

## RESOLUTION OF STATE GREAT KHURAL OF MONGOLIA

.../...../2010

Num:...

Ulaanbaatar

### National Action Plan for Approval

Resolution based on Law of Great Khural of Mongolia, Article 43 and clause 43.1:

1. Shall approve the National 'Mongolian Livestock' Program as attached
2. Government (S.Batbold) shall implement the below measures within the framework of the National Program.
  - 1) Shall develop and adopt an Action Plan (2010-2015) of the first stage of the National 'Mongolian Livestock' Program, and commence its implementation within the first half of 2010.
  - 2) Establish and launch public unit at soum level that will provide professional and technical services, coordinate and monitor the activities related to veterinary and animal breeding services.
  - 3) Allocate no less than 3 per cent of the national budget of Mongolia for the activities related to the implementation of the National 'Mongolian Livestock' Program, incorporate these activities on annual basis into the socio-economic strategy of the year, reflect them in the national budget, and use main portion of the allocated funds for the activities that are supported by the agricultural cooperatives, operating at the agricultural sector
  - 4) With respect to approval of National Mongolian Livestock Program, the Government shall coordinate programs and projects in the livestock sector that are financed by national and international support.
3. Monitoring the implementation of the resolution shall remain with the Agriculture and Environment Standing Committee of the Great Khural (Mr. B.Batbayar).

Signature

## **National Mongolian Livestock Program**

Livestock husbandry is a distinctive livelihood practice in Mongolia, the heritage of which is valued on a world scale. Livestock is a renewable resource and one of the country's main economic pillars and the basis for Mongolia's sustainable development. The Mongolian Constitution (1992) stated "The livestock of the country is national wealth and subject to state protection".

### **One: Rationale**

Livestock husbandry **remains to be** a special, traditional sector of the national economy, and an important source of employment and export income for Mongolia. **As of 2008** the agriculture sector employs around 34.6% of the total labor force and produces 18.8% of all GDP, of which 86.9% is from livestock production. The livestock industry earns around 10% of all export income.

**However, in recent years despite of the livestock growth, Mongolia is facing a bouquet of challenges that needs immediate interventions, including overgrazing and misbalance of the livestock species. Infectious animal diseases are expanding resulting in increasing rates of illness for both human and animal populations. In addition to signs of expansion, instances of new highly contagious disease and recurrence of previously controlled diseases are occurring, which is creating conditions that limit the supply to market of raw materials and livestock products. Aside of this, as the livestock sector is based primarily on households' activities, herders are scattered, the herders' productivity is decreasing, efficiency is lost, herders' ability to withstand the market competition and weather-associated risks is weakened.**

Even though Mongolia's meat and milk production is self sufficient for its domestic consumption, the volume of properly processed meat and milk products are as low as 7% and 4% respectively, which is utterly dissatisfying.

Although over 40 different species, breeds, sub-breeds and types of livestock have resulted from evolutionary processes, **scientific research based smart selection, and the tireless** efforts of herders and livestock specialists, as well as farming of several previously introduced highly productive dairy, beef and hybrid cattle breeds, pigs and poultry breeds, Mongolia is not fully utilizing the genetic resources of these purebred animals.

State funding to the livestock sector is low compared to other countries at not even one percent of total public expenditure. In other words, current state **management** is not sufficient to develop a strong livestock sector, **able to compete** in the market economy, funding **is not adequate**.

Activities related to: the implementation of state policy, laws, programs and plans for the protection of animal health and genetic resources; technical and professional guidance and consultation to private veterinary and breeding entities; and maintenance, information sharing and monitoring of the database related to livestock origin, productivity and health status, is almost non-existent at the soum level.

Although the government produced number of policy related documents, the implementation of those documents are not meeting the current demands. In order to ensure the sustainability of this sector, a set of comprehensive measures is needed to be implemented effectively within the framework of the proposed “Mongolian Livestock” program (further referred as a Program).

## Two: Program Goal and Priorities

The purpose of the program is to develop a livestock sector that is adaptable to climate change and social development and create an environment where the sector is economically viable and competitive in the market economy, to provide a safe and healthy food supply to the population, to deliver quality raw materials to processing industries, and to increase exports.

