorable and dzud does not happen, much time is needed for the herd to return back to its appropriate age and composition structure. If statistical data on kinds of livestock from 1999 (the year with the highest number of livestock, before droughts and dzud) and from 2002 (the last year in successive years of droughts and dzud) are compared and changes in the share of livestock of different kinds are examined (Figure 4), it can be seen that despite dzud the number of goats has grown by 5.4% in comparison to 1999, but the number of other livestock declined by 0.8-4.5%. If in 1999 the ratio of bog (small) / bod (large) livestock (sheep, goats vs. cattle, horses, camels) was 1:3.57, in 2002 it became 1:4.8. The

traditional ratio of sheep vs. goats as 1:3 has changed and became almost equal as 1 (1:0.85).

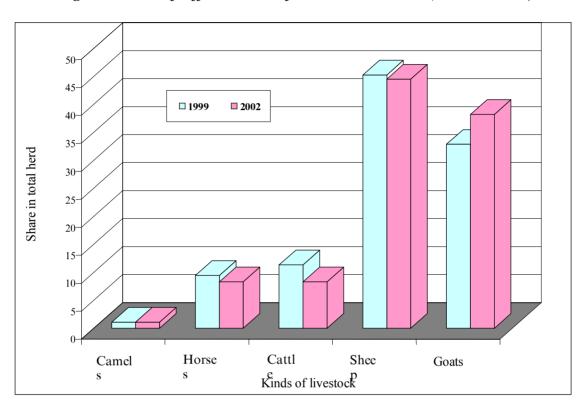


Figure 4. Share of different kinds of livestock in the herd (1999 and 2002)

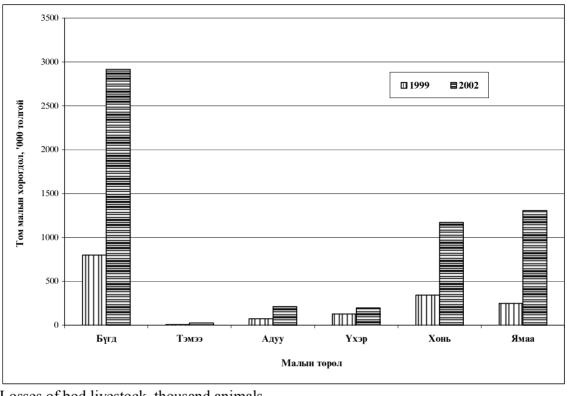
Source: Statistical yearbook of Mongolia, 2003

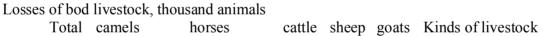
It can be seen from these figures that the number of bod animals /cattle, horses, camels/, that have slow reproduction, has declined, which leads to a conclusion that quite a long term is needed for the composition of the herd in Mongolia to reach the appropriate level. Since the growth of the number of bod livestock is uneven, it is necessary to mention that there are limited opportunities for continuous increase of its share in the herd.

At the present, when we face decline of natural resources such as rapid desertification, drying up, overgrazing and deterioration of pastures and hay fields, decline of crop yield and productivity, shortage of water sources, continuous growth of the goat herd can become a "dangerous" phenomenon, leading to harmful consequences for environment.

There are still discussions and explanations from different points of view for decline of the number of livestock due to droughts and dzud, which were the most severe in the last decades. It is necessary to examine this issue and make an accurate conclusion in order to develop appropriate management of risks that can affect the growth of livestock.

Figure 5. Losses of bod livestock (1999 and 2002)





#### Source: Statistical yearbook of Mongolia, 2003

In comparison to 1999, losses of cattle increased 3.5 times and the amount of losses varies by the kind of livestock. For instance, the loss of camels increased 3.7 times, the loss of horses- 2.9 times, that of cattle-1.54 times, that of sheep-3.36 times, and the loss of goats -5.26 times. In 2001-2002 the loss of bod livestock was higher than in other years. A fact, that enormous assistance from donors and measures taken by the government did not contribute substantially to reduction of losses in 2000-2001, is a sad truth. In the course of the last year and a half, weather conditions have been relatively favorable and pastures, hay yield, sufficiency of water have improved. However, it is necessary to pay attention to the fact, that herders and livestock are still vulnerable to different risks, and there is still a possibility of loosing a large number of livestock.

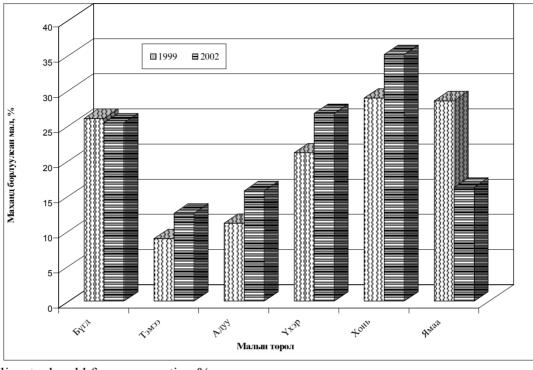
During the study it was observed that main reasons for large loss of animals are related to the fact that commitment and effort of herders to protect their livestock, to use it appropriately as their source of livelihood were unsatisfactory in many aspects. This was obvious from views and opinions of many persons who made proper conclusions on this issue. In other words, in the last years the government and the donors spent enormous resources for the "great loss of livestock". There are no objective calculations of the amount of finances and other resources allocated from the state budget and other sources and to what extent it helped to reduce loss of livestock. As evaluation of risks to livestock breeding has not been made objectively, it is difficult to say what role was played by the government in an attempt to reduce livestock losses by filling in the vacant place created due to irresponsible activities of livestock owners, who did not care about their own livestock, and their careless attitude and what were the results of the government' s activity.

At the present conditions, when the herders attempt to transfer the responsibilities to others, free themselves from risks and make a gain, the government, internal and external donors had sometimes to directly intervene in some issues. However, this situation settled down the herders even more and created a false sense of safety, which still exists today at the level of herders and middle management. This is a proof of their inability to use effectively favorable or unfavorable conditions. That is why changing mentality of herders, who have not yet taken full responsibility as livestock owners, strengthening their capacity to such extent that they will be able to carry on the future development of livestock breeding, is a problem that the government should pay attention to in the first place.

One of important forms to make livestock a source of income and livelihood and a way to enter it into economic turnover is procurement of meat and slaughtering of livestock for meat. This indicator is expressed by the number of slaughtered animals and livestock sold alive. In order to determine how losses of livestock and changes in the structure of herd affected meat consumption, we compared the total number of animals and the number of animals slaughtered for consumption. Although the number of slaughtered and consumed livestock has not changed in general, indicators for different kinds of livestock have been quite different.

Interestingly, although the number of livestock has decreased every year and has reduced by over 11 million in three years, the number of livestock used for consumption has not declined. Thus, an interesting phenomenon is observed, when the number of livestock sold for domestic consumption and the number of exported livestock is not connected to the growth of the total number of livestock, especially to growth of different kinds of livestock. It shows that the share of meat in food supply of population has not changed. Therefore, it is time to think about refusing from the policy and strategy of increasing meat production by increasing the number of livestock, but boost the amount of meat output from one animal. It is important to find a solution to the abovementioned process with negative trends contradicting each other, in other words, to take measures to produce and supply meat of high quality and in such amount as to meet demand of domestic and external markets and clarify the role of the government in that process.

## Figure 6. The number of livestock sold and slaughtered for consumption, in number and percent (1999,2002)



livestock sold for consumption,% total camels horses cattle sheep goats kinds of livestock **Source: Statistical yearbook of Mongolia, 2003** 

Sharp decline in number of goats slaughtered for meat can be directly related to and explained by a fact that goats are not slaughtered for household consumption or to supply meat to the market, moreover, herders strive to increase their number as it is considered an important source of income (de facto the cashmere income is an unexpected income gain option). Expenditures for bod livestock with slow reproduction rose sharply, which is related to decline of the number of livestock and is a negative trend. It shows inability of herders to carry out such tasks, that can be controlled and coordinated without any difficulty.

As for the role and contribution of livestock breeding sector in national development and the agricultural sector, its contribution to the economy and the society in whole, it can be concluded that it is not able to become a considerable factor for support of growth of national economy due to its vulnerability to effects of natural and human factors.

*C. Management of pastures, hay fields and other natural resources.* Significance of pastures that are an irreplaceable source of fodder reserve for livestock with unique time and spatial distribution and availability, and other resources at pastures have increased even more in comparison to the previous period. In the 2000 the territory of natural pastures in Mongolia was estimated as equal to 1.27 million hectares, their fodder resources - as equal to 46.5 million tons of hay, and their ecological capacity - as sufficient for 86 million of livestock transferred in bog /i.e. sheep and goats/<sup>3</sup>(Nyambat, in 2004, had an estimate of 56 million). Tserendash and others /2003/ view that pastures of Mongolia have a capacity to provide all livestock with required protein and energy and emphasize a vital importance of introducing its organization on a scientific basis. They suggested to increase the pasture load up to 90 million sheep and goats in favorable years and to decrease it down to 57 million in years with dzud. Unfortunately, they did not offer a suggestion on the ways of decreasing the number of livestock by 33 million sheep and goats in one year depending on the weather conditions of the year. So, the objective contents of the above calculations are not clear. It is necessary to notice that many sources emphasize importance of upgrading not only coordination, but also management in case weather and other conditions decline. As the Land Bureau reported, nearly 90% of pastures are overgrazed or deteriorated to some extent and the amount of eroded and deteriorated pastures has increased in the last years<sup>4</sup>.

Herders, who use the pastures, evaluate the condition of pastures differently from Tserendash and others /2003/. During the survey conducted recently with assistance from the Mongolian Open Forum in selected aimags, representing all economic regions<sup>5</sup>, half of herders- survey participants reported insufficiency of pastures in both warm and cold seasons, which shows that researchers' calculations contradict the real life situation. It seems necessary to examine in detail insufficiency of pastures, decline of pasture yield and overgrazing reported by herders. In our opinion, this illustrates shortage of fodder resources and its inability to satisfy livestock needs. That is why taking complex measures in order to increase the pasture yield and productivity, to adjust seasonal capacity of pastures is an urgent responsibility of the government.

First of all, introduction of pasture management directed towards protection of natural pastures, reduction of deterioration and erosion caused by natural and other than natural factors, improvement of pastures with use of biological and specially designed methods has an important significance. It is necessary to stop attempts to engage in livestock breeding placing hopes only for the pasture yield, and bring to an end hopes that such possibilities exist, to solve the problem of effective seasonal use of pastures along with taking measures on increasing fodder production and hay preparation. The government should implement a policy of introducing management which coordinates the number of livestock not on the basis of pastures, but on supply of prepared hay and fodder. It is time to change legal provisions of the presently followed Law on Land, which allows common use of pastures without any coordination or control, to create legal and other coordination in order to change this situation, which leads to selfish attitudes in use of pastures and to start joint combined management, to direct efforts of central and local administration, herders and individuals with livestock, private sector and community organizations, donors in this direction.

<sup>&</sup>lt;sup>3</sup> Tserendash, S., Tumurjav M., Gombosuren Ch., Land, pasture and livestock, UB / in Mongolian/

<sup>&</sup>lt;sup>4</sup> Sited, the World Bank 2003, Land Resource and Land Resource Management

<sup>&</sup>lt;sup>5</sup> Open Forum Society, 2004. The Future of Mongolian Livestock Sector. Report of Studies Undertaken /in Mongolian /

Detailed definition and separation of duties and responsibilities of fundamental and supplementary institutions in livestock production, individuals and other subjects, their coordination; development of a mechanism for mobilizing their assets, resources and especially moral strength; its introduction and implementation at all levels may be the most vital and the only duty of the government. In order to do that it is necessary to improve legal environment, to pay attention to making amendments on different issues in the present and newly developed laws and regulations, and by implementing them steadily to ensure success and progress of activities implemented by the government and its partner organizations. In other words, herders, individuals with livestock and other subjects should be aware of all opportunities, provided by the government by establishing appropriate legal environment and creating a mechanism of action, and also use their own resources for making progress in livestock breeding production.

**D.** Fodder and fodder procurement. As we mentioned earlier, due to such major factors as negative effect of climate changes and global warming and inappropriate human activities, greed and careless attitudes towards nature, the plant composition and yield of natural pastures has declined, pastures are overgrazed and eroded, fodder resources are declining, which has become a widespread phenomenon. It is necessary to admit that despite awareness of such negative situation, no substantial measures have been taken or thought of until the present.

Although in the last years there are some good news of increasing volume of fodder production, this growth has not yet reached the level, when it can seriously affect livestock losses during drought and dzud. As natural hay makes up 65-79% of fodder prepared at national level, it shows that livestock breeding still directly depends on pastures and hay and fodder prepared by livestock owners from natural hayfields.

Not only general quantitative indicators of fodder procurement, but also the issue of fodder quality should be one of the main measurements of procurement. As herders made numerous complains about low quality of hay and fodder prepared for the state and local aimag fodder reserves and for sale, we need to look into this issue.

Tuble 1. Total loader production, in thousand tones						
Kinds of fodder		1999	2000	2001	2002	
Hay from natural hay fields		715.2	698.4	831.4	767.0	
Fodder, produced industrially*		14.3	21.8	24.5	9.0	
Home-made fodder		13.0	11.9	20.1	26.9	
Total	Total, in tons **	343.6	331.9	418.5	384.5	
volume of	Per one sheep***,kg/ton	4.77	5.33	8.36	8.47	
fodder <sup>1</sup>						

 Table 1. Total fodder production, in thousand tones

#### Source: Statistical yearbook of Mongolia, 2003

Note: <sup>1</sup>-except for mineralized fodder, \*- transferred into straw from crops, \*\*-unit of fodder, per one sheep

The amount of fodder per one sheep still remains very low, if livestock is fed every day, it can last for 4-7 days, if livestock is herd at pastures and fodder is used only as

supplementary feed, it can last from 20- 34 days (the amount of fodder required for one sheep per year is 4 metric centners- 400 kg<sup>6</sup>). Taking into account a fact that livestock, herd at pastures, is underfed for 140-180 days in severe weather conditions during winter and spring, only 1/25 of required total supplementary feed is prepared at present.

It is difficult to determine exactly the amount of hay and fodder prepared by herders and for sale, and it is impossible to calculate on this basis total fodder supply. For example, results of the survey, conducted in 2000-2001 in Uvs and Dundgovi aimags showed that a bundle of hay transported from the central district weighed not 25 kg, as it should according to standards, but only 16-21 kg<sup>7</sup>. As this situation is observed in many places, it is difficult to believe that estimates of fodder production and feed supply are correct.

If a large amount of high quality fodder is prepared and provided for total herd, we can save resources and improve development, as high quality hay and industrial fodder is out of comparison with wilted grass, cut late in autumn and dry grass from the previous year fed to animals in winter and spring. We need to make a conclusion that an issue of improving quality of hay and fodder can be solved only on a basis of detailed calculations with use of effective technologies. Development of effective mechanisms and forms of pasture use and management in order to introduce them in practice, development and implementation of a policy on support of livestock fodder production and supply studies, their piloting together with all stakeholders is another task for the government. It is necessary to restore plant composition and vegetation of natural pastures using new technologies with active participation of herders, local businesses and other interested parties, utilizing their resources. As producing high quality fodder is a labor-intensive and costly work, it should not be wasted and fed to livestock without any measure, so we need to improve and change livestock feeding methods, too.

*E. Unit productivity.* There is lack of statistics and other information required for study of changes, increase or decrease of productivity per unit or amount of basic products received from one animal. However, the present government paid attention to increasing productivity per unit and since the end of 2000 started implementation of several National Programs in field of increasing productivity of herd. At present, there are no tangible results from these activities.

Kinds of products	1999	2002	
Beef, in kg	4.55	5.34	
Mutton/goat flesh, in kg	5.13	5.03	
Sheep wool, in grams	1375	1682	
Cashmere, in grams	332	352	

Source: Statistical yearbook of Mongolia, 2003

<sup>&</sup>lt;sup>6</sup> See Nyambat L., 2004

<sup>&</sup>lt;sup>7</sup> FAO/TCP/MON 0066 "National Risk Management Strategy for Mongolia", 2002

Although it is difficult to believe that productivity per unit has increased during years of droughts and dzud, official statistics report it. This trend should be examined not from the aspect of increase of productivity and total produce, but from the aspect of reliability of statistics and other data. Livestock does not fatten during dzud, its growth does not intensify, its number does not grow. It can be seen how local professional and statistical agencies and institutions, which report such data, distort information on development of livestock breeding. Records of livestock breeding and selection work are not kept by herders or by bags and soums, the amount of produce received from livestock is not measured, which proves the backwardness of present situation. Therefore, increasing the role of local administration and professional institutions in monitoring livestock productivity by improving professional control and assessment should be an important part of the future reform in the government policy.

Expecting substantial changes and progress in livestock fodder supply as a result of implementation of development programs and their activities will make us lose time and will be an attempt to pacify ourselves. We need to pay special attention to increasing involvement of herders, all individuals with livestock, businesses and community organizations in fodder procurement, especially in finding new resources to use as fodder. Businesses should pay attention not only to fodder production, but to production and sale of ingredients or raw materials required for fodder production, and the government should support them. As almost nothing has been done on this issue, if a correct policy and activities are implemented by the government on the basis of participation, there are possibilities for recovery of fodder production on the basis of local resources.

