



NATIONAL PROGRAMME FOR FOOD SECURITY (2009-2016)

Ulaanbaatar. 2009

NATIONAL PROGRAMME FOR FOOD SECURITY

2009-2016

National Programme for Food Security has an overall goal to provide the entire nation with secure supplies of accessible, nutritious and safe food to enable healthy livelihoods and high labour productivity, founded on the participation of people, government, the public and private sectors.

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GOVERNMENT OF MONGOLIA

RESOLUTION

04 February 2009

No.32

Ulaanbaatar

RE: Approval of the National Programme for Food Security (2009-2016)

With the purpose of implementing the objectives set out in the Millennium Development Goals-based Comprehensive National Development Strategy, the State Policy on Food and Agriculture and the Government Action Plan, the Government of Mongolia hereby RESOLVES:

1. That the National Food Security Programme be approved as set out in the attached Annex.
2. That T. Badamjunai, Minister for Food, Agriculture and Light Industry, be entrusted with the duty of approving the annual action plans for each year and organizing the implementation of the Programme.
3. That the Governors of the Aimags and Capital City be responsible to develop and implement the sub-programmes of the National Food Security Programme and report the results to the Ministry of Food, Agriculture and Light Industry within 01 February of each year.
4. That T. Badamjunai, Minister for Food, Agriculture and Light Industry, S. Bayartsogt, Minister for Finance, as well as the Governors of the Aimags and Capital City be entrusted with duties to take measures of including the objectives and activities of implementing the Programme in their respective annual economic and social development plans, reflecting them in the state and local budgets.
5. That T. Badamjunai, Minister for Food, Agriculture and Light Industry, be entrusted with duty to report on the progress and outcomes of implementing the Programme to the Government of Mongolia within the first quarter of each year.
6. That the Government Resolution No.242 dated on 24 October 2001 be revoked with the issue of present Resolution.

PRIME MINISTER OF MONGOLIA

**MINISTER FOR FOOD, AGRICULTURE
AND LIGHT INDUSTRY**

S. BAYAR

T. BADAMJUNAI

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NATIONAL PROGRAMME FOR FOOD SECURITY

One. Current situation of Food Security

- 1. Food Production and Supply:** Although our country supplies to the requirement of its population with domestically produced meat, milk and potatoes, there are still big disparities in food consumption of its rural and urban populations along with existing seasonal dependencies. For instance, an urban resident consumes 1.5 times lesser meat, 3.9 times lesser milk than a rural resident, while a rural resident consumes 2 times lesser potatoes and vegetables, 9.5 times lesser eggs than an urban resident.
- 2. Food safety:** As per the statistics 2007, only 6.4% of the consumed meat and 2.2% of milk were industrially processed, whereas other food products were processed without due veterinary and hygiene control. Food raw materials and products sold in the markets were in of uncertain origins and had no certificates of quality and hygiene. The State Special Inspection Agency indicated in its report, that toxic chemical residues were found in cases of imported food products and raw materials at concentrations higher than the permissible standard level; and not in few cases, virulent germs, pests and micro-organisms were also found. It became a common practice to violate the technological, hygienic and sanitary procedures and regulations at packaging, preserving, transporting and selling meat, milk, potatoes and vegetables for human consumption.
- 3. Nutrition:** The food intake of a Mongolian person constitutes mostly of meat and flour products, which remain dominating over the low rate of consumption of fruits and vegetables, rich in vitamins and minerals. At the national level, a person of the vulnerable group consumes reportedly 33% lesser calories than the daily food intake norm set in the Recommended Dietary Intake of the Population.

At the national level, 96.3% of the total annual requirement in salt is iodized and over 30% of the domestically produced flour is fortified with iron and vitamins. However, the key indicators of nutrition and food consumption such as low weight births, stunting, underweight, rachitis and anemia among the under-five-year-old children are not decreasing at substantial rates. Also the rate of food-borne non-communicable diseases is not decreasing because of lack of adequate knowledge and consumer education among the population on proper food consumption and nutrient intake. According to the findings of a study conducted in 2006 among adults on factors of nutritional risks, it was shown that 4.9% of the adults, involved in the study, were underweight, 21.8% overweight and 9.8% in obesity. In addition, food access and nutrition of pregnant and breast-feeding women were inadequate, and food deficit prevailed among the vulnerable population such as low income and poor households, the elderly and disabled people, people who require but lack care.

- 4. Legal environment, organization and funding:** Food security related realtions are being regulated by the Food Law, Land Law, Water Law, Law on Protection of Animal Genefund and Health, Law on Border Inspection and Quarantine for Animal- and Plant-originated Products, Law on Cropping and Law on Hygiene and Sanitation. Since transition to market economy, there was not much of government support to the development of national food processing industries, as the consequence of which there was not much of technological advance; and food quality and safety issues were not sustainably met. The responsibilities related to food security and access, food safety and nutrition are scattered among 4-5 government ministries and agencies, and therefore a management structure for joint planning, coordination and evaluation has not been developed yet. Hence, it can be drawn here that there is requirement for capacity building to identify and uplift the food and food raw material quality and safety standards to the international level.

Two. Context and need to update the Programme, and terms applied

- 5. Legal context:** Since approval of the first National Programme for Food Security, Safety and Nutrition in 2001, new policy documents such as the State Policy on Food and Agriculture, Millennium Development

Goals (MDG)-based Comprehensive National Development Strategy, Recommendations of the World Food Summits had been endorsed, thus requiring review and updated re-formulation of the National Programme for Food Security.

A joint MOFA-UN (FAO/UNDP/UNICEF) Food Security Assessment Mission in 2006 made evaluation of the National Programme for Food Security, Safety and Nutrition. It was found that very limited progress had been achieved due to uncertainty of resources required for implementation and that organizational constraints had negative effect on progress. Accepting the Mission's recommendation to update the National Programme for Food Security, MOFA signed a Memorandum of Understanding with FAO in August 2007 on technical assistance in review and updating of the National Programme for Food Security, Safety and Nutrition.