The following priority areas were identified for implementing the above mentioned aim:

1. Drawing special attention from the State to the livestock sector as the main traditional economic activity of the country, to assist in the formulation of a favorable legal, economic and institutional environment for sustainable development, and to develop a good governance in the livestock sector;
2. Improving animal breeding services based on social need/demand, increasing the productivity and production of high quality, bio-clean livestock products and raw materials and increasing market competitiveness;
3. Raising the veterinary service standard to international levels and protecting public health through securing Mongolian livestock health;
4. Developing livestock production that is adaptable to climatic, environmental, and ecological changes with strengthened risk management capacity; and
5. Developing targeted markets for livestock and livestock products; establishing proper processing and marketing structures and accelerate economic turnover through an incentive system.

## Three: Program Objective and Activities

### 3.1 Within first priority, below stated objectives and activities will be implemented

Ensure the sustainable development of the livestock sector and create a legal environment that will promote economic turnover.

#### 3.1.1 Improving the legal framework of the livestock sector

3.1.1.1 Establish a legal framework regarding pastureland resource use, protection, possession and defining territory borders, for managing pastoral and intensive livestock.

3.1.1.2 Revise the “Law on Protecting the livestock gene pool and animal health”, and create a legal environment that will strengthen capacity of the units that will have responsibility to maintain animal registration, veterinary and breeding services.

3.1.1.3 Adopt the “Law on Livestock Husbandry Development”, and establish a legal environment that will support livestock production, improve the recognition of herders’ labour and create an incentive system.

3.1.1.4 Make revisions to the “Law on Administration, administrative units and their management”, “Law on Land Fees”, “Law on Government Special Fund”, “Law on Special Permission for Economic Entities” and “Law on State Reserve”.

3.1.1.5 Implement “Strategic Program Animal Breeding Service” and other sub-programs such as “Camel”, “Pasture and Fodder”, “Meat”, “Milk”, “Wool”, “Cashmere”, “Hide/animal skin”.

### **3.1.2 Strengthening veterinary and breeding services at the local level and bringing services to international standard**

3.1.2.1 Establish a **public** service office at soum level that will monitor, coordinate and supervise activities related to veterinary and breeding services.

3.1.2.2 Strengthen the technical capacity of the local level veterinary and breeding service office and provide state support for capacity building and improving human resources.

3.1.2.3 Access quality information and data at international standard related to animal health and genetics and connect all veterinary and breeding units with network to enable information sharing.

### **3.1.3 Improve knowledge and education of professionals and herders and introduce an advanced technology**

3.1.3.1 Supply and train veterinary and breeding specialists based on requests from aimags, soums, bags and private companies and ensure continuous education for them, **including training, qualifications training, and advanced training, improve accessibility to these units and provide better procurement;**

3.1.3.2 Develop **curriculum for both distant learning and local training centers** to educate herders on traditional and contemporary livestock management and effective animal husbandry management.

3.1.3.4 Legally classify veterinarians and assistant staff work environment as a ‘hazardous’ work environment.

3.1.3.5 Apply outcomes from livestock and veterinary **core technologies**, innovations and scientific studies into practice through state support, economic incentives and by inclusion in various projects and programs.

## **3.2 Within the second priority, below stated objectives activities will be implemented**

Improve traditional livestock practices, develop rational livestock herd structure, improve animal breeding services to increase production and improve economic efficiency.

**3.2.1** Create core (*nuclear or stud*) animal herds of productivity for a specific type of animal and implement scientifically based selective breeding that uses the full biological potential of Mongolian livestock.

3.2.1.1 Improve pasture based livestock through breeding with highly productive nucleus livestock that are adapted to local conditions.

3.2.1.2 Horse and cattle farms will be concentrated in Khangai region, horse and sheep farms in the steppe region, goats and camels in the Gobi region and intensive livestock production will be developed near large towns or in crop regions **based on clear targets, directions, and classifications.**

3.2.1.3 Set **differentiated** livestock production level targets for different regions and identify **unused** biological potential. Develop **targeted** breeding activities based on the demand and needs of the market.