F. Livestock breeding work, livestock health. Livestock breeding and selection work is one of activities, which has been constantly criticized for different mistakes and ineffectiveness, and in the last years became almost non-existent. Livestock health services, which received substantial assistance from the state budget as well as benefited from projects and other activities implemented by donors, have not improved up to the present. Contagious diseases of livestock, which are on the list of the most dangerous at international level and which can lead to such unfavorable economic consequences as ban on export of livestock products, even those diseases, which were announced to be fully eliminated, started emerging again. Therefore, in order to increase export of raw materials and livestock products, to expand exchange of breeding materials, the government should play an important role in taking some decisive measures in this direction in order to improve livestock health. Everyone rested content after developing several programs on improving livestock breeds and selection, then this works were forgotten and measures taken did not achieve notable results. The present condition of livestock breeding can be described as follows: state institutions in charge of livestock health and selection work doing nothing; the private sector going with the tide, initiating nothing; numerous local breeds, breeding and selection groups, elite herds reaching the brink of extinction. Loss of great number of livestock due to contagious diseases, especially parasitic ones, can be defined as a second big risk to livestock breeding<sup>8</sup>.

<sup>&</sup>lt;sup>8</sup> Soum Risk Management Planning Field Survey, 2003-2004 LPS/CPR "Pastoral risk management planning "

Hopes that livestock health protection problems will be solved by means of privatization of veterinary services are almost gone. Veterinarians are not able to reach herders with livestock health services, they do not cooperate with herders and attempt to blame the herders on that failure, because herders are not solvent. It is time to pay attention to the fact that elite herds, and the selected core livestock with improved breeds have been lost. a basis for selection work is destroyed and achievements and results of many years of work are lost, which causes an obstacle to implementation of livestock breeding intensification policy by increasing productivity per one animal. An initiative to improve their herd and have livestock of good breed with high capacity for reproduction is not observed among herders and experts on selection as well as professional institutions are not doing well their work on providing professional management and consultancy to herders. Many issues such as insufficient organization of work on improving livestock health and selection, lack of cooperation between herders and professional institutions, lack of selection basis and participation of private sector leads to a conclusion that in the near future livestock health and selection work are not going to change notably. The government should make a serious conclusion on that situation.

*G. Processing of livestock products.* Methods and technologies of processing raw materials and products of animal origin are at level of home production, manual labor is widespread, it is far from using achievements of modern science, technologies, equipment and information. Herders are not concerned about producing high quality, pure, safe food and products, which meet market and consumer demand, and their capacity is low. Market orientation has not yet taken place in livestock breeding sector, herders lack business mentality and entrepreneurship, business exchange among them is not taking place, all of which affects the market, and becomes an obstacle for perceiving changes in and development of market and demand.

The present situation, when persons engaged in livestock breeding lack initiatives in establishing cooperation with raw materials and products processing industries, and herders are not valued, can not bring any positive results in the future. This situation can become an obstacle for building processing capacity in rural areas. As for many years one side has been offering products without any processing, classification and differentiation and the other side has purchased them at low price and exported them in large quantities as a mediator, it created a false feeling of contentment that each one has gained. However, everyone would agree, that this situation became an obstacle for further development and it is an urgent issue for the government to take appropriate measures to change it. It will be unreasonable to say that everything remains as it was, since there are some trends for development of certain activities among herders such as production of non-traditional dairy products, engaging in small enterprises on production of felt and wooden goods. The government together with the private sector and donors should support initiatives and attempts to engage in various production and livestock breeding in rural areas, assist them in further development, promote those which are working successfully at present, and direct its policies towards developing influential, sustainable, profitable business at local level.

H. Herders' livelihood. Obviously, the final goal of different activities conducted by the government such as development and intensification of livestock breeding, stabilization of business environment is directed towards improvement of herders' livelihood. As 43%<sup>9</sup> of over 850 thousand persons defined as poor live in the Mongolian countryside, improvement of living standards of rural population is an important problem for the government. The simplest example to confirm the above mentioned statement about declining livelihood of herders in rural areas is the number of livestock per herder household. According to official statistics, 85% of total herder households have less than 200 livestock, which is not only a reason for slow improvement of living standards, but also leads to limited business activities in rural areas and domination of subsistence economy. No attempt is observed to find employment other than herding or create other additional sources of income. Due to lack of other than herding source of livelihood, vulnerability to climatic, economic and market factors, lack of assets and material savings to reduce risks, trends for decline of rural poverty are doubtful. Moreover, possibilities for creation of temporary work places in rural areas and in livestock breeding sector are limited. As in many Asian countries, as income level of persons engaged in livestock breeding does not improve notably, their income is unstable, demand for livestock produce directly depends on growth of national economy<sup>10</sup>, so the problem of herders' livelihood is of concern in other countries, too.

Questions that arise from this analytical survey, which attempts to examine many problems such as the present condition of livestock breeding, its future trends, responsibilities of the government, private sector, citizen and donors, their participation, and possible answers to these questions should be discussed seriously. Speaking frankly, livestock breeding sector is very weak with regard to its economic efficiency, significance, capacity to keep and protect its social value. A question why, due to what conditions and reasons the situation in livestock breeding is evaluated so negatively, arises.

First of all, we need to examine critically achievements and shortcomings of that sector at present times, and to evaluate possibilities for further development of the main economic sector of our country from the aspect of economic and social progress concept. For instance, (i) it is extremely important to eliminate persistent errors and shortcomings in the frame of administrative and industrial system in large areas, to fight bureaucracy, lack of initiative and self-contentment, (ii) to link achievements and progress of the sector at organizational, industrial and technological level, to incorporate it into economic and management network of the sector. In general, we need to determine fundamental issues of livestock breeding development on the basis of a proper concept of the future, to define correctly a strategy and tactics for its implementation, to set criteria for expected results, to establish links between other sectors and within the sector itself in the market

<sup>&</sup>lt;sup>9</sup> Tsedendambaa L., Rinchinbazar R., 2003. Problems of Poverty in Economic Regions. In: Studies on Development of Mongolia. National Development institute.

<sup>&</sup>lt;sup>10</sup> Jeffrey D. Fine, Ralph G. Lattimore, 1982. Livestock in Asia: issues and policies. IDRC, Ottawa, Canada.

and business frame. The present situation, when the parties lack cooperation, do not estimate and accept each other, causes the most obstacles.

Therefore, the above mentioned objectives should be the main orientation of livestock breeding development, and implementing a far-sighted, progressive development policy and activities on this basis should be the responsibility of the government in livestock breeding development. Paying special attention to overcoming difficulties; quick solution of urgent problems; implementation of activities in clusters, with joint coordination, in stages; evaluation by development criteria at appropriate stages; maintaining the achieved quality and results is an indivisible part of the future policy and the basic direction for the government, private and community organizations, individuals, cooperating with it.

- 1. To examine in detail policy concepts of the central and local government agencies reflected in programs and activities implemented at present; to study programs and activities, which are being implemented at present and those, planned to realize in the future.
- 2. To upgrade legal environment for rural development and resolve the problem of upgrading legal coordination as an indivisible part of the national and regional development strategy.
- 3. To increase participation of private sector and all social groups in developing policy of the state organizations and making decisions at all levels, on this basis to define their responsibilities precisely; to share some responsibilities in certain directions, to use in full measure possibilities to transfer responsibilities temporarily or evermore.
- 4. To strengthen capacity of local administrative organizations i.e. middle and low levels to implement activities and realize principles of selfgovernment; to decentralize and promote openness and transparency.
- 5. To remove the strategy of livestock breeding development from the frame of sector policy and include it in the national policy of rural development, to link it with policies of other sectors.
- 6. To separate responsibilities and duties of different government agencies and private sector/groups on livestock breeding issues, to develop a mechanism for coordination at the national and sector development and operational levels.
- 7. To support interests of individuals and communities such as herders, herder groups, individuals, community organizations that strive to improve management of livestock breeding, which is a complex renewable resource used on need/demand from the national economy and herders' livelihood; to mobilize the community for active involvement in this issue with new concepts, new development policies and strategies.
- 8. To encourage larger participation of private enterprises, commercial institutions and other subjects (professional associations, community organizations, interested groups, informal groups) in livestock breeding development.

- 9. To establish the most effective methods and mechanisms at national level for realization of the supportive role of the government and ways of its involvement in livestock production, its marketing, financing, disaster management.
- 10. To provide services on professional education, training on the basis of special programs, technical and technological consultancy to persons engaged in livestock breeding, to exchange experience and effective methods of work, to introduce them at local level.
- 11. To implement resource management and monitoring in an environmentfriendly way, to include the issue of sustainable use of natural biological resources and resources, produced as a result of human activities into organizational and production management of livestock breeding and realize it in complex.
- 12. To support an issue of expanding the frame of cooperation with the private sector in direction of processing in order to increase the value of produce and advanced processing of high quality raw materials and other products.

## **PART THREE**

## ACTIVITIES IMPLEMENTED BY THE GOVERNMENT IN LIVESTOCK BREEDING SECTOR: THEIR RESULTS AND EFFICIENCY

#### A. DEVELOPMENT PERSPECTIVES OF LIVESTOCK BREEDING, THE ROLE AND INVOLVEMENT OF THE GOVERNMENT AND ITS PARTNERS

The aim of this part is to analyze different activities implemented in the past and present in livestock breeding sector at national level in the frame of their objectives, real implementation and problems to be aware of; activities of different political organizations and economic groups in the aspect of their outcomes, the level achieved and implementation. Firstly, we made an attempt to define the role and responsibility of the government and other subjects in the frame of livestock breeding development policy and activities. On the basis of a careful study of documents approved by such subjects as the State Ih Hural, the President and the Government, who have the authority to enact laws and make decisions, we selected "The government policy on agriculture " to use as a basic document. The main directions and formulas of policies related to livestock breeding are as follows:

- 1. In determining the main directions of the government policy on food production and agriculture ... to intensify and develop agriculture in the frame of the regional development concept, to provide growth of production, to increase its effectiveness, ...to direct activities of the government, individuals and legal subjects in protecting agriculture from any natural risks, in improving conditions for work and life in rural areas.
- 2. The goals of the government policy are directed towards creating a favorable environment for business; increasing capacity and efficiency of production; providing sustainable development of livestock breeding, crop cultivation and food industry; producing ecologically pure, safe food products and improving their quality and accessibility.
- 3. The objectives of the government policy were formulated as follows: to increase production of the main food and agricultural products, to meet demand for meat, milk, flour, potatoes and vegetables, to reduce import and increase export.
- 4. The main concept of the policy is based on improvement of legal environment in food and agricultural sector; reforms in management, organization and structure; on taking all necessary measures for their harmonization.

The main directions of activities to be implemented by the state, the private sector, individuals, national and foreign institutions in the frame of the government policy are defined as follows:

- 1. To intensify production by using appropriately natural, economic, financial and human resources; to produce safe products and raw materials that meet demand of population for food and industries for raw materials by increasing effectiveness, quality and competitiveness of products; to provide sustainable development of livestock breeding, crop cultivation and food industry.
- 2. To adopt effective, reliable forms of pastoral and intensive livestock breeding and crop cultivation, adapted to natural and climatic changes and based on legal subjects of all forms of ownership and entities, capable of full self-support as main models of agricultural development.
- 3. To support development of agricultural industry and technologies, which are low -risk, environment- friendly and produce ecologically pure products.
- 4. To support development of agricultural and livestock breeding sector with a flexible policy on taxes, loans, investment and foreign trade.
- 5. To upgrade legal environment in order to increase productivity and efficiency of production, to develop farming and intensive livestock breeding, to upgrade insurance system in order to protect livestock and crop cultivation from natural disasters.
- 6. To upgrade and reform livestock breeding and crop cultivation technologies, to train human resources.
- 7. To support and cooperate with NGO's that provide assistance in this sector.
- 8. To support in all aspects long-term capital investment in livestock breeding by donors and national investors, to improve legal environment for investment and provide other required conditions.
- 9. To stimulate activities of banks and non-banking financial institutions in rural areas, to improve their services.
- 10. To increase the number of work places in rural areas, to improve living standards of households, to use effectively internal resources and external help and assistance in order to increase household income.
- 11. To teach traditional methods of agricultural work, to organize work on introduction of new progressive technologies using all forms and methods of training.

Justification, principles and objectives of the above-mentioned policy give an opportunity to define duties and responsibilities of the state, private sector and other legal subjects in the frame of the concept and policy of agricultural sector development and to interpret them in new terms and contents.

1. To create two different mechanisms: firstly, one to coordinate responsibilities and activities of the state and other legal subjects in the frame of the state policy; secondly, the government and other legal subjects themselves should coordinate their own activities and duties.

- 2. To intensify development of agriculture (to develop pastoral as well as intensive livestock breeding).
- 3. To provide sustainable development of the sector
- 4. To strengthen the capacity of the sector and increase its productivity
- 5. To produce ecologically pure, safe raw materials and products
- 6. To protect ecological systems and natural resources, to use them with appropriate management
- 7. To reform livestock breeding technology, to introduce effective methods and technologies
- 8. To improve processing, packaging, storage and protection of raw materials and products of livestock origin
- 9. To provide persons, engaged in livestock breeding and other rural population with financial services
- 10. To make the objective of meeting demand for some exported food products with domestic industrial capacity a direction of livestock breeding development
- 11. To improve the legal environment, the structure, organization and operations
- 12. To increase the market capacity and competitiveness of individuals engaged in livestock breeding

A purpose of providing sustainable development of livestock breeding mentioned in this document is raising some doubts. The results of the previous analysis on existence of the basis for sustainable development of livestock breeding in our country show that at the present level of livestock breeding development and its perspectives for the nearest decade it has not yet entered the road to sustainable development as the economic sector in whole, so there is little justification to say that stable course and expansion of development will be provided. First of all work on recovery of the sector and reaching the level of certain criteria for stabilization of development should be thought of.

#### **B.** CONCEPTUAL ISSUES OF REALIZATION OF THE NEWLY FORMULATED ROLE OF THE GOVERNMENT IN MAIN PROBLEMS OF LIVESTOCK BREEDING DEVELOPMENT AND THEIR INTERPRETATION

While studying different printed sources on development issues, we noticed that development concepts and issues in the state policy and action programs of the government are reflected in a too general, common way, in other words, they contain many versions of the policy and actions, but lack formulation of the new ways of development. This situation leads to negative effect on linking the development concept with the present objective situation in Mongolian livestock breeding, on formulating future trends, on selecting alternatives for elements of the fundamental policy, planning methods of implementation with regard to specific features of activities. The reason for emphasizing the importance of accurate selection and reflection of new trends and versions of development is a need for coordinating the national policies with global development trends, and their significance in receiving assistance from and implementing joint activities with international organizations and donors.

**A. Fundamental issues.** At present livestock breeding is viewed and evaluated from the point of view of different concepts and in relation to different aspects of social life as an important sector, which determines economic and social development in developing countries. The livestock breeding sector is one of sectors that can provide wide opportunities and an important orientation for action and development in defining the role and involvement of the government, individuals, legal subjects, and community organizations in development process. On the basis of common justifications used in other economic and social sectors, fundamental directions of livestock breeding development policy can be determined by following values:

- Its economic significance defined by capacity to implement multilateral activities and actions,
- Its social significance, as persons, who understand the true nature of livestock breeding and value its future, are engaged in it,
- As a vital link and main criteria for existence of environment-friendly production, ecological safety and livestock breeding,
- Its moral significance, as social assets of herders' relations with biological resources,
- As an economic form of maintaining traditions, developed by numerous generations of herders in the course of many centuries
- As an economic sector which gives new opportunities and new chances for social development and progress

Numerous sources and statistics, historic as well as modern, show that livestock breeding is one of the few economic sectors with a capacity to provide the source of livelihood for the majority of rural population. In our country livestock production is developed all over the territory and that is why the definition of Mongolia as a livestock breeding country is a true one. Engaging in livestock breeding gives an opportunity to provide not only an individual him/herself, but members of their household with regular and temporary time-consuming work, based on detailed division of labor. Direct and indirect dependence of living standards of a herder household and its wealth on income and profit, gained from livestock breeding business, is a specific feature of the present time.

**B. Definition and significance.** If economic and social definition of livestock breeding production in Mongolia is examined in detail, there are many important aspects and contents to it. It is:

- A complex political and economic policy
- A definition of society (social strata, groups etc)
- A sector providing highly desired employment and work places
- A source of livelihood and life for a large group of society
- A field of alternative choice for livelihood
- A reliable and economical method for direct relations with natural resources and their use
- A measure of social status and position of a person engaged in it

- A set of development issues, which requires pluralistic views and discussion
- A complex of infrastructure and a live source, which constantly renews itself on the basis of a suitable policy and management
- A complex of activities with a capacity to realize the basic elements of sustainable development

From the above-mentioned one can easily see that livestock breeding is an important sector, which encompasses all social strata from a common herder to the government of the country. In short, there exists no individual, institution or group in Mongolia that are not dependent on livestock breeding. If direct or indirect links of individuals and organizations to livestock breeding, their involvement in everyday activities of this sector, their role and position in it are defined, their dependence on livestock breeding, their role and responsibilities in development of the sector will be basically clear.