6. **Practical need:** With shrinking food reserves and soaring food prices affecting the world markets in recent years, many countries have taken measures to renovate their food security policies and increase government funding and intervention in agriculture. Considering emerging external and internal factors, our country had also to take urgent action on rehabilitation of agriculture, achievement of self-sufficiency in major staple food, increase food contingency reserves for contingencies such as economic instability and disasters, increase government support in overcoming food deficit of the population and food borne non-communicable diseases. In the context of the above problems there were practical need and basis for re-formulation of the Programme.
7. The following terms are applied in the Programme:
 - 7.1. **Food security** – a comprehensive package of actions related to ensuring food supply, access, consumption and sustainability;
 - 7.2. **Food supply** - a supply status of the population with overall food items required per day;
 - 7.3. **Food access** – even supply to food requirements of the urban and rural population all year around;
 - 7.4. **Food consumption** – outcomes of how the rural and urban population consume food products;
 - 7.5. **Ensure food stability** – a comprehensive package of actions to stabilize food supply for the population during economic recession, war and natural disaster;
 - 7.6. **Food safety** – assurance that food will not cause harm to the consumer when it is prepared and/or eaten according to its intended use;
 - 7.7. **Nutrition** – a satisfactory status of food and provisions for growth, activities and energy needs of human organisms;
 - 7.8. **Serving size** – average amount of the particular food item for one intake;
 - 7.9. **Food borne disease** – any disease caused by consumption of food and water contaminated by an infectious microbes, viruses and other pathogens, toxic chemicals and radioactive ions;
 - 7.10. **Underweight child** - a child weighting lesser than the normal weight for the particular age growth;
 - 7.11. **Stunting** - the child height lesser than normal height for the particular age;
 - 7.12. **Wasting** - the child weight and height lesser than normal for the particular age;
 - 7.13. **Low weight birth** - the weight of a newborn being less than 2,500 grams;
 - 7.14. **Supplementary food** - an additional food designated for a baby starting from the sixth month after the birth;
 - 7.15. **Good agricultural practice** (GAP) – a comprehensive package of practice, conditions and actions to ensure food safety requirements in the whole chain of production, processing, transporting and marketing of animal- and plant-originated raw and processed food products;
 - 7.16. **Good Hygienic practice** (GHP) - a comprehensive package of practice, conditions and actions to ensure food safety requirements in the whole food chain;
 - 7.17. **Good manufacturing practice** (GMP) - a comprehensive package of production management, practice and activities and quality control focused on satisfaction of customers' demands and specification of products;

- 7.18. **Hazard Analysis Critical Control Point (HACCP)** – a comprehensive system, which identifies, assesses, controls and eliminates possible risks of hazards at every technological stage of food manufacturing process;
- 7.19. **Functional food** – food containing biologically active matters and useful micro-organisms, which support activities of the entire human body or its particular organs;
- 7.20. **Fortified food product** – food with supplements of vitamins, minerals and micro nutrients useful for human body, which is not included in the particular product or is lost during its processing.

Three. Period of implementation of the Programme:

- 8. The Programme shall be implemented from 2009- 2016 in two phases:
 - First phase from 2009-2012;
 - Second phase from 2013-2016.

Four. Programme goal, priority and objectives

- 9. The overall goal of the Programme is to ensure sustainable supply of nutritious, secure and accessible food, which enables healthy livelihood and high labor productivity of the population, involving participation of the citizens, government, public and private sectors.
- 10. The above goal of the Programme shall be implemented through Four Priority Pillars and 13 main objectives:
 - 10.1. **Priority Pillar 1:** Create enhanced enabling legal, economic and organizational environment for ensuring food supply, quality and safety:
 - 10.1.1. Revise the laws and regulations related to food security, quality and safety to comply with short- and long-term development objectives;
 - 10.1.2. Create enabling economic, financial and business environments to increase foreign and domestic investment;
 - 10.1.3. Build adequate management structure and inter-sectoral coordination and human capacity to implement the Programme;
 - 10.2. **Priority Pillar 2:** stable supply of the population with nutritious, secure and accessible foods and increase the proportion of the industrially processed food in overall consumption:
 - 10.1.4. Enhance supply of staple food by domestic production to substitute imports;
 - 10.1.5. Reduce disparities in food access between urban and rural areas and seasonality of supply;
 - 10.1.6. Stabilize food supply of the population, especially to the people of the vulnerable groups, during natural calamities, economic instability and food deficits;
 - 10.1.7. Update food processing technologies to enhance market competitiveness of the industry and export capacity of the Mongolian brands of food products;
 - 10.3. **Priority Pillar 3:** Improve monitoring and information network to secure hygiene and safety of food products and drinking waters:
 - 10.1.8. Ensure quality and safety of food products through introducing GAP and GHP at all stages of food preparation, processing, preservation, transporting and marketing;
 - 10.1.9. Improve monitoring and information network of food quality and safety, and related practices;
 - 10.1.10. Improve access, quality and safety of drinking waters;
 - 10.4. **Priority Pillar 4:** Improve nutritious quality of food, supporting adequate, healthy diets and reduce nutrition deficiency, preventing from risk factors of non-communicable chronic diseases:
 - 10.1.11. Elaborate and implement updated recommended dietary intake norms of a Mongolian person, improve consumer education of the population on food nutrition;

- 10.1.12. Monitor and prevent from micronutrient deficiency and non-communicable chronic diseases;
- 10.1.13. Increase production and consumption of fortified and functional food products.