3.2.1.4 For extensive husbandry systems, set the number of breeding female animals based on regional condition and livestock productivity characteristics and preserve optimum ratios of livestock species within the herd.

### **3.2.2 Protect the livestock gene pool and introduce advanced biotechnological measures to increase animal productivity**

3.2.2.1 Establish a National Livestock Genetic Resource Centre to preserve, store and sustainably use Mongolian livestock genetic resources, produce **deep** frozen semen, artificially inseminate and conduct sex-predetermination and selection.

3.2.2.2 Establish a semen bank to protect, manage and ensure sustainable use of genes from highly productive breeds that are threatened or whose numbers are decreasing.

3.2.2.3 Monitoring schemes will be introduced for imported reproductive animals or semen to ensure such breeding activities are carried out only by professional and legal entities with special permission.

3.2.2.4 Provide support for the importation of milking cattle, low micron wool producing sheep, goats and other productive animals and semen based on market demand.

3.2.2.5 Establish biotechnology and animal breeding units in economic regions for technology transfer and application, expand artificial insemination activities and bring mobile breeding services to international standard.

3.2.2.6 Use semen from the highest quality male livestock for artificial insemination, use advanced techniques for insemination and create donor herds for reproduction products.

### **3.2.3 Strengthen livestock breeding services and improve access and results**

3.2.3.1 Set adequate institutional structures for animal breeding at the local level, and operate at international standards.

3.2.3.2 Set operational standards for veterinary and breeding service units, revise types of services provided and implement.

3.2.3.3 Provide financial support from the state for those raising *bog* (small ruminants) stud male animals to provide a mating service based on contracts and herd stud males separately during the non-mating period.

3.2.3.4 Livestock breeding services shall be carried out under the authority of professional government agency's management and monitoring through implementing specific breeding plans, based on information such as livestock production purpose, origin and productivity.

3.2.3.5 Support committee's working with livestock and their productivity and contract (delegate through outsourcing) some state activities to these organizations.

### **3.2.4 Creating an animal registration database and network**

3.2.4.1 Register every animal with an individual identification number and establish an internationally compliant system for registering, monitoring and informing livestock and livestock products including origin and health certificate.

3.2.4.2 Establish an information database (*with information about core herds, the origin of good quality male animals, and an animal's productivity with all health indicators*) at soum, aimag and national level and provide information to customers.

3.2.4.3 Training and awareness activities on livestock registering and establishing the livestock information network will be delegated and executed by professional (sectoral) NGOs.

3.2.4.4 Provide necessary equipment and programs for livestock registration, expanding the database network, and using advanced technology for registration that meets international requirements.

3.2.4.5 Create a list of main animal diseases that are obligatory to report at the national level, and collect, compile, assess and create a reporting and information network on sources of disease and levels of outbreak.

3.2.4.6 Improve monitoring scheme through and registration of livestock origin, productivity, quality, traceability and health, and livestock products' quality and safety.

### **3.3 Within the third priority, below stated objectives and activities will be implemented**

**Create an environment where consumers will be guaranteed to receive clean and safe raw and processed products with healthy livestock origin.**

#### **3.3.1 Early prevention measures, increased preparedness to combat against and prevent infectious animal diseases that are banned for international trade.**

3.3.1.1 Obtain international certification (World Organization for Animal Health) for Mongolia to certify that the country has freedom from contagious bovine pleuropneumonia, pox virus of sheep and goats, bovine spongiform encephalopathy (BSE), and that the country's western region has no foot and mouth disease as well as a 'vaccination not used' status.

3.3.1.2 Maintain monitoring schemes of main animal diseases and outbreaks, implement preventive actions in regions that are highly susceptible to animal diseases, improve results and maintain a disease-free condition in livestock.

3.3.1.3 Eradicate all animals from brucellosis, horses from glanders and infectious equine anemia and cattle from leucosis.

3.3.1.4 Maintain preparedness and allocate necessary financial resources for use in reducing risk against transboundary infectious animal diseases that are newly recorded or repeated.

3.3.1.5 Eradicate animal disease outbreaks with a systematic epicenter focus using technology that is not harmful to the environment and human health; improve hygiene conditions through preventative action.