**C. Distinctive features of the structure and distinctive characteristics.** If compared to other sectors, the position of livestock breeding in national economy is different: it is dominating in agricultural sector, but it is quite low in urban areas. Livestock breeding, which is regarded as a supplementary to the industry or of second significance to it, is an irreplaceable sector for rural areas of our country. Despite the relatively low estimation of livestock breeding in sectors other than agricultural, the only sector which can use water and natural pasture resources of our country, that has unique geographic position and specific natural and climatic conditions, is livestock breeding and there exists no other sector which can compete with it.

That is why the present condition of livestock breeding and the issue of its future has always been in the center of public attention, and there always have been discussions, different views and thoughts, disagreement on the issue. In order to determine the state policy, actions and its role in the field of livestock breeding it is necessary to pay attention to examining any development possibilities and issues from different aspects. Livestock breeding for Mongolia is an irreplaceable wealth with regard to its geographic distribution, and use of these vast territories for other purposes, without engaging in livestock breeding, is impossible. Policy and decision makers need to calculate well the role of geography and ecology in livestock breeding in Mongolia, this vital link between livestock, livestock breeding and the natural environment and other factors, in order to solve questions with regard not only to livestock and herders or natural environment.

## C. DEVELOPMENT CONCEPTS AND MODELS

## 1. TERMINOLOGY AND ITS INTERPRETATION

**1.** A term sustainability emerged in the beginning of 1990's as one of the fundamental concepts, a constant in theoretical formulas and discussions on development, and is one of the most important, multilateral issues of pluralistic nature<sup>11</sup>. Generally, sustainability

<sup>&</sup>lt;sup>11</sup> Elliot Fratkin and Robin Mearns, 2003. Sustainability and Pastoral Livelihoods: Lessons from East African Maasai and Mongolia. Human Organization : Summer, 2003; 62,2; ABI/INFORM GLOBAL

is defined as a development strategy to protect and sustain their own lifestyle and livelihood from others. For persons, engaged in pastoral livestock breeding, this concept means maintaining productivity of herd at a certain level, by the way of protecting and realizing their right to use pasture, hay field and water resources and providing political and economic safety; and following a development policy based on technology and knowledge in order to provide sustainable increase of productivity in the future.

When this definition of sustainable development is examined on example of Mongolian conditions, it addresses directly several important issues:

- An issue of keeping livestock productivity and its effectiveness at the achieved level can not be realized by strategies and tactics of increasing or maintaining the number of livestock with low productivity, as it does not agree with principles of sustainable development
- Herders should use pastures, hay fields and water sources according to their rights guaranteed by the law, but they should also fulfill their responsibilities. For instance, by cooperating, working in groups with regard to the laws and regulations and traditional activities, they should increase their influence and strength.
- As for keeping political and economic stability and safety, the rural population, especially herders, are a large social group, which has a significant influence on political and economic life, processes and choices. Unfortunately, instead of making political and economic leaders work for livestock breeding development and progress, herders themselves are directed by them. That is why trends to underestimate livestock breeding, to keep it as a raw materials subsidiary, obvious and hidden attempts to use it in their own political or business interests are observed, but herders are not yet able to realize that situation, so livestock breeding is quite isolated from other forms of private business, which should be understood by them.
- The final result of sustainable livestock breeding should be expressed by ability to establish a firm basis for stabilization of livestock productivity and its further improvement according to a special policy and planning. If the issue is approached in this way, there is a possibility to implement a flexible policy in order to maintain the achieved level or to improve it, and moreover, it will follow such principles of sustainable development as continuity of developmental process. In that case, a strategy, which will surely lead to development of the sector up to a stable level by the way of implementing the government policy and activities on intensification of livestock breeding in several stages and will be able to increase the achieved level, will be the only realistic model. As herders' wish to increase the number of livestock without any concrete policy or objective is quite deeply rooted, it is obvious that their objectives will not quite agree with the objective to intensify livestock breeding and increase livestock productivity up to a certain level with a help of a special policy. An issue of a continuous gradual increase of productivity per unit along

with limitation of livestock growth will be a difficult objective to achieve for the government. The government needs to pay attention to development of pasture management; to provide support to herders by acting as a mediator in finding channels for export of livestock products to foreign markets; to improve the use of land and other state property, to develop a system of protection of herders' participation and their assets. If this is achieved, there is a hope that interest in limiting the livestock growth, competing in domestic and foreign markets with high quality products and activities led by this interest will emerge. When production is run on the basis of market demand, the first grounds for implementation of the sustainable development concept will be established.

**2.** By the tragedy of common use we mean negative consequences caused by use of pastures without any legal coordination. Uncoordinated use of pastures leads to overgrazing, deterioration and worsening of plant composition, which made some politicians and researchers call pastoral livestock breeding (sometimes called nomadic livestock breeding) ineffective, harmful to the natural environment, with no future. However, this issue is related not to the livestock breeding itself, but to lack of coordination on use of natural pastures and resources, lack of mechanisms and ways to realize it in an orderly, conscious way. As it is in human nature to strive to take as much as possible if there is an opportunity to use limited natural resources such as pastures, water or forests, it is difficult to blame them for their mentality of viewing the resources as someone else's instead of trying to protect and save them. While desertification intensifies at global level and facts about its negative effect on pastures, hayfields and water sources are published regularly, we were contended with a period of a few years with very favorable weather conditions instead of calculating and predicting the consequences of these processes in conditions of our country. A notion that all problems will be solved if the number of livestock grows is a consequence of inadequate human activities. Although harmful consequences of using pastures as common land in conditions, when the number of livestock almost exceeds pasture and water resources, have revealed themselves during droughts and dzud, this was explained as a result of natural and climatic hardships and human errors have again been again excused. A herder was put into such a situation<sup>12</sup> that he had no other choice than pursuing a goal of increasing the number of livestock as if natural resources, territory of residence and the world itself are limitless. It is necessary to understand that this situation became a prerequisite and impetus for the above mentioned tragedy and there is a need to immediately change legal environment and outdated laws, which can not coordinate the simplest issues. Inadequate management of pastoral livestock breeding <sup>13</sup> in such a dry and cold region as Mongolia is considered to be the main reason for increase of desertification, which is one of the main factors for pasture overgrazing and deterioration. A fact that dryness and sand movement is observed not only in Gobi desert areas of our

<sup>&</sup>lt;sup>12</sup> Hardin, Garret. 1968. The tragedy of the commons. Science 162: 1243-1248; sited by Fratkin and Mearns, 2003

<sup>&</sup>lt;sup>13</sup> Jeremy Swift, 1996. Desertification: Narratives, Winners and Losers. In: The Lie of the Land. Challenging Received Wisdom on the African Environment. M. Leach and R. Mearns, ids. 73-90. Oxford: James Gurrey

country, but also in steppe and forest-steppe zones, is a distinctive form of global desertification and, moreover, is a sign of the approaching tragedy of common use. To prevent further spread of harmful consequences of common use of natural resources such as pastures, water sources and forest; to stop mentality of common use and attitudes of an non-owner; to introduce certain legal limits and regulations without wasting time is the most critical problem for the government policy to focus on. It is necessary to conduct without further delay activities on legal and management training and promotion. If time is wasted and decisive measures are not taken, there is a danger that Mongolia will remain in history as a unique example of harmful consequences of common use of natural resources. Allowing use of land, which is a state property, without any legal or local coordination, free of charge, not only may lead to repetition of the tragedy of common use, started in such regions as Africa and Middle East, but adds to negative effect in changing conditions. That is why local administration, herders and herder groups should be forced to implement pasture management on the basis of laws and regulations, traditional methods and experience. The government should realize their duties to put pressure for realization of laws and regulations and their further development.

3. Negative results of failing management of common property. Due to common use of resources, including such vital for livestock breeding resources as natural pastures, water and hayfields, different harmful consequences can happen. This harm is mostly caused by inadequate laws or lack of realization of the law or regulations, or their very unsatisfactory realization, which leads to use of gaps and limitations in laws and regulations and greedy overuse of found possibilities, so it is not always lack of laws or legal coordination<sup>14</sup>. In countries with pastoral livestock breeding the tragedy of common use is in reality caused by giving a right to anyone to use the pasture. Since the Law on Land of Mongolia (2003) allowed common use of summer and autumn pastures, it can be said that it provoked herders, who stopped following their traditions because of laws, which were too alienated from real life. If this inappropriate situation is not changed in near future, probability of the tragedy of common use is quite high. Instead of hoping that everything will be solved with introduction of laws, it is necessary to improve management by following the laws at all levels. If laws are followed too literally, it can lead to breach of traditions and unwritten laws, because, unfortunately, a law can not fully reflect traditions, traditional order or coordination and can not legalize the tradition.

**4. Intensification of livestock breeding.** The basic ground for implementation of the government policy on intensification of livestock breeding should be balanced implementation of an objective to increase productivity of livestock along with engaging in livestock breeding with use of intensive methods. Concepts, strategies, activities to be implemented, directions reflected in official documents and in the government and the sector development program on intensification are as follows:

*A. The government policy on food and agriculture* (approved by resolution 29 of the State Ih Hural, 2003)

- ... to intensify the agriculture...

<sup>&</sup>lt;sup>14</sup> Ostrom Elinor, 1990. Governing the Commons. The Evolution of Institutions for Collective Action. Cambridge University Press.

- ... to develop regionally pastoral and intensive livestock breeding...
- ... to intensify and improve traditional methods of pastoral livestock breeding...
- ... to develop intensive livestock breeding in regional centers and regions of crop cultivation...
- ... to intensify production and increase efficiency by introducing progressive achievements of biotechnology and genetic engineering...

In reflecting general directions and policy issues on intensification of livestock breeding this document:

- Views intensification of livestock breeding on a scale of a basic agricultural sector and links it to crop cultivation
- Introduces a concept of distinguishing between pastoral and intensive livestock breeding in aspect of intensification
- Pays principle attention to connecting the objective of intensification of livestock breeding with a concept of regional development of Mongolia
- Determines introduction of scientific achievements and new technologies as one method of intensification, which shows that all important principles were taken into account.

This document defined an objective of livestock breeding intensification and stabilization of production as the main direction of the future development of livestock breeding and determined following stages for realization of the policy, which also defined the role of the government, legal subjects, institutions and individuals.

- To realize the first stage in 2003-2008, when preparatory works for improvement of livestock health and breed are completed, restoration of intensive livestock breeding begins, model enterprises are in place in areas close to centers
- To realize the second stage in 2008-2015, when sustainable growth is achieved in pastoral livestock breeding, intensive livestock breeding starts developing, and intensive livestock breeding farms are established in areas close to centers.

**B.** The program on support of intensive livestock breeding development (approved by the government resolution 160, 2003)

- To recover and improve the gene pool of pure and cross bred livestock
- To engage in intensive livestock breeding in regional centers and regions of crop cultivation
- To breed highly productive livestock
- To develop intensive livestock breeding in certain regions according to market demand
- To increase production of meat, milk, eggs, fine wool
- To develop crop cultivation and livestock breeding in appropriate combination.

Two separate stages for implementation of this program were established: (i) to support establishment of intensive livestock breeding on the basis of regional centers, (ii) to expand intensive livestock breeding based on the regional centers, to develop them on the basis of local development centers. As at present increasing productivity per unit is

considered the main tool and a method<sup>15</sup> for intensification of livestock breeding, it is necessary to reach the objective of substantial increase of livestock quality. In our view, a trend of viewing intensive and pastoral livestock breeding separately, defining the main region for development of intensive livestock breeding in the frame of the state policy and the strategy for its implementation is an appropriate one.

5. To develop a region of pastoral livestock breeding<sup>16</sup>. Sources report that it is necessary to examine various views, mentioned below, in order to select the development policy for an economic sector. Policy makers face numerous groups of issues such as (i) impoverishment of pastures due to expanding deterioration and desertification. (ii) increasing number of livestock, which exceeds the capacity of pastures, difficulties faced in restoration of pastures, (iii) despite existence of effective methods and technologies for fighting desertification and deterioration or decreasing them, such factors as traditional ways of running pastoral livestock breeding, social organization, distinctive mentality still present an obstacle in their implementation, (iv) activities on improving use of pastures, on adjusting the number of livestock and its kinds to the capacity of pastures, on using pastures seasonally and other activities for improvement of adequate management of resources by the private sector by the way of renting them land and pastures or giving for use under contract, are inadequate, (v) herders, nomads do not initiate activities on improving livestock breeding, upgrading production, processing, quality and hygiene of products and do not participate actively in different activities organized by other parties. On the basis of extensive study and different recommendations from other researchers we view that a model suggested by Swift, 1991<sup>17</sup> on modern progressive methods of resource protection and management combined with traditional methods of resource use can be the fundamental principle of the policy on development of pastoral livestock breeding in our country. However, there is no common concept on ways to solve the issue of pastoral livestock breeding intensification. A fact, that the issue of developing pastoral livestock breeding is reflected vaguely in the government policy and the programs on support of livestock breeding development, is probably related to lack of conceptual and theoretical standards, which can serve as an orientation for providing stabilization of logical order, achieved level and results of activities and measures implemented in the conceptual frame on intensification; expanding the frame and defining the way of developing pastoral as well as intensive livestock breeding.

**6.** Links between development of pastoral and intensive livestock breeding. Viewing pastoral livestock breeding as totally different from intensive livestock breeding is the main way of attempting to prove that these to sub sectors have ?qualities. However, at present in rural areas of our country including regions where intensive livestock breeding is planned to develop, livestock is herd at pastures and there is no perspective for its decline in the nearest future. Therefore, calculating possibilities to develop

<sup>&</sup>lt;sup>15</sup> For All Generations: Making World Agriculture More Sustainable. 1997. A WSAA Publication, Edited by J.M. Patrick and S.G.Chaplowe

<sup>&</sup>lt;sup>16</sup> See Fratkin and Mearns, 2003

<sup>&</sup>lt;sup>17</sup> Jeremy Swift, 1991. Local Customary Institutions as the Basis for Resource Management among Boran Pastoralists in Northern Kenia. IDS Bulleting 22(4)

pastoral and intensive livestock breeding in a mutual supportive way might be one of examples of gradual solution of the main problem in livestock breeding development.

**7. Capital investment and its inadequate interpretation.** According to classical theory there are two forms of capital investment- that based on domestic or foreign sources. These forms of capital investments can be used similarly at the national producers' levels. As persons engaged in livestock breeding lack interest in mobilizing their own resources, refuse to invest capital from internal sources pleading lack of finances or opportunity to access loans, they lose possibilities to solve many important issues of livestock breeding development and this trend is widespread. This phenomenon started after privatization and gradually became the most critical issue, which defines the general picture of livestock breeding in our country. A notion that capital investment is an activity of finding a large amount of money from abroad, which is then invested in production and services, still prevails at all levels. This is a negative consequence of inadequate understanding of investment, as starting capital investment from domestic sources is the main method of turnover of internal resources in order to generate a source of capital, to finance and support priority development directions.

8. Dangerous false sense of safety. Although the reasons for the government making promises of different privileges to herders can be justified, this can be a wrong activity, widespread in our country, so examining it can help us in our work. For instance, at first donor countries supported activities implemented by the Mongolian government in livestock breeding during natural disasters, but in the end approached them critically, which is related to a fact that these activities led to an incorrect understanding of an important issue of development policy. As the government promised many times that it will help herders in case of such natural disasters as droughts or dzud, it tried to fulfill their promise and allocated a lot of resources ineffectively. In fact, the government "worked" in place of herders, who are private owners, which created a dangerous false sense of safety among herders that the government will give assistance in case of disasters. Although loss of livestock due to droughts and dzud lasted not for one summer, one winter or one year, but for several successive years, herders did not learn any lessons, which can be rightfully linked to improper activities of the government and its incorrect role on the false basis. Since damage suffered by the rural population and herders was used and is still being used for political gain, we all need to understand a danger of creating a false sense of security, a confidence that the state presents a safety net. The most harmful consequence of that situation is that it causes an obstacle for herders and local administration to strengthen their capacity and use appropriately their opportunity to develop and strengthen their economy, to decrease risks and overcome disasters with less losses, and worsens the situation by increasing unconcerned attitudes.

**9.** Blaming the weather for everything that was not implemented or failed.<sup>18</sup> A belief, that for losses due to climatic disasters only the weather is to blame, is widespread among persons engaged in livestock breeding. The economic activity, that they are engaged in, namely herding, is certainly very dependent on direct and indirect

<sup>&</sup>lt;sup>18</sup> Janet N. Abramovitz, 2001. Averting Unnatural Disasters. In : State of the World 2001. A Worldwatch Institute Report on Progress Toward a Sustainable Society, W. Norton and Company. New York-London

effect of different natural factors, including weather, which they are almost fully dependent on. Although such events as losses of the large number of livestock, its emaciation, miscarriage of pregnant female livestock, due to sudden and continuous weather problems are a general law of nature, not everything is caused by the weather conditions. Although herders, engaged in pastoral livestock breeding, are always on such an unpredictable factor as weather, they have always lacked dependent preparation for and have not taken preventive measures from risks of bad weather<sup>19</sup>. However, they consider weather phenomena the main cause for loss of livestock and have always justified themselves, pleading impossibility to withstand against forces of nature. The government, too, acts as if it has a direct duty to protect livestock breeding from different risks, prepares such resources as the fodder fund and natural reserve pastures, transports hay and fodder to aimags in dzud conditions, using the state budget money, all of which, as was previously mentioned, creates a false sense of security from dzud and other natural disasters and encourages herders to blame all failures on weather.