Five. Implementing activities of the Programme objectives

- 11. **Within the framework of Objective 10.1.1** of the Programme (*Revise laws and regulations related to food security, quality and safety to comply with short- and long-term development objectives*), the following laws, regulations and standards shall be amended or newly elaborated:
 - 11.1. Improve the legal environment on regulation and inspection of purchase/sale of raw food materials and live animals for food purposes as well as activities related to import and export of food;
 - 11.2. Re-define names and quantity of strategic contingency food reserves and their locations;
 - 11.3. Enhance relations related to production, import, trade and consumption of healthy, ecologically clean, biologically active and functional food, including designated food, meeting the international standards;
 - 11.4. Introduce national standard on food safety assessment and setting physiological norms of food consumption of a Mongolian person;
 - 11.5. Adopt and adhere to the references, recommendations, methodologies of analysis and standards on food quality and safety, approved by the Food Legislative Committee of WHO and FAO;
 - 11.6. Elaborate and adhere to the guidelines and technical regulations on production, preservation, transportation and sale of raw as well as processed food products;
 - 11.7. Support production of fortified food products, functional food and children's food supplements;
 - 11.8. Elaborate and introduce unified methodologies for measuring nutritious values of animal- and plant-originated food products and identification of food requirement and consumption of the population.
- 12. **Within the framework of Objective 10.1.2** of the Programme (*Create enabling economic, financial and business environments to increase foreign and domestic investment*), the following issues shall be met:
 - 12.1. Study and prepare a suggestion on custom and VAT exemption or discount for import of necessary food products and raw materials and food processing machinery and equipment;
 - 12.2. Study and prepare a suggestion on acceptance of legal regulations on introducing government subsidies for food and agriculture sector investments and types and tools of financial supports for financial services providers such as leasing, insurance and microfinance in the same sector;
 - 12.3. Study and prepare a suggestion on integrating food and agriculture sector special government funds and expanding it into a Joint Support Fund to Food and Agriculture Production to concentrate Government supports there for entrepreneurs engaged in agriculture investment, loan, insurance and leasing services;
 - 12.4. Study and prepare a suggestion on long term pasture possession rights to Mongolian citizens and economic enterprises with purposes to support intensified livestock farming;
 - 12.5. Revise pasture utilization fees imposed on herder households in a way of limiting goat numbers and encouraging interests to breed high productive meat and milk animals;
 - 12.6. Study and prepare a suggestion on state budget funding for assessment surveys and research studies on nutrition, food access, supply, availability, reserves, nutritious quality and food situation of the population as well as on food contamination.
- 13. **Within the framework of Objective 10.1.3** of the Programme (*Build adequate management structure and inter-sectoral coordination and human capacity to implement the Programme*), the following actions shall be taken:
 - 13.1. Strengthen human and laboratories' capacities to identify metabolism and energy consumption of Mongols and food nutrient components;

- 13.2. Establish a national reference laboratory able to conduct quality and safety analysis of raw and processed foods and seek international authorization for it;
 - 13.3. Establish internal inspection laboratories at factories and strengthen local inspection laboratories and improve links and coordination between these laboratories;
 - 13.4. Provide professional bodies operating at the border ports with fast analyses tools and equipment enabling to conduct primary assessment of food and raw materials and up-grade their staff capacity and skills;
 - 13.5. Establish information network and database on food production, export, import and food consumption and health of the population;
 - 13.6. Create conditions and opportunities for NGOs and business enterprises to participate in ensuring food supply, nutritious quality and safety issues.
14. **Within the framework of Objective 10.1.4** of the Programme (*Enhance domestic production and supply of staple food to substitute imports*), the following actions shall be taken:
- 14.1. Elaborate and implement “Meat” sub-programme and study and prepare a suggestion on provision of supports to intensified meat livestock farming and meat processors and exporters, reduce seasonal fluctuations of meat production, supply and prices;
 - 14.2. Study and prepare a suggestion on provision of methodological and financial supports to low income residents in pre-urban districts of cities, settlements and rural areas to run pig, poultry, bee, rabbit farming and to plant potato, vegetables, berries and fruits;
 - 14.3. Elaborate and implement “Milk Cow” sub-programme and study and prepare a suggestion on provision of methodological, financial, investment and professional supports to pre-urban dairy farmers to shape up their production and activities;
 - 14.4. Implement “Egg” and “Fish” projects to meet demands of the urban population and assist the rural population in diversifying their food consumption and increasing their incomes;
 - 14.5. Elaborate and implement “Renovation of Crop Machinery”, “Irrigated Cropping”, “Fertilizer” and “Plant Protection” sub-programmes and projects to intensify crop production and stabilize domestic production and supply of flour, potato, vegetables and build up export potentials;
 - 14.6. Study and prepare a suggestion on implementation of “Diversification of Plant Varieties” project and provision of investment and loan supports to local producers and processors engaged in cultivation and production of millet, vegetable oil plant, rye, peas and soybeans to reduce their imports.
15. **Within the framework of Objective 10.1.5** of the Programme (*Reduce disparities in food access between urban and rural areas and seasonality of supply*), the following actions shall be implemented:
- 15.1. Introduce advanced technology in food processing, storage, transportation and marketing activities and create conditions to avoid worsening food product quality at each stage on the chain from producers to consumers;
 - 15.2. Support establishment of unified market networks for purchase and sale of agriculture origin raw materials;
 - 15.3. Implement a sub-project to provide food and meal supports to social vulnerable groups;
 - 15.4. Ensure a unified management, coordination and reporting on handling aids provided by central and local Governments, NGOs and donors for the household based livestock and crop production activities and other forms of income generating activities.
16. **Within the framework of Objective 10.1.6** of the Programme (*Stabilize food supply of the population, especially to the people of the vulnerable groups during natural calamities, economic instability and food deficits*), the following actions shall be taken:
- 16.1. Improve legal environment for establishment, disbursement and replenishment procedures of the strategic and disaster food reserves, and set and adhere daily food norms during disasters;
 - 16.2. Revise list of types and quantity of food items to be in the state reserves for the use during disasters,

economic instability and food deficits, and form the reserves;