### **3.3.2 Bring the veterinary service structure to international standard; strengthen the capacity of veterinary services to the level that can fully meet consumers' demands and requirements.**

3.3.2.1. Provide veterinary units for regional pillar centers, aimag's local development centers, veterinary unit laboratories with state-of-the-art, hypersensitive equipments, portable fencing to carry out veterinary diagnosis and classification activities, and strengthen capacity to ensure bio-security and infections outbreaks prevention,

3.3.2.2. Provide high performance shared inter-soum mobile laboratories with special equipment for veterinary diagnostics and surveillance and implement activities to investigate livestock disease, causes of mortality and to respond quickly.

3.3.2.3. Introduce internationally acceptable technology and methodologies in sanitary quality assurance testing and increase export-import requirements for animal and animal-originated products.

3.3.2.4. Increase the quality of prevention work and the responsibilities of veterinary workers through defining quality of livestock immunization activities based on selective lab assessment and monitoring.

3.3.2.5. Use GIS tools for mapping main animal disease zones that are newly or repeatedly recorded and their outbreak locations.

### **3.3.3 Bringing livestock medicine and veterinary tools to international standards**

3.3.3.1. Meet international method and technology standards for testing and analysis of veterinary medicines and bio-preparations and ensure the quality and safety of animal medicines.

3.3.3.2. Locally produce preventive vaccinations for diseases that are new or repeatedly occurring.

3.3.3.3. Use innovative techniques and technologies within veterinary medicine factories; ensure implementation of manufacturing standards on the production of medicines and ensure that the quality of medicinal products meets the required international standards.

3.3.3.4. Set a structure and network for supplying animal medicine and relevant medical supplies.

### **3.4 Within the fourth priority, below stated objectives and activities will be implemented**

Responding to pressures of climate change, social development trends and economic demand, Mongolia will reduce livestock sector vulnerability through extensive livestock management as the dominant form of pasture management, developing intensive production within limited regions by ensuring sustainable use of pasture, and through possessing, improving, protecting and rehabilitating degraded range land.

#### **3.4.1 Improving pasture management**

3.4.1.1 Set a single management system for the sustainable use of pasture resources, implement sub-programs, prepare a pasture use map and cadastre at regional, aimag and soum level, define maximum potential stock numbers and develop an information database.

3.4.1.2 Create a legal framework for regulating pasture and protect at least 30% of land as state, aimag and soum level *otor* reserve area for use during times of hardship.

3.4.1.3 Link animal numbers and types of herd with pasture carrying capacity and limit the number of animals in areas where pasture capacity is already exceeded, and implemented related economic incentives to maintain this provision.

3.4.1.4 Create a legal framework on pasture use fees collected from herders and people with livestock, based on regional characteristics and type of herd and use some portion of it for protecting rangeland or improve its condition.

3.4.1.5 Define clear borders between sites of extensive and intensive livestock production at aimag, capital, soum and district level and enforce it.

3.4.1.6 Combat pasture rodents using technology that is not harmful to the environment or human health.

3.4.1.7 ensure that income from the compensation fees and fees for decreasing the pasture land caused by the mining activities spend for the pastureland improvement activities.

#### **3.4.2 Increasing fodder and hay production**

3.4.2.1 Improving fodder supplies by establishing a full nutrient fodder industry and small sized enterprises which are based on domestic raw materials.

3.4.2.2 Encourage the cultivation of high nutrient animal feed and introduce processing technology that utilizes agricultural by-product materials generated from cropping activities, to supplement livestock.

3.4.2.3 Encourage the use of new bundling and storage technology for hay without decreasing quality and prepare small, high quality feed for consistent supply of the state and aimag fodder reserve.



3.4.2.4 Create a hay and fodder reserve in every soum and aimag for emergency situations. In an emergency, utilize local level reserves first and then State reserves can be accessed if insufficient.

3.4.2.5 Permit Gobi aimags to prepare fodder from the Khangai region and organize activities to provide required technical support with concessional conditions.

#### **4.4.3. Improve livestock water supply**

3.4.3.1 Taking into account herders' ideas and initiatives, ensure that only professional organizations using the national budget will implement exploration and research work to find the water sites and develop new water wells to create the water reservoirs .