**10.** Transparency in rural areas and livestock breeding sector. A fact, that local government institutions are not able to take responsibility for the main issues of livestock breeding development and implement substantial measures, that general public will be aware of, by mobilizing resources and existing opportunities, shows that such issues as transparency and openness, exchange of information and accountability have been almost forgotten in this sector. Livestock breeding sector producers on the one hand, and local government and professional institutions on the other hand, have not taken any positive steps towards reporting each other about their achievements and taking action on determining ways to solve the problems on the basis of local resources. As herders do not make effort to allocate resources in solving urgent current problems of livestock breeding development and do not initiate any measures or effective activities oriented towards development, this situation became the main reason for the situation still remaining as it was. Few activities, that were periodically implemented by the local government, have been almost forgotten. The main form of providing information is a report about some relatively successful activities at the bag meetings, which limits the opportunity for herders to raise certain questions, to exchange opinions on forms and possibilities of common effort from both sides, to agree on concrete issues and initiatives. As some sources view, developing transparency and openness of activities of informal and formal institutions in rural areas, mutual official reporting to each other about their achievements and shortcomings, open exchange of views and opinions can become the most powerful mechanism for decentralization at soum and bag levels.<sup>20</sup> Strengthening accountability between the local government and herders is obviously a complicated task, so an initiative from the soum and bag management in this issue on starting this activity from themselves will be an appropriate tactics in present conditions. It is important to inform herders officially about activities of soum and bag management; to make them evaluate these activities; to determine directions and make recommendations on urgent

<sup>&</sup>lt;sup>19</sup> Lehman.B.F., 1999. The Non–Formal, General Equilibrium-Consistency Approach to sector Analyses. FAO Economic and Social Development Paper #5, FAO, Rome.

<sup>&</sup>lt;sup>20</sup> Agraval, Arun and Jesse Ribot, 1999. Accountability in Decentralization: a Frame Work with South Asian and West African Cases. Journal of Developing Areas. V.33

issues and measures that need to be taken and implemented further; to discuss and clarify the ways of implementation on the basis of consensus; to support a principle of developing community initiatives. One of the problems that misdirects the principle of transparency, accountability in the frame of the government system is a situation, when information about activities and reports to the financing ministries, agencies and institutions mostly go to levels higher than soum level. A situation, when organizations report only to the source of financing, leads to ignorance of non-financing organizations and groups, so disregard for such groups and other discriminatory approach<sup>21</sup> became widespread. That is why transfer of certain issues, which the government can not or need not to coordinate directly, to NGOs and other informal groups, so that they take a direct responsibility for activities to be implemented on the basis of herders' initiatives and their capacity; and other methods and mechanisms for decentralization should be used widely by the government.

11. Ways and approaches towards rural poverty alleviation. One of the new phenomena, which emerged in the beginning of transition to the market economy, is increase of poverty in rural areas, especially among herder households. In that time, when a strategy of increasing the raw materials and other produce production by increasing the number of livestock was dominant among herders, living standards of a herder household were determined by the number of their livestock. In the time, when other forms of production, income sources and services were not developed and herders did not have source of income other than their livestock, a method of restocking or increasing the number of livestock per one household up to a level, which secured livelihood, was selected and numerous programs and projects were implemented in this direction. However, as several vital questions were not taken into account in implementing restocking policy with assistance of loan capital, expected outcomes have not been achieved. Those of households, which improved their living standards as a result of restocking, fell into "double debt" and their number is not significant. Since such issues as finding sources of income other than from herding, especially relating quality of raw materials and produce with their pricing and sale have not been paid sufficient attention, it leads to loss of many favorable possibilities to overcome poverty. In general, if the government does not state clearly on what conditions, when and how it will assist herders, if it does not explain it to their citizen and implement their promises, it will be difficult for them to abandon their present position of a subject responsible for everything. An improper trend that poverty alleviation and fighting poverty is not something to be implemented on their own initiative and effort, but something that the government and the state initiates with herders as beneficiaries, is widespread. It shows that the government can not reach citizen and herders with their policies, and especially their promotion and explanation to the public is insufficient. A need to define the poverty alleviation policy as the one when "the government can not take herders out of poverty, but will support them to certain extent together with other organizations and subjects, so for herders the only possibility to reduce poverty is to get this support and use it effectively" is dictated by the peculiarities of the sector.

<sup>&</sup>lt;sup>21</sup> Bruce M.Johne, Robin Mearns , 2002. Natural Resource Management and Land Policy in Developing Countries: Lessons Learned and New Challenges for the World Bank. Dry Lands Program Issues Papers #3, IIED, London

12. Institutions for conducting technological, information and education activities in livestock breeding sector. Provision of information about fundamental development policies, concepts and mechanisms of their realization, responsibilities, participation, monitoring and evaluation of different subjects to related subjects without any delay; organization of training, practice and introductory measures on organizational and technological issues of activities planned for implementation, of goals and objectives put forward is extremely important for directing producers in the correct development direction right from the beginning, in providing professional advice and support on urgent issues, their appropriate solution and mechanism of implementation. As for our country, the question of introducing new technology and giving production and technological consultation was left behind under excuse that an academic and research system for agricultural studies is already in place, which became the main reason for lack of progress and positive changes in livestock breeding development and slowing down of developmental process. A certain period of time was lost without realizing that herders became private owners, who need to compete at the free market; finally, ways for improving forms of running business, introducing reform and changes, increasing efficiency in order to increase income from livestock breeding, decreasing dependency from market and natural environment factors were sought. Since a structure, which could observe this situation among herders and take required actions adopted to local conditions, did not exist, all activities were limited by some attempts made by the herders on their own, but they gradually stopped. Although the government put forward an objective to intensify livestock breeding development, it can be said that organizational questions for reaching the objective are not developed, mechanisms for strengthening capacity and introducing technologies for intensification are not defined, and these questions are not explained to herders, herder groups and local professional institutions. That is why it is still not clear how to establish and develop livestock breeding extension services. The Center of Introduction of Scientific Achievements and New Technologies in Production at the Ministry of Food and Agriculture is not able to implement the role of the extension institution, which is related not to the operations of the center, but to the wrong approach of attempting implementation of extension in the form of the state agency, financed from the state budget. The classic definition determines extension as services with a role to reach consumers with scientific achievements and new technologies<sup>22</sup>, while the present system in our country is more concerned with policy issues and is guite centralized. As a result, it proves inadeguate in providing herders with adequate consultation on technological issues, in transferring them new technologies and cooperating with them.

13. Availability, accessibility and redistribution of financial and technological resources. The question of appropriate distribution of all kinds of resources at each stage of operations is extremely important in implementing appropriate management of resources, used in pastoral livestock breeding, in engaging in production of business orientation. A fact, that livestock is not regarded as a resource for generating monetary/financial assets, is an interesting phenomenon in Mongolia. That is why a view

<sup>&</sup>lt;sup>22</sup> Dixon, J., A.Gulliver, D.Gibbon. 2001. Farming Systems and Poverty: Improving Farmer's Livelihoods in a Changing World. FAO

that we lack possibilities for generating resources for financing complementary activities in livestock breeding and activities other than related to livestock breeding, still prevails and we look for financing from abroad. Except for sale of raw materials and livestock production, herders are reluctant to sell livestock to generate resources for household needs or other planned business activities, so they stay behind market relations with their attempts to run an unprofitable business with ineffective methods. The reasons for that may be as follows:

- Herders believe that it is impossible to use livestock for objectives other than as a source of livelihood, especially to sell livestock in large number in order to have cash income, which is related to their strategy of increasing the number of livestock and the government support for creating interest in entering livestock into economic turnover
- Herders do not estimate advantages and significance of transferring physical, non- monetary assets, such as livestock, into cash savings and thus constantly lack money
- In the frame of main market services, such as insurance and banking, livestock is not accepted as a reliable asset for a collateral, which can be viewed as direct denial of livestock as an important source, capable of natural reproduction
- As herders themselves do not care about livestock or their economy, it leads to the situation, when other beneficiaries, producers and businesses do not pay attention to and are even afraid of supporting or assisting livestock breeding, which is ineffective and lacks attention from the owners themselves
- Instead of looking for effective technologies in order to increase livestock productivity, to upgrade fodder production, raw materials and products processing and piloting them, such ignorant attitudes as refusing from them, thus retreating from progress are widespread among herders.

While the banking system has recovered and possibilities for accessing loans by persons with interest in working, are getting wider, only a small part of herders loan from time to time small amounts of money to provide for their needs, i.e. to buy food and clothes for their household, and repay the loans with wool and cashmere from livestock, still lacking ideas on finding a source of income other than livestock or generating any savings. While the government in cooperation with donors provides herders with equipment and tools at discount prices to repair and build wells, improve water supply, irrigation and hay making and bears a certain part of costs as a form of aid and assistance, herders do not suggest any initiatives on sharing even a small part of costs to contribute to the efforts of the government. That is why all assistance provided to the herders by the government should be implemented on the commercial principle, or , in other words "any service provided should be paid for with their own assets", and the money should be used for improvement of infrastructure, which is a responsibility of the government. When herders and small rural producers will learn to enter in relations with banks and enter economic turnover with finances received for their physical assets, we need to implement a policy of introducing substantial capital investment on favorable conditions. At the time when a "feed me" mentality prevails, use of assets and resources will remain ineffective and there will be obstacles in redistribution.

14. Rural development or intensification of agriculture: Dualistic situation or an urgent objective? The majority of researchers view that from aspect of development theory and concept, rural development has a wider frame and most importantly, provides wider opportunities to deal with issues of economic and social development, strategy and program activities, related to agriculture, as a whole. However, policy and decision makers and those, who implement these policies in our country, talk a lot about development of agriculture, as if issues of rural development are abandoned or if these two versions of development policy overlap, i.e. an unclear situation is observed. If these principally different issues are not approached separately, it will be complicated to define responsibilities of the government, private sector, citizen and other subjects separately and utilize various sources and mechanisms. That is why the government should think over the question of considering development of livestock breeding as a component of rural development or implementing development of livestock breeding as an independent policy. If issues of rural development are to be incorporated in the policy of livestock breeding development, it is not vet possible, but realization of livestock breeding issues in the frame of rural development policy has an advantage of covering detailed issues in that frame and being more effective. If these considerations are viewed as justifiable, the government should clarify this dualistic situation and put forward one of these concepts as the basis of its policy, its urgent objective. In our opinion, selecting the concept of rural development has several advantages, such as:

- There is an opportunity to link it with the national and regional development policy, and implement united activities and measures in principle directions,
- There is an opportunity to view agricultural development policy without dividing it into such sectors as crop cultivation and livestock breeding, in the frame of a united development policy, strategy and actions,
- To study the present level of development, achievements and shortcomings at the level of the whole economic sector and large social groups,
- To view support and stabilization of rural development not at sector level, but at regional or national level.

#### **PART FOUR**

# STUDY CONDUCTED IN RURAL AREAS: RESULTS AND INTERPRETATION

As livestock breeding is a basic sector of national economy, everyone is concerned about the present condition of its development, its future perspectives, its resources, issues to address and urgent problems, and everyone attempts to foresee its future. A study of views, ideas, evaluation, aspirations of representatives of the state institutions, herders, rural residents, private sector, community organizations, informal and community groups on the main issues of livestock breeding development was conducted in the selected aimags and soums, mentioned previously.

The main subject and direction of the study is to collect required information and analyze it in order to identify and determine the roles of the state and private sector, general public and community based groups in multilateral issues of livestock breeding development.

### A. THE ROLE OF THE STATE, GENERAL PUBLIC AND LEGAL SUBJECTS: THE PRESENT CONDITION AND FUTURE TRENDS

If views, ideas and evaluation of herders and other groups on the role of the state institutions, private sector and general public are summed up, the results show that the central state institutions and their local structures bear an enormous load, while the role of policy makers and private sector is quite low. The majority of herders views that they bear the most of the load and, what is interesting, the role of donors in livestock breeding development was evaluated as equal with that of the government.

A fact, that from all rural administrative institutions the soum administration was evaluated highly as an institution, playing an important role, shows that it is viewed as having a significant role in linking the higher and lower level institutions, general public, private sector and community organizations. As the role of national and local Hural in development issues is not understood, in other words, as activities on enacting laws and making decisions are not viewed as important for livestock breeding, the role of executive governance institutions is evaluated low. We have to agree with an evaluation given to the private businesses and processing factories, namely, that they are being very ineffective. Expanding business cooperation and mutual support with herders and herder groups, initiating such cooperation and motivating it should be an important responsibility of processing factories in order to change the present condition of livestock breeding and passive attitudes of herders. In doing so, this factories have an opportunity to decrease the burden on the government along different directions and to increase the volume and quality of production meeting their own demand.

		T	he g	overn	ment, p or	rivato ganiz			and	con	nmu	nity	
Problems of improving business environment and livestock breeding development	The State Ih Hural	The Government	Aimag administration	Aimag Department of Agriculture	Soum Citizen Representatives Hural	Soum Administartion	Bag	oups of s	Herder households	Donors	Community organizations	Private businesses	Processing factories
Upgrading laws and regulations, the legal environment	√	1	V		$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$			
Providing the growth of livestock	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$			
Improving livestock breeds, increasing productivity		1							1	1	1		
Processing raw materials and products of animal origin		1				$\checkmark$		V	1	1			
Hay and fodder production, fodder supply		1	1			$\checkmark$		$\checkmark$	1	V		V	
Water supply		$\checkmark$	$\checkmark$					$\checkmark$		$\checkmark$	$\checkmark$		
Building livestock pens and fences									V				
Improving livestock health		$\checkmark$		$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$			
Appropriate use and protection of pastures and hay fields	1	$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$	V			
Improving livestock breeding marketing		1							V			1	
Improving and expanding services provided to herders		1	√		$\checkmark$	$\checkmark$	1		1				
Markets, prices		$\checkmark$							$\checkmark$		$\checkmark$		$\checkmark$
Training and practice		$\checkmark$								$\checkmark$	$\checkmark$		$\checkmark$
Total score (by the number of $\sqrt{\text{symbol}}$ )	3	11	4	3	2	7	5	0	1 1	9	4	2	2

Table 3. Results of evaluation of the role of different institutions, general public and groups in main issues of livestock breeding development

Another questionnaire, similar in contents with Table 3, but with a different direction of the study, asked about the trends in changing roles of the above mentioned institutions and groups in the near and middle term (3-10 years). With regard to the present policy and measures planned to implement in near future, the questionnaire respondents view that responsibilities on livestock breeding development issues will be transferred to the middle level of state organizations, and the load will concentrate especially on soums, bags and herder groups. It is obvious from the above table that private businesses and processing factories are viewed as representatives of private sector with substantial influence on livestock breeding development and much hope is put on them. During discussions with survey participants after they answered the questionnaire, it could be observed that the role of various institutions, groups and general public is viewed in relation to 2 main problems. For instance, the respondents answered that all institutions

and the general public should play a certain role in "limiting the growth of livestock" and support limitations taken in attempt to stop thoughtless increase of the number of livestock.

Table 4.	Possible changes in the roles of different institutions, general public and
groups in	main issues of livestock breeding development in the near and middle
term	

Problems of improving		Т	he g	overn	ment, p			sector ations	and	com	mun	ity	
business environment and livestock breeding development		The Government	Aimag administration	Aimag Department of Agriculture	Soum Citizen Representatives Hural	Soum Administartion	Bag	Informal groups of herders	Herder households	Donors	Community organizations	<b>Private businesses</b>	Processing factories
Upgrading laws and regulations, the legal environment	$\checkmark$	√	$\checkmark$			V	√	$\checkmark$					
Providing the growth of livestock		$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$						$\checkmark$
Improving livestock breeds, increasing productivity					V	1	V	$\checkmark$		V	V		
Processing raw materials and products of animal origin		V			1	1	V	$\checkmark$	$\checkmark$	V	V		1
Hay and fodder production, fodder supply		V						$\checkmark$	$\checkmark$	V		V	1
Water supply			$\checkmark$			$\checkmark$		$\checkmark$	$\checkmark$			$\checkmark$	
Building livestock pens and fences		$\checkmark$	V			1	$\checkmark$	$\checkmark$		V	V		$\checkmark$
Improving livestock health									$\checkmark$				
Appropriate use and protection of pastures and hay fields		$\checkmark$		V		1	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$		
Improving livestock breeding marketing	V	V		V	V	1	V	$\checkmark$	V	V		V	
Improving and expanding services provided by herders		$\checkmark$				1		$\checkmark$	$\checkmark$			$\checkmark$	
Markets, prices		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$				$\checkmark$
Training and practice								$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$
Total score (by the number of $\sqrt{\text{symbol}}$ )	2	9	5	2	4	1 0	9	9	9	6	5	5	6

While management and professionals, who work in state organizations and understand negative consequences of unlimited growth of livestock number, all gave this answer, some herders also approached this question in similar way, in other words, they support intensification, as it is better to have few highly productive livestock instead of a large number of livestock with low productivity.