- 16.3. Improve the state reserves storage facilities to enable preserving the food reserves longer, enhance their capacities and optimally locate the storage facilities, considering the regional specifics;
 - 16.4. Take actions to form staple food reserves at aimag and soum levels for usage during disasters;
 - 16.5. Set a mechanism of forming and disbursement of vitamins and minerals reserves designated for assisting young children and pregnant and breast-feeding women during disasters, who are most inclined to suffer from food deficits in such a time.
17. **Within the framework of Objective 10.1.7** of the Programme (*Update food processing technologies to enhance market competitiveness of the industry and export capacity of the Mongolian brands of food products*), the following actions shall be taken:
- 17.1. Study and prepare a suggestion on assistance in building of integrated food and agricultural complexes via provision of loan and financial leasing and investment supports;
 - 17.2. Study and prepare a suggestion on provision of supports to enhancing production capacity and technological renovation in processing industries in response to the requirements to supply the urban and settlement population with industrially processed meat and milk;
 - 17.3. Support initiatives and investments to establish meat, milk, potato and vegetables processing small and medium enterprises and workshops adequate for aimag, soum and settlement needs;
 - 17.4. Support and promote production of ecologically clean food and take actions to get them registered as products with the Mongolian geographical indications on the national and international levels;
 - 17.5. Support and promote processing through advanced technology and exporting of pastoral animals' meat, milk and potatoes and vegetables originated from ecologically clean environments and natural berries as "Mongolian Brand Foods".
18. **Within the framework of Objective 10.1.8** of the Programme (*Ensure quality and safety of food products through introducing GAP and GHP at all stages of food preparation, processing, preservation, transporting and marketing*), the following actions shall be taken:
- 18.1. Exercise control over animal health and product origin, quality and safety through ears tagging of large animals;
 - 18.2. Introduce Good Hygiene Practices in local slaughterhouses and milk collections spots and certify them;
 - 18.3. Improve registration and monitoring of food supplements and secondary raw materials used in food processing industry;
 - 18.4. Elaborate and implement a project to monitor and conduct surveillance to identify residues of animal drugs and preparations, pesticides and other chemicals and heavy metals in food products as well as contamination with virulent microbes;
 - 18.5. Introduce Hazard Analysis Critical Control Point (HACCP), Food Safety Quality Management System (ISO9001), Food Chain Inspection System (ISO22000:2007) into food processing plants;
 - 18.6. Introduce qualification merit system to food processing plants' activities and rank them;
 - 18.7. Revise food produce packing standards and technical requirements to comply them with the common international standards;
 - 18.8. Form conditions to transport perishable food products with special-propose vehicles and introduce refrigerating equipment at each stage of marketing;
 - 18.9. Elaborate and implement a regulation to withdraw back from sale and liquidate food products that do not meet the set quality and safety requirements or their shelf-life expired;
 - 18.10. Conduct trainings on introduction of Hygiene and Sanitation Good Practices for personnel of public cafeterias and food traders and suppliers for schools and kindergartens.
19. **Within the framework of Objective 10.1.9** of the Programme (*Improve monitoring and information network of food quality and safety, and related practices*), the following actions shall be taken:

- 19.1. Introduce the Mongolian and international standards in food safety laboratories and rank them;
 - 19.2. Exercise control over imported foods through tender selection and certification of food importers;
 - 19.3. Revise and renew the perishable food import agreements and negotiations with exporting countries to comply them with international standards;
 - 19.4. Set quality, safety and risk assessment criteria on genetically modified food products' and adhere thereto.
20. **Within the framework of Objective 10.1.10** of the Programme (*Improve access, quality and safety of drinking waters*), the following actions shall be taken:
 - 20.1. Provide supports to elaborating and introducing water-refreshing technology where waters do not meet requirements for drinking water;
 - 20.2. Establish water harvesting reservoirs to collect rain- and snowfall waters in regions poor with water resources to use for needs of the population, livestock and cropping;
 - 20.3. Conduct analyses of drinking water sources used by the rural population, and fix signs with their water quality indications, next to each water source;
 - 20.4. Set hygiene zones for drinking water sources of the rural population, protecting them from contamination, and isolate animal water drinking spots from wells and springs used for human drinks;
 - 20.5. Study on and implement a legal regulation to ban activities related to any mineral exploration and mining in the hygiene protection zones of drinking water sources;
 - 20.6. Improve sensing surveys and information on water borne-communicable diseases.
 21. **Within the framework of Objective 10.1.11** of the Programme (*Elaborate and implement updated recommended dietary intake norms, improve consumer education of the population on food nutrition*), the following actions shall be taken:
 - 21.1. Prepare training curricula and standards on food nutrition education adequate for age and sex peculiarities of the population and train trainers and volunteers for this purpose;
 - 21.2. Establish cabinets at rural and urban educational and health organizations to support healthy diets and conduct regular trainings;
 - 21.3. Provide government supports to food nutrition surveys, research studies and information services.
 22. **Within the framework of Objective 10.1.12** of the Programme (*Monitor and prevent from micronutrient deficiency and non-communicable chronic diseases*), the following actions shall be taken:
 - 22.1. Encourage and advertise breast feeding of a new born up to 6 months, further breast feeding combined with child supplementary foods until two years old;
 - 22.2. Provide government supports to establish curative resorts in cities and settlements for children suffering from underweight, anemia, rachitis and nutrition deficiencies, and build up enterprises specialized in manufacturing health and child supplementary foods, based on improved involvements of residents and economic entities;
 - 22.3. Regularly measure, monitor and inform growth and development of children by medic personnel of households and improve their caretaking and create national database of monitoring children's growth and development;
 - 22.4. Competitively select supply enterprises, service centers and spots able to provide cafeterias of kindergartens, secondary schools, universities and vocational training and production centers with quality and safety foods and raw food products;
 - 22.5. Improve nutrition quality and safety of food products supplied for "School Tea Break" program and include milk and dairy products into their rations not less than 60%;
 - 22.6. Provide government supports to production of special-purpose foods made of buttermilk, fruits, berries, rye, barley, bran and offal rich with protein, vitamins and minerals for people in vulnerable groups subjected to nutrition deficiencies

- 22.7. Identify demands of young children and pregnant and lactating women for vitamins and mineral preparations and take actions to select their suppliers and regularly supply the priority groups;
 - 22.8. Elaborate and implement the second phase of "Prevention from and monitoring of non communicable chronic diseases" programme.
23. **Within the framework of Objective 10.1.13** of the Programme (*Increase production and consumption of fortified and functional food products*), the following actions shall be taken:
- 23.1. Elaborate and implement a policy on fortified food products and improve activities to monitor their production, consumption and outcomes and reporting;
 - 23.2. Increase imports of micro-elements used for food fortification and supply the internal markets with fortified foods and increase consumption of fortified foods by the population, based on introducing good practices;
 - 23.3. Increase involvement of economic enterprises, research and non-government organizations in introducing technology of food products fortification with vitamins A, D and E and minerals;
 - 23.4. Increase production of food products with regulatory effects.