3.4.3.2 Share costs of building new wells with users in order to increase their ownership.

3.4.3.3. Transfer responsibility for use, protection and maintenance of wells, which have been newly built or rehabilitated by state funds, to herder groups and communities or local groups based on agreements.

3.4.3.4. Train herders in manual well development and create water reservoirs to catch rain or snow water.

#### **3.4.4. Create livestock risk management capacity**

3.4.4.1. Develop innovative training methods and exercises for livestock husbandry to adapt to climatic and ecological changes; arrange training and practical activities for herders.

3.4.4.2. Implement concerted monitoring, information and prevention activities in soums of the Gobi and steppe regions, which have more frequent weather disasters and higher natural risks.

3.4.4.3. Develop the livestock insurance system; introduce a re-insurance scheme and promote awareness activities on the importance of insurance to herders to generate interest for volunteer livestock insurance.

3.4.4.4. Breed fast-growing meat producing livestock by transferring meat production methods such as intense feeding at a younger age and to reduce the number of livestock in winter.

3.4.4.5. Provide state support to herders who live in the Gobi and steppe regions for building two different types of herd shelter for sheep and goats.

### **3.5 Within the fifth priority, below stated objectives and activities will be implemented**

#### **Develop targeted markets for livestock and livestock products, establish proper processing and marketing systems and increase economic turnover.**

3.5.1. Develop a system for the preparation of livestock and raw materials.

3.5.1.1. Improve standards for preparation processes for livestock and raw materials.

3.5.1.2. Establish expedient structures to control and warrant the quality of livestock and livestock products.

3.5.1.3. Establish a small abattoir and hide pre-processing mill in each soum, and create a “Comprehensive network on livestock, meat processing, refrigerated transport and marketing”.

3.5.1.4. Increase usage of secondary products and support standards in processing in order to sell beside traditional meat products.

3.5.1.5. Organize training concerning livestock raw material preparation and transportation, focusing on quality in each area, and provide human resources such as raw material preparation specialists.

3.5.1.6. Establish an information network for customers and suppliers for meat and other raw materials; including prices for classifications or categories in each local area on a monthly basis; and include the participation of local organizations and increase their role and responsibilities.

### **3.5.2. Create and implement an economic lever to provide incentive for the production of quality livestock products and raw materials**

3.5.2.1 following the herders’ initiatives, through the investment, loan and taxation policy support individuals and entities running an intensified meat and milk cattle farms as well as cooperatives on pasture management, hay and fodder productions, supply of the raw agricultural products, veterinary and breeding activities and services established at soum level.

3.5.2.2. Government will provide incentives to those who undertake activities such as the following:

- A person or legal body who has raised and sold at market nucleus herd animals and young, breeding male or female livestock with certified origin
- herders, farmers and cooperatives who treat their livestock and supply good quality products to domestic industries
- herders and farmers who consistently raise camel and cattle offspring
- person or legal body who develops new wells of their own enterprise and funds
- producers who make good quality livestock fodder using upgraded technology

3.5.2.3. Create a price structure based on classification of raw material and their standard of preparation.

### **3.5.3. Modify and develop livestock industry marketing to capture the intended market**

3.5.3.1. Undertake basic market investigations of livestock products and determine intended market.

3.5.3.2. According to the “Policy on industrialization”, set a minimum level of livestock raw material processing to meet with international standard.

3.5.3.3. Based on the potential of livestock and livestock raw materials, fully utilize and increase the capacity of processing industries and support export of products.

3.5.3.4 Register some species of livestock and livestock products in a “Geographic index” for improving competitiveness in the global market.

3.5.3.5. Support cooperation between herders, producers and academic organizations that results in activities that are intended for the improvement of the dedicated product market industry.

3.5.3.6. Support activities for the appropriate use of livestock raw materials in remote and/or isolated areas and investigate and implement ways to increase export potential for products.

3.5.3.7 Support direct relationships between herders and industries to create a exchange network.

#### **Four: Implementation time frame and expected outcomes of the program**

4.1. The program will be implemented in two phases from 2010-2021. The first phase (2010-2015) of the program will be also implemented in two sub-phases.