In comparison to Table 3, many more persons selected to tick the middle level management, herder groups and herder households, while fewer marks were assigned to

the government and donors. When justification for that is clarified, respondents view that local administrative institutions together with herders should take issues of livestock breeding in their own hands, the government should change its role and participation by transferring some of its responsibilities to the private sector and community organizations and groups, thus implementing decentralization. The government should give directions for proper development orientation and strategic policy, provide a favorable legal environment and support the sector in times of need or with vital objects. Respondents hope that proper distribution of responsibilities and balanced participation can be achieved if the role of the higher level state organizations is directed towards providing support, the local administration is given legally guaranteed authority and most important of all, if cooperation between herders and private sector, which processes and sells raw materials and produce of livestock breeding sector is developed.

At present, an extensive discussion and exchange of views on the forms of running livestock breeding, its development possibilities, organization, business perspectives and trends is underway. Currently, the form of household economy is domineering in livestock breeding in Mongolia, and perspectives for new, market oriented forms are not in place. It is important to notice that it was interesting to listen to respondents' views on the subject. In order to separate and clarify answers and explanations of representatives of numerous organizations and groups, directly related to livestock breeding sector, all survey participants were divided into three groups: herders, representatives of central and local institutions. Results of a survey on possible changes in forms of livestock breeding at the level of development issues in the nearest decade are shown in a special subchapter.

## **B. VIEWS ON PERSPECTIVES OF CHANGES IN THE FORMS OF LIVESTOCK BREEDING AND THE LEADING TREND**

The form of engaging in livestock breeding has changed in the course of time and it is a process, which shows clearly the evolutionary qualities of development. This process depends on distinctive features of livestock breeding itself along with the state policy, economic capacity and social preference. At present, development of Mongolian livestock breeding is at an interesting stage of the final years of transition to the market economy and the beginning of the independent economic development.

The views of herders, local management and experts on the forms of livestock breeding in the future differ. 88 % of survey participants are confident that in the near future pastoral livestock breeding will be still dominating in our country.

### Table 5. Views on future forms of livestock breeding

Forms that will	In near future	In middle-	In long-term
emerge in the future	(within 5 years)	term(within a	(within 15 years
		decade)	and further)
Pastoral	29	21	14
Semi-settled	2	8	8
Settled	2	4	6
Total	33	33	29 (4 persons did not
			answer

### 1. Herders and persons with livestock (by number of answers)

While the number of respondents who view that pastoral livestock breeding will keep its leading position in the nearest 5 years was about 80%, it declined only to 42% in long-term future. As respondents think, the semi -settled and settled forms of livestock breeding will reach 30% in the mid-term future and in the long term they will make up to 50%, which leads to an important conclusion, that changes in the form of livestock breeding in the course of its development are inevitable.

The majority of local administration and professionals view that semi-settled and settled forms of livestock breeding will only take a notable place in our country after an over 15 year period.

Forms that will	In near future (in 5	In middle-term(in	In long-term (15
emerge in the future	years)	a decade)	years and further)
Pastoral	14	10	8
Semi-settled	0	3	7
Settled	0	2	0
Total	14	15	15

### II. Local administration, professionals (by number of answers)

Our study revealed principle differences in views of administrative workers, professionals and herders on the issue of ways of connecting intensive livestock breeding and farming with pastoral livestock breeding. Professionals view that due to lack of the original gene pool of poultry, pigs or dairy cows in our country, it is impossible for intensive breeding to be born from or to emerge gradually from pastoral livestock breeding, so it should be viewed as a separate development issue. As it is impossible to make a transition to intensive livestock breeding from the present pastoral livestock breeding by selecting and breeding local livestock or using new technologies, this issue should be discussed only when the livestock breeding pool is improved, fodder procurement and infrastructure meet requirements of intensive livestock breeding, so only starting from 2015 and further pastoral and semi-settled forms of livestock breeding will have equal shares in this economic sector. This conclusion corresponds with that of the study on "The future of Mongolian livestock breeding" conducted by MOSF, which

also indicated a period of over decade, required for intensive form to take place in livestock breeding sector.

The staff of central state organizations in charge of agricultural issues has a different view on the subject of questionnaire. We should notice that their answers do not express the position of the organizations, but private opinions of individuals.

In their opinion, a semi-settled form of livestock breeding will be in position to take up about 25% in about 2015 and the present semi-settled form will make a gradual transition to the settled form.

Forms that will emerge in the future	In near future (in 5 years)	In middle-term(in a decade)	In long-term (15 years and further)
Pastoral	<u>8</u>	<u>6</u>	4
Semi-settled	0	2	2
Settled	0	0	2
Total	8	8	8

### III. Staff of central state organizations ( by number of answers)

It agrees fully with our previous suggestion that the evolutionary process of development of livestock breeding forms takes livestock productivity up to a certain level and on this basis elements of intensification are introduced gradually and then expanded.

The question if such above mentioned changes will take place in reality is the most interesting one and as herders, the staff of central and local state organizations, and professionals view, in the course of two decades the process of intensification will start, even if gradually.

## C. VIEWS ON POSSIBLE CHANGES IN FORMS OF PRODUCTION AND BUSINESS (MIDDLE AND LONG TERM FUTURE)

Business and production units in livestock breeding in our country do not have many different forms and characteristics. Numerous factors such as markets, competition, free production do not agree with existence of only one model of livestock breeding, especially extensive one, and the need to solve efficiently various economic, ecological, social development and environmental safety problems shows that it is impossible.

Different groups view that existence of favorable legal environment is the most decisive factor among all other basic factors in implementation of policy on intensive development of livestock breeding.

### Table 6. Forms of legal environment in livestock breeding production and business

Survey participants (n=24)	Herders and	Local	Staff of central
	livestock	administration and	state institutions
	owners	experts	
On land issues	Good	Good	Good
On pastures*	Unsatisfactory	Unsatisfactory	Need for a
			special law
Livestock breeding marketing	Unsatisfactory	Satisfactory	Satisfactory
Business environment in livestock	Unsatisfactory	Unsatisfactory	Unsatisfactory
breeding			
Improvement of livestock breeds	Satisfactory	Satisfactory	Satisfactory
Increasing livestock productivity	Satisfactory	Satisfactory	Satisfactory
Procurement and distribution of	Unsatisfactory	Unsatisfactory	Unsatisfactory
fodder			

A. Evaluation of legal environment in livestock breeding production and business

Note: \*- on assumption that a special Law on Pastures will be introduced

It is viewed that if the public evaluates the legal environment as unfavorable, unable to serve as a tool for protection of legal interests, personal effort and initiative of people, who should implement development policy and activities are generally weak and their involvement is low.<sup>23</sup>

Droughts and dzud of the last years, different economic and social factors taught important lessons to herders, so they started to think about laws, regulations and legal environment, and not only have their own ideas on these issues, but also started looking for "gaps in laws" as one herder said. Existence of such issues as a need to solve the issue of pastures by introducing a special law, weak marketing network in livestock breeding, unfavorable business environment for herders ( in order to stabilize and increase prices for livestock products etc., in herders' opinion) is accepted at all levels. The government should pay attention to the opinion that legal environment for intensification of livestock breeding and increase of production is not yet in place and take appropriate measures on its further improvement.

The results of a survey on further changes in the forms of livestock breeding business and production, on emergence of new forms /shown in Table 6.B/, attract interest as according to these figures possibilities for establishment of diversified companies in livestock breeding almost do not exist, but herder households and herder groups will be prevailing. Despite the view that farms, herder cooperatives and NGOs will emerge in the future, a large part of herders view that herder households and herder groups will remain a large part of livestock breeding production. Staff of the central institutions view that there is a possibility for simultaneous emergence of several forms. Local administration

<sup>&</sup>lt;sup>23</sup> Johnson, F.B., J.M.Page, P.Wan. 1972. Criteria for the Design of Agricultural Development Strategies. Food Research Studies. Vol.XI

and professionals gave more responses on such forms as households, groups, cooperatives and farms. A conclusion can be made that there is a basis for emergence of various forms of business and production in livestock breeding.

Company	0	0	0
Cooperative	12	5	13
Association	1	8	10
NGO	5	8	6
Farmers	2	15	12
Groups / hot ail/	18	18	12
Households	24	20	12
Other / to clarify/	7(crop cultivation	15 (pastoral LB+	Cattle of milk &
	+livestock	poultry/pig/dairy	meat directions,
	breeding)	farms)	poultry, pig

B. Forms of livestock breeding business and production\*

Note: \*\* - total answers have increased due to repeated opinions of survey participants

From the aspect of appropriate institution formation and relations a view, which supports informal or traditional institutions is significant as it has a meaning of protecting pastoral livestock breeding, which is an indivisible part and valuable inheritance of the world civilization. That is why the government should pay attention to the trends of expanding activities on cross breading livestock under the name of livestock breeding intensification and determine beforehand a special implementation policy and identify methods and mechanisms for its implementation.

One of interesting issues observed from the survey results that should be taken into consideration in the future is that Mongolian in rural areas have never had a lifestyle similar to that of settlements/villages, and due to that they have little traditions of dealing with problems collectively with total participation. This situation, even if it can not have negative effect, can still become an obstacle to cooperation between different groups, its strengthening and stabilization. Gradually, cooperatives and farms are going to develop and co-exist with traditional forms and become the main form of production and business in livestock breeding of our country.

### D. OPPORTUNITIES FOR SHARING AND TRANSFERRING RESPONSIBILITIES BETWEEN THE STATE AND PRIVATE SECTOR

If the role of the state is well focused in the frame of the structure and operations and is closely linked to the private sector and other social institutions, it has a reliable basis for implementation. On the other hand, there are other criteria for good governance, when the state is able to take responsibility for a few fundamental issues and implements them in any conditions.<sup>24</sup>

<sup>&</sup>lt;sup>24</sup> Dolgorjaw, Ya., Gunner Andesrsen, L.Zolzaya, L.Luvsantsamts. 2003. Strengthening the Mongolia's Public Administration. Chapter VII. Public Administration

With regard to the present condition of country development, the achieved level and perspective goals, the Mongolian government is an executive /implementing agency in term of its role. Due to that, at decision making level it is in charge of numerous duties related to different objectives and activities and needs to implement them, which is not an issue to justify in aspect of classical theory. If summarized, the government as a state administrative organization needs to take responsibility for and implement several fundamental duties mentioned below.

- 1. To provide social equality and unity with regard to the living standards accepted at national level as reasonable (responsibility for implementing a social development policy, which strives to bring living standards of different groups as close as possible and to bridge the social division and gaps)
- 2. To maintain the nature and position of the state at appropriate level (as an independent management institution of the highest rank with a role of developing laws and making decisions, it should focus its activities on issues for implementation, totally refuse of involvement in everyday logistic issues, such as intervening in different other questions, taking over others' duties or working instead of others and actually implement the role of the state)
- 3. To develop in equal measure all economic sectors by coordinating and linking them with a policy and strategies at the national level, to distribute equally national wealth (a duty to provide equal development of sectors )
- 4. To distribute properly the roles of the government, community based and private organizations, and general public in livestock breeding development, to interchange them, to implement in cooperation, to decentralize, to provide favorable legal environment, to conduct a development policy with balanced participation of different parties (a duty to develop and implement a proper policy)

Among other numerous responsibilities of the state an issue of avoiding such problems as implementation of ineffective activities, programs and projects, especially discrimination of producers and beneficiaries, is quite important in the present conditions in Mongolia.

Table 7.	Possibilities	for	joint	implementation	and	transfer	of	responsibilities
between t	he governme	nt and	d priv	ates sector				

				5	State	and pr	ivate	e orga	nizatio	ns, gr	oups			
Problems of improving business environment and livestock breeding development		The State Ih Hural	The Government	Aimag administration	Aimag Department of Agriculture	sourn Cruzen Representatives H	Soum Administration	Bag	Informal groups of herders	Herder households	Donors	Community organizations	<b>Private businesses</b>	Processing factories
Upgrading laws an the legal environm		A	A	С	С	С	С	B	В	B	С	В	В	С
Providing the livestock	growth of	A	С	A	А	С	A	С	A	A	С	С	С	С
Improving livestock breeds, increasing productivity		С	A	С	С	С	С	С	A	A	С	С	A	А
Processing raw materials and products of animal origin		С	A	С	С	С	С	С	A	В	С	С	С	С
Hay and fodder fodder supply	production,	С	A	С	С	Α	А	С	A	A	A	С	С	А
Water supply		С	С	С	С	С	С	С	Α	Α	С	С	С	С
Building livestock	•	С	С	С	С	С	С	С	А	A	С	С	С	С
Improving livestoe	ck health	Α	Α	С	Α	С	Α	Α	Α	Α	С	С	A*	С
Appropriate use a of pastures and ha		A	A	A	С	Α	A	A	А	A	С	С	A	А
Improving livestock breeding marketing		С	A	С	С	С	С	С	С	С	С	С	A	А
Improving and expanding services provided by herders		С	С	Α	С	С	А	С	В	В	С	С	A	С
Markets, prices		С	С	Α	В	С	С	С	Α	С	С	С	Α	С
Training and practice		С	С	С	Α	С	Α	Α	В	В	С	Α	С	С
	C	9	6	8	10	11	7	9	1	2	12	11	6	8
	4	4	7	5	3	2	6	3	9	7	1	1	6	4
	8							1	3	4		1	1	

Note: A- leading role, C- responsibility to cooperate /work together, B- responsibility to get a share

\*-private veterinarian services

If the roles of the state and different private organizations, groups and international donors are grouped as leading, cooperating and beneficiary, they have a possibility to change substantially as the results of the previous research (Table 4) showed.

What can be the role of the state and other subjects in the frame of the sector development issues is basically shown here. A conclusion can be made that the above mentioned changes will take place in such a way, that it will be impossible to separate, which organization or a group will have a leading, or a cooperating, or a beneficiary role. In other words, it is obvious that in all issues of livestock breeding development

cooperation between the state, community organizations, general public, groups, donors, processing factories and businesses, coordination of their activities in many aspects will be an inevitable need and a guide to development. If duties of certain groups at different levels are examined in detail, central and local administrative organizations have two almost equal shares of main responsibilities except for beneficiary, herders and herder groups have more duties as implementing agents of different measures and activities and their beneficiaries and in any case in the frame of taken responsibilities, a duty to cooperate has more weight, which is different from the present situation. Survey participants view that in the legal frame determined by the state on such issues as intensive methods of livestock production in households, groups and cooperatives, use and protection of natural resources with appropriate management, marketing, many responsibilities for the most active work will be a responsibility of herders, so this should be reflected in the livestock breeding development policy.

We conducted an extensive study on the ways of cooperation between the state, privates sector and other groups for development of livestock breeding sector with use of their resources, capacity and skills and collected a substantial amount of materials. With regard to lack of possibility to process research materials in quantitative form and summarize them, they are shown in the below table in written form. This basic research materials are taken mostly from the answers of professionals and answers of only a few experienced herders are reflected in it. As herders had not reached the level, which could meet the requirements for sustainable cooperation between themselves and the private sector, and for lack of experience and practice, they could not give clear answers to the questions.

As herders and the private sector in rural areas have low financial capacity and big producers are not interested in supporting livestock breeding, there is no other choice for the government as to take the main responsibility for support of livestock breeding sector, which is still vulnerable to economic and climatic risks. However, it is time for central and local administration on the one hand, and herders and private sector on the other hand to make a principal conclusion on this situation, as the present situation does not agree with market laws.