Six. Expected Outcomes

24. **Within the framework of Priority Pillar 1**, the following outcomes shall be achieved:

In 2009-2012

- 24.1. Due to the improved economic and legal environments of investment, loan, insurance and leasing services for ensuring food security, these services shall be increased by no less than 2.5 times compared to 2007;
- 24.2. Volume of products of food processing plants will be increased by 30 percent compared to 2007;
- 24.3. Food safety inspection structure and organization will be restructured and based on unified methodology, management and information system;

In 2013-2016:

- 24.4. Inspection over food quality, hygiene and sanitation will be upgraded up to the international commonly used standards;
- 24.5. Food security assessment will be conducted in accordance with the common international methodology and the national standards and outcomes will be available to the broad public.

25. **Within the framework of Priority Pillar 2**, the following outcomes shall be achieved:

In 2009 – 2012:

- 25.1. The number of milk cows of dairy farms in pre-urban zones will be increased up to 8,0 thousand and the milk processing factories will have total capacity to process and sell not less than 20,0 thousand tons of milk for consumption of the population;
- 25.2. Meat production will be increased by 35% compared to 2007 and 50.0 tons of meat will be industrially processed, and 20.0 thousand tons of meat sent to export, including 10,0 thousand tons of meat purchased from intensified meat farms;
- 25.3. The country will achieve full self-sufficiency in meat, milk, flour, potato and vegetables, while domestic production will meet 65-70 percent of demands for egg, 15 percent for butter, 15 percent for fish and 5-10 percent for vegetable oil;
- 25.4. Emergency reserves of flour, rice, sugar will sufficient for 10-14 days and strategic food wheat reserve will be increased up to 30-35% in the total consumption, and their locations will be optimized and supply and prices of wheat will be stabilized;
- 25.5. Irrigated wheat fields will increase up to 53.0 thousand and this will enable harvesting not less than 25 percent of wheat production from irrigated fields;
- 25.6. Varieties of agricultural crops will be diversified and the number of rotations will be increased, while

fields of pure fallows are reduced by 20 percent;

- 25.7. Technological updates of food processing factories will be made and 30 percent of meat consumption and 20 percent of milk consumption of urban and settlements will be industrially processed;
- 25.8. No less than 25 percent of the total number of soums will be connected to the food wholesale network;

In 2013-2016:

- 25.9. Annual supply of milk from pre-urban dairy farms will increase up to 40.0 thousand tons on average, and volume of industrially processed milk will be doubled in 2012 and further;
- 25.10. Total meat export will achieve 38.0 thousand tons, and 60 percent of meat supply of the population of cities and settlements will be processed industrially;
- 25.11. The country will become 100 percent self-sufficient in eggs and domestic production will supply 20 percent of butter consumption, 25 percent of fish, 15 percent of berries, 5 percent of rice, and no less than 40 percent of vegetable oil;
- 25.12. The disaster reserve of flour will be sufficient for 20 days, rice and sugar for 15 days, and strategic wheat reserve will increase up to 25 percent of the total consumption;
- 25.13. In total, 30 percent of fertilizers used in crop sector and 20 percent of plant protection chemicals will be produced domestically, and 50 percent of trailer and towed aggregates and 70 percent of agricultural motorized machines will be replaced;
- 25.14. In total, 60-70 percent of the soums will be connected to the wholesale trade network and its branches;
- 25.15. No less than 25 agro-processing complexes will be established around cities and settlements.

26. **Within the framework of Priority Pillar 3**, the following outcomes shall be achieved:

In 2009 – 2012:

- 26.1. Inspection over meat and milk origin, hygiene and sanitation will be improved;
- 26.2. Preliminary inspection system of food imports will be improved;
- 26.3. Unified inspection system of control over every technological phase, including production of food raw materials and ready-made products, will be established;
- 26.4. No less than 20 percent of farms and food producers and service providers will acquire Good Agricultural, Industrial and Hygiene Practices;
- 26.5. Inspection and sensing studies of heavy metals, toxic chemicals in food raw materials and end products will be improved.

In 2013-2016:

- 26.6. Internal inspection system will be introduced in every food processor and a regulation on withdrawal of food products that do not meet quality and safety requirement will be established and adhered;
- 26.7. 60 percent of food plants will introduce Hazard Analysis Critical Control Point (HACCP), Good Hygienic practice (GHP) and Good Manufacturing practice (GMP);
- 26.8. No less than 55 percent of agricultural farmers will introduce Good Agricultural Practice;
- 26.9. Food borne communicable diseases will be decreased.

27. **Within the framework of Priority Pillar 4**, the following outcomes shall be achieved:

In 2009 – 2012:

- 27.1. Food and nutrition education curriculum and training standards will be developed and no less than 200 trainers will be trained;
- 27.2. Each aimag center and district in the capital city shall have at least 1 child health care resort and 1 food education training cabinet established;

- 27.3. Production of fortified and functional food will be increased by 50 percent compared to 2007;
- 27.4. Vitamin D deficiency among under-five years old children will be reduced by 1.2 times, malnutrition, anemia, Vitamin A deficiency and anemia among pregnant women will be reduced by 1.5 times, each, while goiter among children of 7-12 age will be reduced three folds;
- 27.5. Criteria of food deficiencies of social vulnerable groups will be implemented.