#### **4.2. The first phase (2010-2015) will achieve the following outcomes from the five priority areas**

4.2.1. Establish favorable legal conditions that will promote the implementation of livestock sector related laws and organizational structures, expand production and economic growth through advancing production, concerted policy on technology transfer, preventing animal diseases and running animal breeding and treatment operations scientifically.

4.2.2. Set up a proper professional service provision structure; improve accessibility, quality and results of those services; Create an opportunity where the livestock sector will supply market responsive, quality and safe raw materials and increase export potential; and improve herder family income and self sufficiency.

4.2.3. Keep certification from the World Organization for Animal Health regarding Mongolia’s disease free status for bovine contagious pleuropneumonia, sheep and goat pox, and bovine spongiform encephalopathy (BSE); gain official freedom from foot and mouth disease with ‘vaccination not used’ status in the western aimags. To eradicate brucellosis in cattle, camels and small ruminants, to eradicate glanders and equine infectious anemia in horses in western region and keep this disease-free condition.

4.2.4. Encourage managed possession and use of pastureland to increase production of hay and fodder; upgrade livestock water supplies; establish livestock industry’s capacity to adapt to climate change by decreasing the exposure to risk.

4.2.5. Improve herders' living conditions through State policies related to the creation of market structures for livestock products and raw materials, and protection against falls in livestock product prices.

#### 4.3. The Second phase (2016-2021) will achieve the following outcomes

4.3.1. Prepare and adopt a law on “Livestock husbandry development”; create a legal environment for support and encourage a structure of livestock husbandry industry development.

4.3.2. Register all livestock and create a database and monitoring structure regarding the origin of livestock, raw materials and products and information regarding their health and condition to supply healthy, natural products for the population and for export; improve conditions for enriching, preserving, protecting and the appropriate use of livestock genetic resources; provide domestic breeding products to satisfy internal demand instead of using imported products.

4.3.3. Upgrade the animal diseases information system regarding registering and informing on new and re-spreading diseases; improve laboratory capacity; provide bio-security status and produce vaccines and diagnostic devices for contagious diseases; create a network for supplying veterinary drugs and sharing techniques. Gain national brucellosis-free status in Mongolia.

4.3.4. With regard to climate change, social development trends and economic demands, create favorable investment and business conditions for development of the pasture and intensive livestock industries simultaneously; decrease the exposure to natural risk and increase the productivity of the livestock industry.

4.3.5. Fully process raw materials domestically and develop export oriented production in order to substitute imported products.

#### Five: Indicators of program implementation

5.1. The main indicators of this program

| Indicator  | Unit                       | As of 2008 | Targeted level |           |           |
|--|----------------------------|------------|----------------|-----------|-----------|
|  |                            |            | Year 2012      | Year 2015 | Year 2021 |
| <b>1.First priority area:</b> Formulation of a favorable legal, economic and institutional environment for sustainable development, and the development of good governance in the livestock sector |                            |            |                |           |           |
| 1.1 Reform Livestock Sector Legal Environment  | By activity implementation | -          | -              | -         | -         |

| Indicator  | Unit       | As of 2008 | Targeted level |           |           |
|--|------------|------------|----------------|-----------|-----------|
|  |            |            | Year 2012      | Year 2015 | Year 2021 |
| 1.2 Strengthen local veterinary service  |            |            |                |           |           |
| - State Service Office   | Number     | 0          | 338            | -         | -         |
| - Private Sector Service (new)   | Number     | 751        | 60             | 75        | 135       |
| 1.3 Improve knowledge of veterinarians and herders   |            |            |                |           |           |
| - New specialist and retrained specialists   | Number     | 104        | 1,272          | 1,908     | 2,120     |
| - Graduates of temporary schools   | Number     | 25         | 6,800          | 12,200    | 17,000    |
| <b>2.Second Priority Area:</b> Improve animal breeding services based on social need/demand, increasing the productivity and quality of livestock products to increase competitiveness of the sector |            |            |                |           |           |
| 2.1 Protect livestock gene pool:   |            |            |                |           |           |
| - National Center for Livestock Gene pool  | Number     | 0          | 1              | -         | -         |
| - Establishment of biotechnology and animal breeding branches in regions   | Number     | 0          | 3              | 2         | -         |
| - Number of livestock that will be artificially inseminated  | Number     | 3,200      | 16,000         | 24,000    | 120,000   |
| 2.2. Use locally made and imported goods for breeding purposes   |            |            |                |           |           |
| - Imported semen   | Num        | 7,000      | 20,000         | 30,000    | -         |
| - Locally produced semen   | Num        | 21,000     | 24,000         | 60,000    | 195,000   |
| 2.3 Maintain livestock number at the beginning of the year, by herd type:  | '000 head  | 43288      | 33343.4        | 35298.9   | 36457,6   |
| - camel  | Percentage | 0,6        | 0.8            | 0.8       | 0,9       |
| - horse  | Percentage | 5,1        | 6.4            | 6.8       | 8.2       |
| - cattle   | Percentage | 5,8        | 7.7            | 9.6       | 13.8      |
| - sheep  | Percentage | 42,4       | 44.9           | 45.4      | 45.1      |
| - goat   | Percentage | 46.1       | 40.2           | 37.4      | 32.0      |