Responsibilities and duties	Present	duties	implementation	l models for joint and transfer of oonsibilities		
	State	Private sector	For the state	For the private		
				sector		
To protect from disasters Fodder reserve	Procures, distributes and replenishes the fodder reserve consisting of mostly hay from natural pastures	Procures mixed fodder & natural hay of low quality, not meeting the requirements & sells it to the state reserve	To establish a turnover fund for reserve	To supply fodder, which meets the quality standards, on commission of the state reserve and sell it on the market under contract		
To protect livestock gene pool	Formally maintains the so called livestock	Not able to provide consumers with their	To disband the fund which does not	To take responsibility for procurement of		

Table 8. Opinions on possibility for joint implementation and	transfer of some
responsibilities of the state to the private sector	

	gene pool, with view	services, can not	meet the	genetic and selection
7	of making it a core selection group and a coordinator	contribute to implementation of the state policy	consumers' demand & requirements for protection & improvement of livestock gene pool & transfer it to the private sector	material, to sell it and provide services
To transfer technologies, make them meet consumer demand	The institution in charge of introducing new technologies is financed from the state budget, is not extension- oriented and remains a centralised institution	Its activities are limited by participation in foreign projects and training at local administration level. Lacks professional branch, trainers, staff, is not able to reach herders and producers with their services.	To implement a program on establishing extension services in agricultural sector, with prevailing participation of private sector	To train trainers on agricultural development issues, employ them at producers' and private sector
Livestock health services	Provides vaccines and medicines against contagious livestock diseases with money from the state budget, the state finances all expenditure on treatment of acute contagious diseases, private veterinary services made little progress	Services are not regular and of low quality, a system of accountability for emergence of contagious diseases is not in place, a mechanism for reaching customers with regular services is not developed	To provide support from the state on the basis of a contract between the state and consumers, to introduce external control and evaluation of veterinary services	To prevent from contagious and parasitic diseases, to take responsibility for infection control, treatment & disinfection, to make compensation for low quality service and diseases resulting from it
Rearing livestock for selection and breeding	The state does not implement any significant duties apart from officially organized auctions	Has no responsibilities on improvement of livestock breeds and rearing livestock for selection and breeding	To change the present form of ineffective auctions, to transfer this activity to local private sector	With the government support to take all responsibilities for rearing and sale livestock for breeding, to establish a national system of selection work, to control and evaluate breeding materials, to conduct selection work on commercial principles
Training and practice on strengthening of local capacity	Implements work on strengthening local capacity through foreign projects and programs, local participation and responsibility is quite low	Is not able to use appropriately capacity and participation of national community organizations and local professional institutions, initiatives of herders and producers are very unsatisfactory	To expand local participation and that of national community organizations, to utilize national capacity, to transfer local training to the private sector	National community organizations and private enterprises should increase contribution of private sector by supporting professional institutions with their own resources, cooperating regularly with herders and producers

It is obvious that establishment of a mechanism to transfer some of the state responsibilities to other subjects will take time, but the state, private sector and

community groups should start discussions on the subject, plan some measures and implement them without wasting time.

#### **PART FIVE**

### POSSIBILITIES FOR INCREASING THE ROLE OF THE STATE IN LIVESTOCK BREEDING

There are still many urgent problems to solve at the national level in order to make a progress in livestock breeding development with a well-thought policy. It is not related only to the number of issues, but to its scope. Discussion of these issues is based on the analytical survey and the study conducted in rural areas and we made an attempt to draw up the main justification in the frame of the assumption, that roles of many subjects are important in solution of numerous urgent problems in livestock breeding.

We examined implementation of responsibilities by the state, private sector and other subjects in livestock breeding issues, their achievements and shortcomings; their ideas on and evaluation of the main reasons and conditions, their satisfaction with them and included several such issues as possibilities for further improvement, forms of activities and priority objectives in this part. We made an attempt to link and clarify the past experience, lessons and their significance with future trends of livestock breeding development, a need to increase the roles of the state, private sector and other subjects.

In determining priority directions, we used some appropriate ideas and justifications from the national development policy implemented by the state and from development programs of economic sectors as well as the "Program of the government activities" approved in 2000 and the action program to be implemented by the new government in 2005-2008. As herders or individuals engaged in livestock breeding are included in formal and informal groups<sup>25</sup> in our country, we took into account common features and paid attention to an opportunity to express some views on the role of herders in livestock breeding, methods and tools of implementing their role, attitudes towards their role. Our study proved that the most urgent issue is a need to accept at all levels a fact, that herders in our country represent a large social group, which needs to take full responsibility for many issues related to the future of livestock breeding sector in our country.

The priority directions of the state activities are included in the report from the main sources, their effects on livestock breeding are defined on the basis of results and conclusions from our study. Study of the effect of main directions developed by the state on livestock breeding reveals an interesting result. As we know, an aim was put forward to implement a policy of developing livestock breeding with use of intensive methods on the basis of cooperation.

<sup>&</sup>lt;sup>25</sup> Cathcart, S.R., L.A.Samovar, L.D.Henman. 1996. Small Group Communication: theory and practice. Mc Graw-Hill.

# Table 9. Priority directions of the state activities, evaluation of their effect on livestock breeding

Priority directions of national development	Livestock breeding policy issues and achievements	Effects and consequences in livestock breeding
To provide stabilization of macro economy and structural changes, to deepen reforms	Lack of progress in introduction of effective technologies and management, in coordination of livestock growth and stabilization of productivity	Lack of progress, development capacity, lack of changes in livestock breeding situation, unclear trends.
To improve banking and financing system	Lack of progress in livestock breeding in aspect of viewing banking and financing services as investment opportunities	Representatives of banking and non- banking sector do not accept herders' capacity for collateral, herders are not able to access services from the bank as a source of investment.
To restore national industry, to provide economic growth by supporting export- oriented industries	The present situation, when domestic and foreign exporters sell their produce and raw materials without processing, remains the same, livestock breeding lacks export orientation	There is a trend for further expansion of present situation when livestock products are purchased and sold without regard to them meeting quality requirements, it has not been able to become an impetus for progress in output and quality of produce, or interest in engaging in export-oriented industry.
To develop infrastructure, to accelerate regional and rural development	There is some progress and changes in roads, communications and services	Rural producers and businesses are not able & do not attempt to use progress in infrastructure development.
To provide favorable environment for human development, to improve accessibility of health, education & social services	Much attention is paid to improvement of services provided by the government and good relations with foreign investors and donors, which gave some results	Although opportunities for providing services to herders have increased, business capacity and skills of service providers and receivers are weak, so the expected level is not achieved.
To alleviate unemployment and poverty, to improve living standards	As the private sector did not pay much attention to creating work places, and herders lack initiatives on increasing and expanding their sources of income, this situation becomes an impediment to development	Herders, herder groups and local administration are not greatly concerned about using new emerging opportunities and favorable conditions.
To provide sustainable development and ecological balance, to implement a policy, safe to regional development environment	Although some attempts to introduce basic elements of sustainable livestock breeding development are being made, there is lack of tangible changes or progress, formulation and interpretation of policy is inappropriate	Sustainable development is not an issue of concern in rural areas, no attention is paid to proper use of biological and natural resources.
To intensify land reform To decrease soil, air and	Although laws and regulations, legal environment are in place, opinions that their implementation, especially on issue of pastures, became a step back, are widespread	Herders and locals are not aware of new opportunities and favorable legal environment and do not use them, herders do not contribute to improvement of pastures or water supply, local administration is slow on taking appropriate measures. Herders and herder groups, which do

environment pollution, to	livestock breeding and weak	not realize their fault in overgrazing,		
improve healthy living environment	production and resource management harmful consequences to environment	water sources and other sources,		
	tend to increase	which are basic resources for livestock breeding, become the main reason for impoverishment of environment.		

If intensification and intensive development is our final goal and the future we strive for, a question of who will implement development of livestock breeding with use of intensive methods and what is the role of subjects emerges. Our survey paid certain attention to formulate an answer to this question. First of all, we conducted a study to determine if intensive development and intensive methods of running an economy are various, principally different issues. Individuals, engaged in livestock breeding, professionals and management workers all have different views on the subject.

### Table 11. Intensification of livestock breeding, possibilities for use of intensive methods, roles of different subjects

				Direc	tions o	f the qu	uestion	naire		
Study participants		Agree/ disagree with policy	of intensive development	Existence or lack of possibilities and conditions for intensive development of livestock breeding		Are intensive development and intensive methods of running different concepts?		Can intensification of livestock breeding and intensive methods be implemented together *		
		Yes	No	Yes	No	Yes	No	Do not know	Yes	No
Herders, (n=3	52)	28	4	9	23	9	13	10	32	0
Heads of here (n=12)	der groups,	7	5	8	4	5	7	0	5	7
Livestock experts, (n=8)	breeding	7	1	4	4	2	4	1	4	4
Bag governors, (n=8)		8	0	3	5	5	1	3	6	2
Soum governors, (n=8)		8	0	2	6	1	7	0	2	6
Total *	Number **	58	10	26	42	22	32	14	49	19
	Share ***	85.3	14.7	38.2	61.8	32.3	47.1	20.5	72.1	27.9

Note: \*- answers to the question whether herders or the state can implement these together?

\*\*-sum of all answers \*\*\*-compared to the total number of 68 questionnaire respondents

Of survey participants 85% accept that intensification is a proper development trend, but view that conditions for implementation of intensive development are not yet in place. While half of respondents view that development of intensive livestock breeding is different from engaging in livestock breeding with use of intensive methods, 1/3 answered they did not know. Since over 70% answered that it is possible to engage in intensive livestock breeding in combination with intensive methods it leads to a view that although these two issues are understood separately, they can not be implemented separately.

In determining its rural policy, the state selected a strategy of intensive development of livestock breeding and approved the national program on this issue as its first step. Along with that, the state takes different measures such as developing cooperatives, supporting them with loan and tax policies, which reach herders by different channels and ways. As different initiatives, although few in number, are out forward, we can understand that livestock breeding development goes in the direction of intensification.

### PART SIX

### POLICY MODELS TO INCREASE THE ROLE OF THE STATE AND PRIVATE SECTOR, TO SOLVE URGENT ISSUES IN LIVESTOCK BREEDING

#### 1. Policy models, their analysis

As we mentioned before, the state and its partners (the state, private sector, community organizations and groups, general public are called collectively partners in solving development problems) will face these two important objectives in the course of dealing with livestock breeding development issues and therefore should always pay attention to them:

- 1. To intensify livestock breeding development, to maintain the present level and achievements of intensive development, to expand it further in favorable direction
- 2. To decrease as much as possible improper activities and measures, which can lead to unfavorable results and consequences.

In general success or decline of livestock breeding in our country depends first of all on the state and the private sector, which determines the extent of their roles and responsibilities.

### A. WHAT IS NEEDED FOR MONGOLIAN LIVESTOCK BREEDING SECTOR TO ENTER THE ROAD TO SUSTAINABLE, INTENSIVE DEVELOPMENT?

In order to increase contribution of livestock breeding sector in national and rural development, it is important for policy and decision makers to include issues of stabilizing livestock breeding and increasing its role in economic and social sector into a group of questions of main directions and pay attention to them in the future. A fact that some urgent issues have not been solved yet, gives place to intensive development of livestock breeding in the future and opens new opportunities for success. In the below table we made an attempt to show main reasons and obstacles to development of livestock breeding along with their possible consequences.

### Table 12. Obstacles to development of livestock breeding

Main issues and	Main reasons and consequences
activities	
A political game, "false care policy" makes a negative	Attempts to make the rural population and herders a target for political games have increased, false promises to do all their
impact	work for them, to give them different privileges, limits initiatives
	of people and greatly slows down the development pace.

Unfavorable condition of legal environment negatively affects herders	Herder households are not included in laws and regulations as rightful members of the market society and discriminative attitudes towards them are observed. For instance, many criticize a fact that at the time when we face the tragedy of common use of resources, the Law on Land stated common use of summer- autumn pastures, which became a step back from the previous situation. A provision of the Law on giving land into ownership in urban areas does not accept herders as a large social group with their own space to reside. Exemption from taxes leaves them out of active market relations, which is not taken into consideration.
Decline and	Legalization of common use of land without appropriate
impoverishment of natural resources used in livestock breeding increases	coordination led to disruption of pasture use management, provoked merciless exploitation of natural resources and created a situation, which can cause numerous dangers in livestock breeding.
As roles and responsibilities	National programs are developed with an attitude of high
of main subjects and partners are not divided and coordinated, it affects negatively implementation of intensive development policy on the basis of appropriate cooperation	expectations, while direct involvement of the state in livestock breeding is high and guarantees for implementation of such programs are low. They are not able to represent interests of rural areas, herders and herder groups, or attract their attention and do not provide opportunities to private sector to support the livestock breeding sector by capital investment in the frame of regional development policy, which in the end led to such negative phenomena as doubt in and ignorance of programs.
There is lack of	A policy for increasing productivity per animal to the new level
development policy to	has not been developed, an incentive to incorporate commercial
support progress and	orientation in livestock breeding does not exist, sale of products
positive changes in	as they are or with the lowest level of processing does not meet
livestock breeding sector	market principles and demand, which leads to backwardness.
Although herders lack financial sources, they are	For unclear reasons herders have refused from transferring their livestock into money/cash savings, and denied opportunities to
not interested in using	enter market turnover, banking and financial services. This has
opportunities for cash	become a basis for the chronic "problem" of herders, namely
generation	lack of cash. It is not determined if this is lack of opportunities to
	earn money or chronic lack of cash.
Herders lack interest and	As presently established cooperatives, associations, community
initiative to cooperate in direction of production,	organizations were not able to reach the level of a business
direction of production, services and resource	entity, and perspectives for their development are low, it leads to cautiousness and distrust among herders and negatively affects
management	establishment of cooperative network in rural areas.
Work on rearing elite	With transition of livestock to private property livestock gene
breeding livestock, which is	pool has been destroyed and selection and breeding work has
a basis for increasing	almost stopped. A selection base of good breeds, required for
livestock productivity and improving breeds, has not	increasing livestock productivity and breeding in direction of intensive livestock breeding has become non-existent.
started and perspectives for	mensive investore breeding has become non-existent.
its start are not clear	
Fodder supply and	The present system, when the government gives promises to
availability, which is a basic	assist herders and protect them from dangers in difficult times

source for protecting livestock from natural disasters and supporting productivity of the herd and its successful survival in winter, has remained at low level, with all hopes put on natural pastures	and procures low quality hay at high price with money from the state budget, "frees" herders and individuals with livestock from their responsibility to prepare, reserve and buy hay and fodder in order to create a reliable fodder supply. It adds up to vulnerability to different risks and reduces efficiency of some activities directed towards protection from risks in livestock breeding.
Herders and herder groups still do not have any interest or wish to invest capital in livestock breeding and just wait for the events to unfold further	The main condition for accelerating and intensifying livestock development, especially for improving livestock breeds and increasing their productivity is capital investment. However, herders deny and underestimate this condition, so herders themselves slow down development of livestock breeding.
There is lack of technological and hygienic base for production of quality produce, which can meet growing demand	Technologies and hygienic conditions for producing and processing livestock products and raw materials are extremely outdated, which leads to such negative consequences as decline of selling capacity at the market and reduces the price of products. "Industry", which produces the same kind of product in the same period with the same technology showed its inability to support itself.
Livestock breeding has not developed and diversified to provide production aimed at special segment of the market, for special needs	No progresses is made in processing livestock products and raw materials with different technologies for special markets and consumption and in entering the commercial network. It leads to staying behind the business frame, which can provide competitiveness of livestock breeding, its ability to meet market demand creates new demand.
As livestock breeding has low capacity for overcoming risks, and no measures were taken to prepare and be ready for risks, it became extremely vulnerable to disasters and risks	Although a system, when the state took responsibility for risks to livestock breeding, has been eliminated, a new system to replace the old one has not been established. As free producers –herders are not able to take responsibility for many important issues such as reducing risks and protecting themselves from risks, harmful consequences of natural disasters heavily affect livestock breeding.

### **B. URGENT ISSUES NEEDED TO BE SOLVED EFFECTIVELY IN THE NEAR AND MIDDLE TERM, RESULTS AND PROFIT FROM THEIR SOLUTION**

As we clarified our ideas on urgent issues in livestock breeding and inappropriate consequences from them, we found an opportunity to determine outcome from their identification and solution in rural areas, first of all in livestock breeding development.

Urgent issues needed to be	Expected outcome, responsibilities of different subjects			
solved quickly	/ state, its partners – private sector, groups, community			
	organizations, individuals/			
To decrease the overload on the pastures and water supply	To take measures on recovery of natural pastures and other resources in natural way and with use of accelerated methods and technologies with human assistance, based on resources, direct participation and coordination of herders (to support with loans on favorable conditions from the state, to provide services on introduction of technologies, to increase participation of professional institutions, donors, processing factories, community organizations ).			
To limit growth of livestock	To limit growth of livestock by increasing the amount and			
with low productivity and efficiency	quality of produce and raw materials per one animal, by improving livestock breeds; to provide preparation for transition to intensive methods; to reduce load of pastures (to improve livestock gene pool, to rear high quality livestock, to implement measures on sale for selection and breeding work with participation and resources of private sector, to provide support from the state in this direction ).			
To restore and implement the				
tradition of systematic, quarterly based usage of pastures in the frame of general reform.	implementing the systematic and controlled usage of pastures, water sources and hayfields; to engage community and local			
To undertake operational and technological reforms in livestock breeding	To introduce creative technologies on saving labor and materials, improving the product quality and raw materials processing; to set up a livestock breeding extension program and implement it in soums; ( to set it up on the basis of investment and participation from the public and private sectors; to transfer training, technological testing, organization of in-service training to private sector and local organizations; to get help and assistance from donors)			
To strengthen the capacity of herders to be prepared for the risks and reduce their vulnerability to risk	possible risks and damage; to transfer to a system, when			

### **B. POSSIBILITIES AND CAPACITY FOR SUCCESSFUL SOLUTION OF MAJOR PROBLEMS IN LIVESTOCK BREEDING**

Since livestock breeding is the main sector of the country's economy, its activities have been carried out with the broad participation of different institutions and individuals: starting with the Government down to a herder. It is obvious that participation of many individuals involves specific duties and responsibilities of those and it is quite interesting how this is implemented in the market economy. It is important to determine ways of solving difficult problems on the basis of previous achievements and experience, to introduce new technologies wherever possible, to decentralize and implement structural and operational reform, to implement these activities in a coordinated way.