In 2013 – 2016:

- 27.6. Among under-five years old children, underweight will be reduced by 3.8 percent, stunting by 9.8 percent, wasting by 0.2 percent, Vitamin D deficiency by 25 percent, Vitamin A deficiency by 6 percent, anemia by 10.7 percent, while goiter prevalence among children between 7-12 ages will be decreased by 3 percent, Vitamin A deficiency among lactating women by 11.5 percent, anemia among pregnant women by 10 percent respectively, thus Mongolia will meet objectives of the Millennium Development Goals (MDGs)-based Comprehensive National Development Strategy;
- 27.7. A serving size of the population which consume less than 5 units of fruits and vegetables a day will be reduced by half compared to 2012;
- 27.8. A national safety net system for support of the population shall be established.

Seven. Management and organization of the Programme

- 28. An Advisory Council in charge of implementation of the Programme throughout the country will be established to organize and monitor the implementation of the Programme;
- 29. A chairman and members of the Advisory Council will be approved by the Government in accordance with the existing procedure.

Eight. Financing of the Programme

- 30. The following financial resources will be used for implementation of the Programme:
 - 30.1. Own resources of business enterprises and residents;
 - 30.2. State budget;
 - 30.3. Local budgets;
 - 30.4. Banks' loans;
 - 30.5. Aids and soft loans of foreign countries and international organizations;
 - 30.6. Investments of domestic and foreign investors.

Nine. Implementation criteria of the Programme

- 31. The Central State Administrative Organization in charge of Food and Agriculture jointly with the relevant other Central State Administrative Organizations shall set evaluation criteria for every objective and activity of the Programme at the beginning of each year, in accordance with the expected outcomes identified in Article 6 of this Programme.

Ten. Monitoring and Evaluation

- 32. The Central State Administrative Organization in charge of Food and Agriculture jointly with the relevant other Central State Administrative Organizations, involving external monitoring as necessary, will organize monitoring and impact assessment of the Programme and the former will report outcomes of the Programme to the Government, within the first quarter every year.

Pillar/Priority Area 1: Enabling Environment

Pillar/Priority Area 2: Food Security

Pillar/Priority Area 3: Food Safety

Pillar/Priority Area 4: Nutrition

I. Pillar/Priority Area 1: Enabling Environment

Title	1.1 Capacity Building: Vocational Training for the Food and Agriculture Sectors		
Starting date	2009		
Duration	8 years to 2015		
Justification	<ul style="list-style-type: none"> • While there is good training available for school leavers, e.g. at the Food Technology College in UB, there is very limited vocational job-oriented training for food industry workers and managers. • Agricultural Training Colleges such as the ones at Byanchandman (Tov <i>aimag</i>) and Shamar (Selenge <i>aimag</i>) are very run down. • Very few farms and food businesses use or are familiar with best practices for producing and processing safe quality foods such as GAP (Good Agricultural Practice), GMP (Good Manufacturing Practice) and GHP (Good Hygienic Practice). • Moreover modern food production and processing technologies are lacking as well as the skills needed to establish and run successful food small and medium scale farm and food enterprises. Government policy currently focuses on providing job opportunities for youth. • The national MDG-1/target 3 is to: "Develop and implement strategies for decent and productive work for youth". 		
Objective	<ul style="list-style-type: none"> • To provide people in the agriculture and food sectors with the updated knowledge, practical and business skills required to produce safe, top quality Mongolian food and drink. 		
Strategy	<ul style="list-style-type: none"> • Adapting the approach used to set up the National Dairy Training Centre at the Food Technology College, the strategy is to add Vocational Food Training Centres (VFTCs) to selected existing training institutions at city and aimag level. The focus will be on providing youths and personnel involved in the food and agriculture sectors with practical skills and knowledge and basic business skills; • Training costs will be shared between the VFTC and the food companies/ organizations sponsoring the training course and/or the trainees themselves; • Each VFTC will have a demonstration food processing unit, which will be run on a commercial basis, the profits of which will also contribute to training costs. Outreach training units will be attached to each VFTC; • Outreach training is very important as it enables more farmers and their families, especially women, to participate. Once GAPs, GMPs and GHPs have been successfully introduced along the food chain, training will focus on introducing the more advanced HACCP (Hazard Assessment Critical Control Point) system of food management and control. • A joint Ministry of Food Agriculture & Light Industry /Ministry of Education, Culture and Science Working Group will be established to oversee the vocational training programme and VFTCs. The WG will include representatives from the public and private sectors and concerned producer and processors organizations such as the Mongolian Food Processors Association. 		
Main Beneficiaries	<ul style="list-style-type: none"> • Agriculture and food industry personnel 		
Implementing agencies	<ul style="list-style-type: none"> • Ministry of Food, Agriculture & Light Industry , Ministry of Education, Culture and Science, City and <i>Aimag</i> Administrations 		
Expected outputs	<ul style="list-style-type: none"> • Vocational VFTCs established at 20 training institutions, including outreach training. • Joint Ministry of Food, Agriculture & Light Industry , Ministry of Education, Culture and Science food industry vocational training WG unit set up; • 20 priority training modules prepared and used; • 10,000 agriculture and food sector personnel participated in training; • GAPs, GMPs & GHPs introduced in 500 foods production & processing enterprises; • HACCP course established; staff from 500 food production/processing units trained. 		
Budget US\$ Million	Government	5.10	2008-2012: 7.86
	Donors and NGOs	5.00	
	Private sector/civil society	3.00	2013-2016: 5.24
	Total	13.10	