| Indicator   | Unit       | As of 2008 | Targeted level |             |             |
|---|------------|------------|----------------|-------------|-------------|
|   |            |            | Year 2012      | Year 2015   | Year 2021   |
| 2.4 Production from individual animal   |            |            |                |             |             |
| - Milk from pure/ mixed cow   | 305 kg/day | 1769       | 2217           | 2673        | 3,200       |
| - Cashmere  | gram       | 290        | 290            | 300         | 310         |
| - Low micron wool   | Kg         | 3,9        | 4.1            | 4.4         | 4,9         |
| - Thick micron wool   | kg         | 1,1        | 1.2            | 1.3         | 1,5         |
| 2.5 Establish animal registration database and network  |            |            |                |             |             |
| - unit in the network   | Num        | 0          | 338            | -           | -           |
| - registered animal   | Percentage | 0.3        | 40             | 60          | 80          |
| <b>Third priority area:</b> Raise the veterinary service standard to international levels and protect public health through securing Mongolian livestock health |            |            |                |             |             |
| 3.1 Obtain certificate from Animal Health Organizations as disease-free or low-risk country from listed animal disease  |            | 0          | Certificate    |             |             |
| - Contagious bovine pleuropneumonia   |            | 0          | Certificate    | Certificate |             |
| - Foot and mouth  |            | 0          |                |             |             |
| - Sheep and goat pox  |            | 0          |                |             | Certificate |
|   |            |            |                |             |             |
| 3.2 Cure livestock from the following diseases  |            |            |                |             |             |
| - Cattle and camel from brucellosis   | Percentage | 98         | 98.5           | 100         | -           |
| - Horse from glanders   | Percentage | 97,5       | 99.5           | 100         | -           |
| -Horses from equine infectious anemia   | Percentage | 99.3       | 99.8           | 100         | -           |
| - Dairy cattle from leucosis  | Percentage | 75,0       | 85.0           | 100         | -           |
| - Small ruminants from brucellosis  | Percentage | 99,5       | 99.6           | 99,7        | 100         |
| - Number of herder families with brucellosis (currently 3.5-11.7%)  | Percentage | 7.6        | 2.5            | 0.3         | 0.1         |