Problems faced	Reasons and consequences	Possibilities to overcome
Uninterested, non-caring and lazy attitude towards the issue of livestock breeding development from the local government and herdsmen	Herders and their groups do not support the policy and do not participate in activities undertaken by the government; there is lack of initiative, as well as lazy and uninterested attitude at the level of herders and their groups towards the sound usage of the current economic, social and natural resources	the problem, results To strengthen cooperation and collaboration of economic entities, local government and community on sound usage of all existing resources, to increase drastically the duties and responsibilities of the private sector and herders
Poor interrelation and weak realization of policies in livestock breeding	Interruption of implemented measures and activities, as well as change of policies and strategies, with every change of the government; continuous superficial implementation at the lower and middle levels	To implement long term programs in order to keep interrelation of policies and strategies; to ensure the sustainability and growth of implemented measures; to provide the private sector and local professional organizations with guidance and recommendations on future directions
Poor capacities of investing into developmental areas and generation of investment sources	Scarce possibilities of finding and generating loans and other monetary sources; high interest rates; poor liquidity; private entities with good financial	To bring rural banking services close to herders; with participation of local authorities to take concrete measures towards developing tax, loan and

## 1. Possibilities and capacity of increasing the state responsibilities in livestock breeding

	capacity are not interested	customs policies that will
	in providing financial	support investment into
	support and assistance to	livestock breeding made by
	livestock breeding	the domestic manufacturers
		and herders
	Lack of established	To strengthen business and
Poor initiative from grass	channels and mechanisms	non-business relations of
root levels, unchanged	of receiving feedback from	official and unofficial
mentality of relying on	lower levels; policy	groups, local government
help from the top /state/	measures and activities are	and professional
	"getting lost" at the lower	organizations; to set up
	level	procedures for independent
		and joint monitoring and
		evaluation of activities.
Mentality of blaming the	Mentality backwardness,	To establish a full, self-
weather and nature for all	which emerged due to the	support mechanism at the
problems is still strong	poor choice of blaming	level of manufacturers by
	weather for their own	implementing a disaster
	irresponsibility and laziness	management strategic
		planning system.
Unsatisfactory performance	Lack of professional	To set up extension services
of the livestock breeding	guidance and extension	of providing livestock
professional units in the	services; lack of orientation,	breeding technology and
countryside	information, training and	production
	consultancy systems	recommendations based on
		soum livestock breeding
		units

### 2. Possibilities of increasing duties and responsibilities of the private sector\*

Problems faced	<b>Reasons and consequences</b>	Possible solutions
Selfishness and distrust	Lack of initiative, lack of	As a priority to start
remain strong	capacity of grasping the	different forms of
	bigger issues by	cooperation and
	cooperation and mutual use	collaboration between
	of resources	herders; to stabilize the
		above through obtaining
		institutional status with
		permanent involvement of
		the private sector
Very weak professional and	Lack of regular, sustainable	To develop special
functional capabilities	capacity- building	extension-orientated
	measures, poor coverage,	training programs and
	poor results	organize training for
		herders, their groups and
		local community

Continuous weak capacity of livestock breeding to absorb progressive technological activities	Weak initiative and poor capacity to welcome and introduce new, efficient technologies and activities;	To select technology consistent with the short and mid-term capacity of the sector; have the private sector to undertake the testing.
Weak capacity to sense and greet initiatives from the private sector entities not engaged in livestock breeding, infrastructure development and processing industry.	Lack of initiative both from the processing industry and herders; remoteness; lack of understanding of possibilities and needs of one another	To create and support an interest in private sector to invest into livestock breeding; to set up an efficient and cost saving mechanism of communication with herders
Lack of collateral and cash accrual in order to get bank credit	Bank's refusal to acknowledge herders as partners, lack of initiative from the herders to meet the requirements for banking services	To build up a trust between banks and herdsmen, to create concrete mechanisms enabling the herders to obtain banking services

### \*Note: Herders and groups of herders included

Livestock breeding, which provides a source of livelihood for almost half of the population, should make certain contributions not only to the agriculture, but to the national economy and "serve" like other non-economic sectors. As can be seen from the few examples included in the report, although the position of livestock breeding in the economy is seemingly the same, its scope and progress are stagnant; increase in quality is much lower than quantitative increase. Although lack of change in the share of agriculture in the GDP can be attributed to crop cultivation industry, the futile situation in livestock breeding also serves as an impediment. It is right to conclude that decrease in national indicators following the loss of animals due to risks, which occurred lately in the livestock breeding, was not because of its important position. It was due to its inability to "serve" the national economy.

### D. Policy issues of pastoral livestock breeding intensification

Continuous vulnerability to different natural risks, weak livestock breeding management, a fact that livestock gene pool and health care services are not stabilized and not restored as a system, lack of remediation prospects in the nearest future; lack of concrete support to livestock breeding from the private sector, as well as many other factors continue to have negative impact on livestock breeding- this is the current situation in this sector.

Unstable growth in livestock number, with an average growth of 4-5 % during the year with favorable weather, and up to 10% decrease during years with drought and/or dzud, has provided a valid proof of failure of herders' strategy to provide for production with

quantitative growth in livestock breeding. Currently, vital issues such as market competition, implementation of commercial principle, undertaking technological renovation, meeting customers' demand with high quality goods, products, and raw materials are discussed just superficially, but there are only few cases, when the above was reflected in the mission statement of an business entity or when it served as a concrete leverage for the production. Most of the respondents of the survey on living opportunities, conducted by the Mongolian Chamber of Commerce and Industry, had replied that within nearest 10 years there would be no tangible change in our country's economic situation<sup>26</sup>. It is interesting that the opinion of rural people was similar to that of urban people, which shows the need to develop the countryside and alleviate the backwardness in living conditions (assuming that living opportunities were not limited by amount of meat and milk obtained from the animal).

Since pastoral livestock breeding is prevailing in livestock breeding sector of our country its intensification should be examined at the state policy level, as a complex problem. It is not only very complicated, but also requires a special policy and actions from the state and the owners. Pastoral livestock breeding is otherwise called extensive. From this definition it is obvious that intensification of this sector involves complete change of forms and methods of engaging in business or their substantial change. The authors own views on basic principles of pastoral livestock breeding intensification policy are as follows:

1. There is a need to develop a policy on intensification and intensive development of pastoral livestock breeding, which takes into account national peculiarities, to develop and implement a development concept and strategy;

2. To develop and implement national programs in directions necessary for intensification and development of pastoral livestock breeding;

3. To create a selection and breeding basis in order to improve quality of the herd. The question of improving the livestock breeds discussed presently can be solved with use of local livestock breeds and elite selection groups by (I) improving the breeds of total livestock, increasing its productive qualities, (II) taking measures on introducing herds with improved breeds and selection qualities in soums, bags and herder groups

4. To improve fodder supply by changing the present condition when preparing fodder for livestock is limited by preparing hay from natural hayfields, to introduce cultivated and improved hayfields, to intensify work on preparation and production of raw materials for and ingredients of fodder locally

5. To improve water supply and sufficiency of animal pens and fences;

6. To start work on distributing pastures and hayfields to herder groups for use and ownership under long term contract;

7. To increase the number of small and medium enterprises on processing and semi-processing of raw materials and livestock breeding products in order to add value, to safeguard their quality, to implement technological reform on the basis of well-thought strategy and planning;

<sup>&</sup>lt;sup>26</sup> The White book of Mongolian economy and foreign trade 2003. Mongolian Chamber of Commerce and Industry, UB

8. To make herders understand that they need to work hard to become not only "producers", but suppliers of raw materials and livestock breeding produce;

9. To improve quality of technical consulting services, to bring them closer to herders, to operate according to market principles of demand and supply and creating demand;

10. To expand non-herding activities, to mobilize all opportunities for finding other sources of income generation;

11. To establish cooperation between producers, processing industry and private sector, to develop sustainable collaboration between these subjects;

12. To create a sustainable system for use and protection of natural resources, to establish a favorable legal environment.

Improving development of herders' mentality, preparing them psychologically has a special importance in accepting new ways of livestock breeding development and implementing the state policy. First of all, herders should themselves understand that they are free producers, owners of assets, a large social group, which should have their own place at the market.

The practice is prevailing to define the fundamental principles of livestock breeding development and its concept purely on content base, reflect them into the policies and procedures, and plan and implement the activities within that frame, rather than connecting it rightfully with the current development level of the sector, its capacity, and its future strategies. As observed, it is inconsistent with the principles of the development economics and management theories. For example, defining livestock breeding intensification as an "output", as opposed to a "function/activity" according to the process theory, might lead to defying is creative qualities, such as space/time limit, levels to achieve, output criteria, as well as step-by-step, organized development.

One of the issues that seriously impedes the development of livestock breeding is the political game of "false care and love" with empty promises that do not bring any benefit whenever, instead of acknowledging the employees and manufacturers engaged in livestock breeding as a major self-sufficient social group, and implementing policies and activities on active and equal cooperation. Being released from any social and market events and activities and put under the auspices of the government, instead of participating equally in all market society activities, benefiting from the social welfare after paying the taxes, failing and succeeding in the market competition, is harmful to herders and is a breech of their rights.

The abovementioned single example shows how the government has fulfilled its duties of providing the herders, who are specialized in livestock breeding, with all conditions to be the equal members of the market economy society. The government should acknowledge its failure to fulfill its duties and take the blame of being directly responsible for turning the herders, a major social force, into a selfish "group" that demands care from the government, but shows no initiative or courage to understand, accept and implement the objectives and goals set by the government.

Upon careful review of the current situation in livestock breeding, it can be seen that "feed-me" mentality prevails and the development policy is understood as something implemented through grants or aid or something, which takes place in the due course, on its own. It will not be an exaggeration to say that this attitude of the herdsmen - the owners of livestock and main force in livestock breeding, had driven it into deadlock.

### E. Economic problems of livestock breeding intensification

If we will observe what is being implemented in the countries with different level of development, where the policy of rural development has received full support, it can be seen that attempts to solve the agricultural development issues by implementing a separate policy for the sector, or cooperation between the sectors, or too much intensification, or in other words production-aimed policies have failed and given away their position to a new concept of rural development. It is doubtful that livestock breeding can be intensified by calling out people to engage in high quality production, when they are not involved deeply into the market social relations, live in places with poor infrastructure, with poor development of services to support the living conditions and weak capacities of rural manufacturers.

Intensifying livestock breeding, engaging in it intensively will require much more expenditure compared to present situation. Especially in case with intensification of pastoral livestock breeding it is necessary to create a necessary material basis by making an additional investment in bio-industry, where livestock feeds in natural pastures and produces livestock products and then to develop it in a sustainable way.

A question may arise who should invest finances required for intensification of pastoral livestock breeding, and where these funds can be found. The answer is that herders should take an enormous responsibility, they should:

1. Generate sources of financing and add to them constantly. If herders approach this issue in the same way as at present, when they complain about lack of money having several hundred livestock outside the ger, the intensification policy will never be implemented.

2. By improving quality of and level of processing of raw materials and livestock produce sales should be increased and cash savings should be generated, i.e. a certain part of required assets should be received from livestock.

3. Starting from the present herders should get loans, however small, and repay them, thus understanding the nature and the rules of banking services in order to become reliable lenders and partners of banks.

4. Increase the amount of income generated from activities other than herding, reduce the number of livestock used on household needs and increase the amount supplied to the market.

5. Establish all kinds of relations and links for active cooperation with the private sector and processing industries as reliable partners, create a financial- capital cooperation

6. Work with initiative to find sources of financing such as donations and aid

7. Be involved in activities on insurance coverage, savings, establishment of joint funds.

Directing national programs, donors' projects and charity activities towards intensification of livestock breeding, implementing a policy directed by the state in the frame of financing and investment is a an important responsibility. Especially, issues of bringing banking services closer to herders, implementing legal and coordination activities on facilitating their requirements through the state policy, agreeing with commercial banks on the size of loans, interest rate and repayment period for herders, taking into account peculiarities of livestock breeding production, seasonal character of livestock production and output, should be implemented in the frame of the state responsibilities.

Introducing principles of costs- efficiency evaluation into livestock breeding production, using them as criteria for the level of intensification, developing simplified methodology for herders to use is very important. In this way, setting criteria for livestock breeding intensification will have a great significance in evaluating efficiency of these costly activities.

### **II. SELECTION AND CONFIRMATION OF POLICY MODELS**

The previous chapter dealt with the issues of drawbacks in livestock breeding in relation to the duties and responsibilities of the government and owners. While numerous successes and progress were mentioned only briefly, our intention to clarify the drawbacks and failures is related to our opinion that it is difficult to support the good.

Efficiency of the Government activities is represented by the way it fulfills its duties and responsibilities, which is also defined as good management<sup>27</sup>. Good management of the government is a network of government agencies capable of creating the social conditions favorable for human development of all social groups in all aspects, as well as an efficient partnership, established within legal framework between the private sector, NGO's and the state organizations.

It is popular to view that the structure, organization, and scope of activities of the Government with Good Governance, as it is sometimes called, should be small and simple. Having said that the government should be small and have fewer duties and responsibilities in conditions, when the civil society is not properly developed, and the population is inexperienced in cooperating with the civil society, it is important that we carefully review the following three duties<sup>28</sup>:

<sup>&</sup>lt;sup>27</sup> Training manual on "Increasing capacity for local self-governance in Mongolia", 2003. Association of Mongolian local management, UB

<sup>&</sup>lt;sup>28</sup> Information, consultation and public participation in policy-making: building open government inOECD member countries. 2003. In Open Government: fostering dialogue with civil society. O rganisation for Economic development and Cooperation

1. To establish social justice, and unity within the conditions accepted by all members of society and meeting at least the minimum living conditions

2. To keep the legal status of the government in all sectors

3. To ensure a status efficient for development of the economy, sound allocation and usage of state resources

According to the general principles of developmental policy survey and research, when reviewing the developmental issues of any sector, firstly, all possible models are formulated briefly, then each model is evaluated, and then the best option is chosen, the one, which has best justifications for implementation, and most importantly, which is consistent with the state policies and goals, strategies and tactics to achieve the goals, the prevailing attitude, measures undertaken, or to be undertaken. Without that there might be a risk of making a mistake in ensuring the connection with the real conditions and ensuring the continuity of the state policy.

Upon careful review of the general attitudes on roles and responsibilities of the state, private sector and social groups, and their future change, as found from the survey undertaken in the countryside, as well as upon analysis of the current situation in the animal husbandry, I considered it right to choose the optimal policy model based on the following outline:

- 1. Inaction version, or unchanged continuation of the current policies, strategies and activities undertaken in livestock breeding and unchanged responsibilities of the state and the private sector, individuals, community and donor organizations.
- 2. Radical changes version, or fundamental change or comprehensive reforms of the current policies, strategies, and principal direction of activities undertaken in livestock breeding; as well as of duties and responsibilities of the state, private sector, public and donor organizations.
- 3. Modest changes version, or making appropriate changes and supporting the development rate on the basis of connecting the current situation of livestock breeding, its future trends, responsibilities of the state, the private sector, community and donor organizations, as well as individuals with the policies, strategies and activities undertaken by the state in this sector.

Although it is possible to study simultaneously the livestock breeding development policy and roles and responsibilities of many individuals on the basis of the above three models, due to the goals and specifics of the research paper we would focus on the issues of speeding up development of the sector, and leading it into sustainability through increasing the responsibilities of the state, private sector, public and donor organizations, and individuals. A fact that until present we focused on problems, outputs, activities, and programs implemented in livestock breeding is directly related to our intention to define the model of improving current and future roles and responsibilities of many organizations and subjects on the each stage of management, organization and implementation as a policy recommendation. According to the exemplary model of the policy analysis<sup>29</sup>, criteria for the selected policy model should be chosen. As Bardach, 1996 suggested, when evaluating choices, which are not easy to define quantitatively, such as policies, functions and responsibilities, it is best to use qualitative or practical criteria, which I did use in my research, as follows:

- 1. To be consistent with laws and regulations. It is important that any policy and, within that policy, the issues of responsibilities and duties, should not violate the Constitution, other laws and regulations or any rights.
- 2. To be accepted politically, or at least not to meet direct protest and be directly accepted or be able to get appropriate support in certain political circles.
- 3. To be effective. From the time of its approval until the actual implementation, every policy, strategy, program and activity is discussed at different levels of the state and management; it is amended and changed, sometimes up to the point, when implementation is impossible. It is important, that no matter what the situation is, it is implemented and even small, but tangible and efficient results are achieved.
- 4. To be flexible to improvements and changes. During the development of the policy it is impossible to foresee and reflect all relevant issues. Therefore, it should be unbiased, but at the same time, flexible to allow certain amendments in the progress.
- 5. To be feasible possible to implement and being implemented. Possibilities for implementation and implementation itself are sometimes thought to be related to the Government only. The destiny of livestock breeding depends heavily on the decisions, methods, and policies of the owners, rather that the state. Therefore, the main line of policy implementation is the fact how the herdsmen are acknowledging and following their duties and responsibilities.