Title	1.2 Capacity building of food laboratories			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> • The survey on food safety reveals that 27% of the population suffers from food nutrition deficiency and micro nutrition deficiency is high among children, in addition, in times of widespread communicable disease and chemical poisoning samplings have been sent to abroad which is costly and time consuming. 			
Objectives	<ul style="list-style-type: none"> • Supply with reliable quality safe food produce to the population; • Reduce micro nutrition deficiency among children and women; • Improve inspection over food borne communicable disease and eliminate the diseases; • Plant, animal, soil and food contamination, spread of chemical reagents and residuals detected in proper time and executed in a way acceptable internationally. 			
Strategy	<ul style="list-style-type: none"> • To build up a unified network of food safety laboratories that will be interlinked with each other and well equipped and certified; • To establish a national reference laboratory and promote it for international accreditation. 			
Main beneficiaries	<ul style="list-style-type: none"> • Overall consumers, children, women, vulnerable groups, inspection organizations and laboratories and their workers 			
Implementing agencies	<ul style="list-style-type: none"> • Food Security Program Implementation Unit under the Minister's Office, Ministry of Health, Ministry of Food, Agriculture & Light Industry, National Center for Standardization and Measurement. 			
Expected outputs	<ul style="list-style-type: none"> • Capacity to analyse soil, plant, animal and their origin food produce and raw materials quality, chemical reagents residuals and their spread set up and results of analyses are reliable nationwide; • Laboratories adopted to needs and requirement of regional centers and settlements established; • Border and trade facilities equipped with fast analyses equipment and tools; • Results of quality and safety analyses aggregated in unified information system, and made accessible to broad public; • Food safety warranted. 			
Budget US Million	Government	7.00	2008-2012:	8.4
	Donors and NGOs	7.00		
	Private sector/civil society		2013-2016:	5.6
	Total	14.00		

Title	1.3 Promotion of Food Research, Information and evaluation		
Starting date	2009		
Duration	8 years to 2016		
Justification	<ul style="list-style-type: none"> • The foreign and domestic organizations, domestic working group and professionals that made assesment of the previous program, unanimously agree and point out that unavailability of information on domestic and import food produce and raw materials quality, hygiene and sanitation conditions, supply and demand on domestic and foreign markets impedes trustworthy and realistic conclusion on the program implementation. There is no preventive information available to communicate with consumers on food produce production quality and sale. • The present practice, when the professional organization conducts inspection upon information it receives, is far behind the international practice. • Confiscation and complete destruction of poor quality produce, if detected, is also far behind the existing international practice. • Information on domestic and import food produce often is incorrect, contradictory, and no reliable source is available to make clarification, which still hinders development of realistic data and information on food produce supply status in Mongolia. • In the last period, only MOFALI has made assessment of the program, while related ministries and agencies have not assessed implementation of the program, which again hinders conclusion of nationwide implementation of the program. 		
Objectives	<ul style="list-style-type: none"> • Make available reliable information source to provide with regular information on food supply, quality and safety; • Conduct monitoring of the implementation of each objective and clause of the program and rectify shortcomings and weakness, when required; • Make perception and conclusion on food supply and safety identical; • Make preliminary information on food supply and safety available to broad public. 		
Strategy	<ul style="list-style-type: none"> • To build up a unified information network enabling research, policy and decision making and evaluation of food security issues; • To establish specialized food product research centers able to conduct baseline surveys and evaluation of food security situations along the food market channels. 		
Main beneficiaries	<ul style="list-style-type: none"> • Overall food consumers. • Food producers and importers, traders, authorities and NGOs. 		
Implementing agencies	<ul style="list-style-type: none"> • Each organization under the Government Administration and service organizations indicated in the program. • Food Safety National Committee. 		
Expected outputs	<ul style="list-style-type: none"> • Regular and true information on food supply communicated openly to broad public; • Information on the implementation progress, outcomes communicated to law makers, decision makers and broad public and responsive actions undertaken; • Information on domestic and import food quality made available and warning messages sent to residents with no delay. 		
Budget US\$ Million	Government	3.50	2008-2012: 5.1
	Donors and NGOs	3.50	
	Private sector/civil society	1.50	2013-2016: 3.4
	Total	8.50	

Title	1.4 Agricultural Investment Fund (newly suggested)			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> • Due to the weak government supports, food and agricultural sector investment and financial services have been hampered in the entire country, while agriculture employs about 40% of total workforce and produces about 20% of GDP. The FAO/UNICEF/UNDP Joint Food Security Assessment Mission to Mongolia, in April 2007, concluded that “The National Plan of Action for Food Security, Safety and Nutrition 2001-2010 ... has been hampered by lack of funding both from public and private sectors, as well as by its holistic approach”¹. • Commercial banks are much reluctant to lend to agriculture and most of their loans are short-term (76.4%). In 2007, out of 137 non-bank financial institutions (NBFIs) and 181 credit and savings cooperatives operating in the country, only 18.8% of the NBFIs and 43.6% of CSCs was in rural areas. Consequently, rural enterprises, poor and vulnerable households still have no access to microfinance services. • The delay of land privatization and certification of farm assets leads to lack of collateral assets of livestock and crop farmers. In addition, no agricultural insurance exists, except the Index-based Livestock Insurance pilot project being implemented in Bayankhongor, Khentii and Uvs aimags, only. • Agricultural producers and processors can't get equipment and machinery on financial leasing, although over 200 companies are registered as lessors. They can't provide leasing services due to their limited financial capacities. Therefore, the Government needs to support investment in food, agriculture and processing industries. 			
Objectives	<ul style="list-style-type: none"> • The objective is to establish Agricultural Investment Fund based on government investment and donor contributions and to support PPP initiatives in food, agriculture and light industry. 			
Strategy	<ul style="list-style-type: none"> • The strategy is to support private sector mid-term investments in food, agriculture and light industry through the following financial mechanisms: grants, loan guarantees and leasing. 			
Main beneficiaries	<ul style="list-style-type: none"> • Beneficiaries of the suggested government schemes will be: • All the primary agricultural enterprises and agri-processors; • Household-based livestock and crop farms, especially poor and vulnerable households; • Rural and urban consumers, indirectly. 			
Implementing agencies	<ul style="list-style-type: none"> • Ministry of Finance, MOFALI, Financial Regulatory Committee, Crop Production Support Fund, commercial banks, microfinance institutions and financial leasing companies 			
Expected outputs	<ul style="list-style-type: none"> • The improved rural financial services will lead to the following outputs: • Increased investment; • Increased productivity; • Increased economic efficiency; • Increased food security. 			
Budget US\$ Million	Government	150,0	2008-2012:	300,0
	Donors and NGOs	150,0		
	Private sector/civil society	200,0	2013-2016:	200,0
	Total	500,0		