| Indicator   | Unit                               | As of 2008 | Targeted level |           |           |
|---|------------------------------------|------------|----------------|-----------|-----------|
|   |                                    |            | Year 2012      | Year 2015 | Year 2021 |
| 3.3 Achieve no outbreaks of infectious animal disease   | Based on implementation of program |            | -              | -         | -         |
| 3.4 Enable every soum and district to carry out veterinary, sanitation and quality assurance testing.   | Number                             | 120        | 112            | 106       | -         |
| 3.5 Establish mobile services for diagnosing animal diseases.   | Number                             | 0          | 25             | -         | -         |
| 3.6 Produce locally made animal medicines and vaccinations  | Percentage                         | 70         | 75             | 85        | 100       |
| <b>Fourth Priority Area:</b> Develop livestock production that is adaptable to climatic and ecological changes with strengthened risk management capacity |                                    |            |                |           |           |
| 4.1 Establish country, aimag and soum level reserved (otor) grazing areas   | Percentage                         | 0,5        | 2.0            | 5.0       | 10        |
| 4.2 Define maximum livestock numbers based on herd type and pasture carrying capacity   | Based on implementation of program | -          | -              | +         | -         |
| 4.3 Create hay and fodder storage facilities in every soum and aimag  | Number                             | 38         | 40             | 150       | 150       |
| 4.4. Take measures to improve pasture quality   |                                    |            |                |           |           |
| - New wells   | Number                             | 1,314      | 2,400          | 3,600     | 2,686     |
| -Total area where combating rodents   | '000 ha                            | 700        | 2,000          | 3,000     | 10,000    |
| 4.5 Reform livestock insurance structure  |                                    |            |                |           |           |
| - number of herders holding index-based livestock insurance   | Percentage                         | 3,3        | 10.0           | 15.0      | 20,0      |

| Indicator   | Unit                    | As of 2008 | Targeted level |           |           |
|---|-------------------------|------------|----------------|-----------|-----------|
|   |                         |            | Year 2012      | Year 2015 | Year 2021 |
| 4.6 Increase volume of fodder preparation   |                         |            |                |           |           |
| - Net increase of prepared fodder   | Unit                    | 560.5      | 616.5          | 700.0     | 900.0     |
| - Fodder prepared using processing technology   | Percentage              | 9,6        | 12             | 30        | 40.0      |
| <b>Fifth priority area:</b> Develop targeted markets for livestock and livestock products; establish proper processing and marketing structures and increase economic turnover. |                         |            |                |           |           |
| 5.1 Establish abattoir  | Number                  | 25         | 313            | -         | -         |
| 5.2 Total raw meat, of which:   | '000 Tonnes             | 223,1      | 256.3          | 353,8     | 324,0     |
| - processed   | '000 Tonnes             | 15,1       | 34.8           | 97,0      | 157,0     |
| - exported  | '000 Tonnes             | 10,2       | 21.0           | 33,0      | 50,0      |
| 5.3 - total volume of milk, of which:   | '000 Tonnes             | 457,3      | 447.9          | 523,8     | 622,9     |
| - processed milk  | '000 Tonnes             | 16,5       | 26.9           | 52,4      | 124,6     |
| 5.4 Give incentives based on the quality of products with a certificate of origin and which are supplied to the local industry.   | Based on implementation | -          | -              | -         | -         |
| 5.5 Establish livestock product exchange network  | Based on implementation | -          | -              | -         | -         |

## Six : Management and structure of program

6.1. 6.1.the following parties will be responsible for the management and coordination function of the program.

6.1.1 The government, civil society, and private sector partnership based supervision and coordination function of the program at national level will lay with the National Committee, headed by a member of Cabinet.

6.1.2 Responsibility for program implementation will be the duty of the relevant central government administration and professional government organizations.

6.1.3 Every governor will have responsibility to coordinate the program in their aimag, soum and at district level and the respective local professional government organizations will implement the program in their area.



6.2. The program action plan will be approved by the Ministry of Food, Agriculture and Light Industry and every aimag, soum and district will and report results annually.

### **Seven: Program Financing**

The program will use the following financial resources for implementation:

- 7.1.1 state and local budget;
- 7.1.2 investment of domestic and international enterprises; and

7.1.3 .Establish “Mongol Livestock” capital investment fund which will provide a non-commercial based soft loans, and assistance.

7.2. “Mongolian Livestock” program shall have the following funding sources:

7.2.1. income from mining products;

7.2.2. national budget;

7.2.3. foreign (donor) countries and international organizations grants and soft loan

### **- Eight: Reporting, monitoring and review of program implementation**

9.1. Program implementation reports shall be submitted by aimag, city and soum professional organizations to the central government administration by January each year. Central government administration shall deliver reports to Cabinet and State Great Khural (Parliament) during the first quarter of each year.

9.2. State administration will undertake control and analysis during program implementation and the Government has the responsibility for reporting program implementation results.

9.3. If necessary, a third party could monitor program progress and report to Government.

9.4 Ongoing revision will made of the program based on implementation results.