It looks like we might achieve certain results upon placing the policy recommendation in all three selected models to further increase the duties and responsibilities of the state, private sector, public and donor organizations and citizens in livestock breeding.

As we mentioned earlier, the findings of the survey, conducted among the local authorities, professionals, herdsmen and businessmen, on duties of the state and its partners in livestock breeding, show that respondents consider the Central Government, the aimag/soum Governor's office, herdsmen and donors to carry out the most of the duties out of 13 different subjects. Furthermore, the same survey showed with quite specific orientation that in the short and midterm future there are possibilities that the forms of engagement in livestock breeding will increase, and subsequently duties and responsibilities of the individuals involved will change. With an attempt to diversify the current and future duties and responsibilities in relation to the key issues in livestock breeding, it was defined that there are many possible forms of engagement in livestock breeding, such as guiding, supporting, direct implementation and sharing benefits.

<sup>&</sup>lt;sup>29</sup> E. Bardach.1996. The eight-step path of policy analyses. A handbook for practice. Berkeley Academic Press, Berkeley.

Policy models	Definitions of the problems in the policy model			
	and methods of is implementation			
Inaction model	Taking into account scarce possibilities of simple change in the current situation in livestock breeding development; the time required for the model to become a forming element of rural development with decisive significance; or the justifications brought up to choose gradual development path through support of livestock breeding development based on its own resources, it is possible to chose the inaction model, or the version of not changing the current policies, strategies and activities. But			
	livestock breeding still:			
	• There is low quantitative and qualitative progress in development; easy decline in production and output of goods and raw materials; slow and unstable growth, poor market and ecological orientation.			
	• There is large centralization/concentration of duties and responsibilities of the state, private sector, community and donor organizations, and citizen either at top, or bottom levels; it is unever at all levels;			
	<ul> <li>Owners, or herders have not found an equal position and share on the market and in the commercial network; they are not involved in the market society basic relations; they do not have enough money, which is an engine of development; they are insensitive to the reforms have poor capacity of accepting and absorbing the technology and efficient methods</li> </ul>			
	• There are many unsolved developmental issues including vulnerability of livestock breeding to the weather and economic risks, insufficient situation with attracting and getting support from the banks and financial institutions, as well as private sector and manufacturers			
	<ul> <li>Developmental policies, strategies and concept definitions, such as to intensify, intensification and intensified development are not accurate, are defined as an output not a process and as such, do not have criteria.</li> </ul>			
	• The current situation of internal and external environmental factors having either a negative impact on the development or slowing it down,			

# Table 14. Definition of policy models

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Radical changes model	<ul> <li>will eventually be liberalized, but it will require quite a long time</li> <li>The probability of unnecessary waste of the capital and labor continues to be high, and subsequently, development of livestock breeding will slow down, and have a weak contribution to development of national and agricultural sectors.</li> <li>There is a probability of further weakening of capacity of livestock breeding to serve the rural development</li> <li>There will be a need for immediate change of many</li> </ul>
	<ul> <li>important issues in a completely different from the current situation direction in order to overcome in a short time all negative aspects mentioned in the inaction version, and consequently bring livestock breeding into the sustainable, ecological and market economy orientated development path, such as</li> <li>Decentralization by delegating some duties of the state from the upper to lower levels and ensure full transparency at all levels</li> <li>Simplifying the vertical system of cooperation and integration of accountability, duties and activities ; resolute expansion into the horizontal system in short time</li> </ul>
	<ul> <li>Concentration of cooperation with other economic sectors only for the socio-economic progress</li> <li>Direct implementation of the multilateral goals of increasing the economic capacities and intensification of livestock breeding by herdsmen and other livestock owners</li> <li>To make the management related to generation and Expenditure of the capital and other resources, which are the source of development, the direct responsibility of producers</li> <li>To stop immediately or gradually the grant aid and discounts from the Government</li> <li>To realize the principle of eliminating the harms and negative impact on ecology and environment caused by the entities involved in livestock</li> </ul>
	<ul> <li>breeding, or restoring the environment with their own capital</li> <li>To make herdsmen and other livestock owners fully responsible for the risks in livestock breeding</li> <li>To make all herders pay all taxes regardless of their wealth and living conditions; to stop all discounts</li> </ul>

	<ul> <li>given to herdsmen within duties other than social welfare</li> <li>To unite all herdsmen into coops, partnerships, and NGO's and let them have an official status</li> </ul>			
Modest changes	<ul> <li>Although both of the above options (inaction and radical changes) have their own advantages, it is possible to choose the third option based on modest changes, if a decision was made to refuse from both above options due to many reasons, including an unpleasant or negative impact on the future destiny of the sector, that might probably create a serious situation in the future. This option should be defined by two main tactics, such as further strengthening the advantages of the above options and avoiding mistakes and disadvantages.</li> <li>As we project, livestock breeding development policy option of modest changes will have: <ul> <li>To revise and define anew the development, its strategies and tactics issues, in consistence with fundamental factors, such as objective development of our country, its socioeconomic conditions, legal environment, regional development concept, rural development policy</li> <li>To develop and confirm an approved rural development policy of Mongolia, to develop and implement a national program which reflects all problems of livestock breeding in stages, in order to ensure continuity and to increase drastically the duties and responsibilities of the herders</li> <li>To bring the level of livestock productivity to a certain level and stabilize it; to implement activities of planning future policies and strategies based on the level achieved</li> <li>To divide the duties and responsibilities of entities and legal subjects, to provide the balance through the mechanism of decentralization</li> </ul></li></ul>			

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	<ul> <li>To increase further transparency of all activities, and implement activities on the basis of profit analysis</li> <li>To undertake step-by-step implementation of decentralization activities by increasing participation of the private sector, herdsmen, their representatives, community or founder organizations, to remove the concentration of state duties and decentralize them.</li> <li>To make entities involved in livestock breeding and parties involved in the disaster management share responsibility for risks in livestock breeding; create and abide the mechanisms of sound allocation of the risks</li> <li>To further increase participation and responsibilities of the private sector in development, decision making and implementation of policies on key issues in livestock breeding based on the principles of reliable partnership</li> <li>To change the current practice of releasing herders from different taxes and fees; to transfer to the system of supporting livestock breeding by sound policies on loans, taxes and customs.</li> </ul>
	livestock breeding; create and abide the
	• To further increase participation and responsibilities of the private sector in development, decision making and implementation of policies on key issues in livestock breeding based on the principles of
	• To change the current practice of releasing herders from different taxes and fees; to transfer to the system of supporting livestock breeding by sound policies on loans, taxes
	• To raise highly efficient animals, to produce high quality fodder and raw materials for fodder, to ensure its proper storage; to update the technology of fodder production
	• Through state/private sector cooperation to implement activities aimed at updating the technology on protection of the quality of the raw materials and products, when the animal is alive and during processing; as well as drastic upgrading of first-stage and industrial processing levels
	• To define national criteria on evaluation and confirmation of development and intensification level of livestock breeding; to transfer to the system of intensification ratings.

# **III. SELECTION OF AN APPROPRIATE POLICY OPTION**

I have developed a projection of three options on the current situation of livestock breeding, state policy on livestock breeding, duties and responsibilities of many subjects and formulated general issues on activities to be undertaken in relation to the possible responsibilities of the state, private and public organizations and citizen in consistency with the quality of each particular option. The most suitable version will be defined through evaluation by the previously mentioned principal criteria.

The required criteria on policy version chosen by us are as follows:

- 1. To be consistent with laws and regulations
- 2. To be acceptable politically
- 3. To be effective
- 4. To be open for amendments and improvement
- 5. To be feasible -possible for implementation, and being implemented.

According to the general evaluation and total score, the modest changes version is the most consistent with the criteria we have chosen. Many documents on the regional and rural development, as well as the state policy on agriculture were developed and approved during the late 1990's and early 2000, whereas intense talks about the intensified development of livestock breeding started only in 2002. This did not match timewise and is believed to have had a certain impact on livestock breeding and its development.

In addition to a need to have a "preparation" stage in order to develop the intensified livestock breeding in its real content, the way of intensifying and developing will become an important process of reform and activities of turn-round quality, so if we consider it necessary to approach the issue seriously, to implement it in stages, it is rightful to chose the modest changes option.

Policy options	Criteria	General				
	Consistent with laws and regulations	Acceptable politically	Effective	Feasible	Can be amended and improved	evaluation total score
Current, or inaction option	3	1	1	1	1	7
Radical changes option	2	2	1	1	2	8
Modest changes option	4	3	3	4	3	17

#### Table 15. Evaluation of policy options with previously selected criteria\*

Note: \*score (4-fully consistent; 3-consistent; 2-almost inconsistent; 1- inconsistent)

The modest changes policy version and its principal formulation has been given in the table 13 and the following is the brief summary of the principal formulation of resolving the issue of the modest changes policy in livestock breeding.

The policy of modest changes in livestock breeding provides opportunities for establishing essential pre-requisite conditions for intensified development of this sector, leading to the road of sustainable development. This policy should be directed towards implementing operational management and coordination of responsibilities of various entities in their further division and development, as well as strengthening of already existing capacities, organizational systems, and cooperation. The core of the modest changes policy should be introduction of new and efficient technologies into livestock breeding.

# Box 1. Definition of the modest changes policy

Definition of the modest changes policy and the state duties

The Government of Mongolia should acknowledge the necessity to implement the modest changes policy or the policy of step-by-step intensification of livestock breeding development, through balancing responsibilities of the state, national and international organizations, individuals and groups of individuals; by setting up clear distinction of the above duties; by ensuring close correlation among those duties, and especially through transferring the principal responsibilities on development to the private sector. The Government should implement many activities, including creating in the countryside the capacity for independent implementation of technological and human resources development; by transferring certain duties and responsibilities to the private sector and civil organizations it should focus primarily on policy development, providing policy guidance, improving legal environment, and if necessary, acting as a mediator and providing support. By accomplishing the above, the Government will provide an opportunity to refuse from the former attitudes and methods of intervening into activities of private owners and free manufacturers in the market environment, of taking on other's duties.

The core of the modest changes policy should be introduction of new and efficient technologies into livestock breeding.

As for the technology, there has almost been no tradition in our country of summarizing and identifying the needs for technology or using it in consistency with the country's specifics. It is imperative that many issues, which evolved during the last 10 years, are not left unattended, but are resolved in a determined way. If we approach technology issues from the aspect that its implementation should be simple, with few problems; it should contribute to creation of different sources of income and that there is a need for substantial change of practical activities in livestock breeding, there are many issues to pay attention to and review.

Gradual approach to implementation of the policy of modest changes in livestock breeding or the development policy of this sector means taking off the government some of the heavy burden carried by it. In order to do so, attention should be paid to providing possibilities for the private sector and public organizations to take over some responsibilities of the government and to become guides of development. Measures should be taken to connect livestock breeding development with the regional development policy and to develop and implement a rural development policy, which reflects fundamental issues of livestock breeding development and contains detailed description of the government and other entities' roles and responsibilities.

As a result, an opportunity to substantially increase the scope and quality of roles and responsibilities played by the private sector and, especially, herdsmen, in comparison to the present situation, will emerge. Increasing roles and responsibilities of herders and groups of herders will help to clarify roles and responsibilities of the state and other entities and there will be an opportunity for similar increase of activities and initiatives for cooperation at different levels.

## Box 2. Basic formula for implementation of the policy of modest changes

- To define the duties of the state organizations in a mutually co-related, balanced and distinctive way within the framework of a mutually co-related strategy and process of intensification of livestock breeding development and livestock breeding run with use of intensive methods.
- To raise to the leading level roles and responsibilities of the local authorities, herders, and groups of herders
- To increase substantially responsibilities and participation of the private sector, community organizations and other subjects; to increase economic and social benefits for livestock breeding
- To define carefully the possible roles of donors and international organizations in Mongolian livestock breeding; to link it with the national policy
- To introduce commercial regime into livestock breeding gradually, but without losing time; to increase capacities of herders and rural manufacturers and their influence on the market.
- To encourage sustainable commercial cooperation between herders and other subjects
- To carefully study and redefine state participation in livestock breeding production and development
- To introduce resolutely sound management and organization into livestock breeding production
- To intensify human resources development in the countryside; to transfer to the system of organizing training and internship programs with participation of community organizations
- To set up independently agricultural extension services within the framework of rural development policy; to mobilize professional organizations and professionals working at the soum level in this work

In general, implementation of the modest changes policy among herders, herder groups, rural units, linking it with other measures and activities will create pre-requisites for technological and management reform and provide its development.

Based on detailed analysis of how different state and private organizations, groups and herders understand, acknowledge and implement their roles and responsibilities in livestock breeding development, I have tried to make some proposals on future actions. The focus was on ensuring unity and balance of responsibilities, by defining and demarcating responsibilities at different levels with regard to their coverage and scope of livestock breeding development issues.

Finally, since the main approach to development of this sector will be strategy of intensification and development of livestock breeding, the backbone of the state policy on agriculture, it is imperative to define immediately roles and responsibilities of the government, the private sector, community organizations, other groups and donors; the form and direction of these responsibilities; as well as possible implementation mechanisms and possible cooperation. However, concentrating the issue on two poles, namely, implementing intensification and engaging in livestock breeding with use of intensive methods and paying more attention to their coordination should be related to the future development objectives of this sector.

In this relation, by connecting the roles one takes on in livestock breeding, with the policy, activities and responsibilities we could consider them at the following levels:

- 1. Policy of intensification, scope of activities
- 2. Scope of roles and responsibilities
- 3. Implementing subjects (organizations, citizen, groups)

The scope of activities and livestock breeding intensification policy is defined as follows:

- 1. Engaging in livestock breeding with use of intensive methods
- 2. Intensification and development, with use of intensive methods
- 3. Undertake step-by-step measures for intensification and stabilization of intensification
- 4. Define development policy by results of livestock breeding intensification

5. The state does not take responsibility for livestock breeding development, but provides all kinds of support

The scope of roles and responsibilities is defined as follows:

1. To be fully responsible for implementation

- 2. To be responsible, to organize
  - 3. To make decisions, implement, coordinate, support
  - 4. To create and improve legal environment
  - 5. Cooperate, and provide technical assistance

Implementing subjects or subjects taking on responsibilities are shown in the diagram as follows:

1. Herders and herder groups

- 2. Private sector, community organizations
- 3. Local administration
- 4. The government and central state organizations
- 5. Legislative body
- 6. Donors

Please note, that showing separately roles and responsibilities of different organizations, groups, households and citizen, which will take part in multilateral processes of livestock breeding development, especially in its intensification and development and stabilization of achieved levels, does not express an idea of them minding only their own business, but shows my idea of who shall have which responsibilities at what level.

# Picture 1. Roles and responsibilities of the state, groups and individuals in intensification and development of livestock breeding

At present when the Parliament elections have been held and it is obvious that current structures and directions of duties of the government organizations of all levels are going to change, believing that it is possible to preserve the successive quality of the state policy and make it consistent with the previous policy, approaching the issues of policy, activities and functions in that way is not a rightful approach. Therefore, I believe that the following three main issues should be considered when defining development policy in livestock breeding sector, which will assist in implementing the policy recommendations we make.

1. If the policy of intensification and use of intensive methods in livestock breeding is introduced before implementing special livestock breeding policies separately for pastoral, semi-settled and settled forms, an opportunity will arise to implement activities and take measures, which cover all forms mentioned earlier, and to find optimal definition of roles and responsibilities of the state, private sector, donors and civil organizations.

- 2. Although most of our herders have few livestock and are rather poor, there is a group of middle level herdsmen, who possess sufficient number of livestock, have good experience in livestock breeding, and have developed market economy mentality. Up until today, development policies have not been paying attention to this group. In addition to always having positive aspirations, this middle group of herders have capacities to grow and develop. Therefore, alongside with paying attention to supporting the middle group, a strategy should be implemented to support those from poor herders, who are devoted to livestock breeding and are experienced in it.
- 3. The herders, who already can not earn living from livestock breeding, should be pulled out immediately from the desperate situation and their labor should be used in other issues of rural development. Therefore, capacity building activities should be organized in the countryside to provide employment to the poor, and to get them involved in activities other than livestock breeding.
- 4. One important indicator of viewing livestock breeding sector as the basic economic sector of our country is a fact that the concept of regional development

was developed long time ago in order to reflect main issues of development policy of this sector as well as the sustainable development policy, which should be updated. Taking all necessary measures to implement the livestock breeding development policy and strategy with regard to the new contents and forms, especially linking it with the fundamental policy of national development should be the state responsibility.

- 5. It is extremely important for community organizations, the private sector, other groups and subjects to be ready to take over state responsibilities in livestock breeding issues, or to implement them in cooperation with others, to have capacity to do so, to have an aspiration to participate in this important work in interest of the nation, for economic and social progress.
- 6. Understanding its own decisive role in supporting decentralization by transferring and sharing its own responsibilities in livestock breeding development, in providing with the best possible development policy and directions is one of "duties" to be implemented by the government.

Finally, since intensification of livestock breeding is an appropriate option as far as the economic and social development policy is concerned, there will always be a possibility to solve in time other issues in this sector.

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