¹ FAO/UNICEF/UNDP Report: Joint Food Security Assessment Mission to Mongolia, Ulaanbaatar. April 2007. Page 5

II. Pillar/Priority Area 2: Food Security

Title	2.1 Meat production			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> The average nationwide per capita meat consumption for the last six years makes up to 97.4 kg and export of meat and meat produce totals to 7.8-13.1 thousand tons which is much lower than the actual potential. Although in recent years the number of livestock has been instantly growing, the number of animals designated for meat has declined. The national average meat production based on the unit animal at the start of the year decreased 1.6 times vs. 2000. There are 28 meat processing plants and over 70 meat workshops in the country with overall processing capacity of 85.0 thousand tons per annum, however, the industrially processed meat amount is as low as 7.8 thousand tons a year. The monitoring and evaluation carried out on the implementation of the Government "Meat Export" project adopted in 1999, reveals that the project unfortunately failed to comply with its basic objectives and attain tangible outcomes due to inefficient management, arrangements and lack of financial resources. Based on above, the present "Meat" sub programme was developed and its implementation is crucial to improve meat supply and production. 			
Objective	<ul style="list-style-type: none"> Direct the Government support to the development of meat cattle, horse, sheep, pig and meat poultry intensified farming in peri urban areas; Increase a share of dam in overall pasture livestock herd and a number of offspring's per 100 mother animal as well as a number of livestock to sell for meat; Support the regions with potential to develop livestock feed farming and increase the slaughtering weight; Support animal fodder cropping and production, produce complex fodder and reduce import; To comply with modern requirement up-grade and revise standard and technical conditions which the meat processing, transportation and storage economic entities should observe; Seek for external markets for sheep and goat meat and increase meat export. 			
Strategy	<ul style="list-style-type: none"> The Government arrange for import of high productivity cattle semen and sires and supply to herders based on their request and against payment; The professional organizations function as middleman between herders to supply with high productivity cattle semen and bull, which was identified through selection process. The supply of semen and bull will be a chargeable service; Arrange for breeding of pure breed meat sires and initiate selling by auction the sires which meet all the quality requirements. 			
Main Beneficiaries	<ul style="list-style-type: none"> Entrepreneurs engaged in intensive farming, meat traders and overall population in cities and settlements. 			
Implementing agencies	<ul style="list-style-type: none"> MOFALI develops this project and will implement in cooperation with the capital city, region, aimag center and settlement centers administration, agricultural and other NGOs, juridical persons engaged in meat production, residents and herders engaged in intensive and pasture livestock production as well as broad public. 			
Expected outputs	<ul style="list-style-type: none"> Support to economic entities and residents engaged in meat cattle, sheep, horse, pig and poultry farming have resulted in increase of meat production and export to attain 38.0 thousand tons per annum; The elite sires for meat cattle, horse, sheep and pig would be produced locally, and 30-40 percent of meat and egg poultry would be produced domestically; 20 percent of the demand for meat in cities and settlements would be met through intensive meat production; The weight of cattle dams in overall herd size would attain 40 percent and sheep dams 70 percent in the project nine aimags; The carcass weight of meat sheep attain 18-20 kg, while cattle carcass weight make up 150-160 kg, 80-82 percent of a total beef and mutton production in the region would come from aimags and soums covered by the program; Pig farming households and economic entities with at least 20,000 sows will be established, which would produce at least 16,000 tons of pork and deliver to the market. 			
Budget US\$ million	Government	6.8	2008-2012:	9.84
	Donors and NGOs	6.5		
	Private sector/civil society	3.1	2013-2016:	6.56
	Total	16.4		

Title	2.2 Milk production			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> • Since 2000, the dairy production increased by some 24.0 percent including mare milk production increase 1.6 fold, sheep milk 2.0 times and goat milk 1.5 times respectively. • Despite this, the population demand for milk and dairy products could not meet to full extent. The milk consumption amount among the rural and urban population significantly varies. • As of 2006, the urban and settlement population consumed 68.4 kg of milk and dairy products per capita, exclusive butter, while the rural population consumption made up to 232.8 kg per capita i.e. it was as 3.4 times high as the consumption of milk and dairy produce in rural areas. • As of the present, the overall processing capacity of dairy plants total to 30.0 thousand milk and dairy produce per annum, however, only 1.7 percent of milk produced in the agriculture is processed industrial way. • At the moment Mongolia has 88.000 pure and semi pure bred meat and milk cattle, which is as 2.8 times low as in 1990 and 35% percent less than back in 2000. There are only 3.100 semi pure bred and local improved bred cows in over 400 households engaged in breeding of milk cows, though, the annual milking yield of these cows is low. • Based on above it is to conclude that separate program to develop and implement dairy farming is required to increase milk production and improve supply with milk the cities and settlements. 			
Objective	<ul style="list-style-type: none"> • Support to supply with high productivity milk cow, bull, and their semen and embryos the dairy farms and cooperatives based in peri urban areas; • Support to combined production of crops and fodder to meet the dairy farm fodder demand; • Set up a system to deliver professional assistance to run dairy farming and provide with knowledge promotion; • Support to strengthen production infrastructure including energy, road, transport, on plot facilities, machinery and equipment to improve dairy farm's provision with machinery and equipment; • Make farmers to master technology and approaches to run intensive and settled dairy farming. 			
Strategy	<ul style="list-style-type: none"> • The Government arrange for import of pure bred cattle and bull and semen based on the request of farmers, cooperatives and residents interested in running or engaged in dairy farming on re-payment term; • Provide financial support to construct livestock shelter and prepare fodder; • Support residents and economic entities interested in milk production breeding bull rearing; • Support establishment of milk processing workshops in local areas to collect milk from herders which rear cow, sheep and goat in traditional way. • Arrange for establishment of dairy workshops where appropriate based on herder's request, and support improvement of water and pasture conditions. 			
Main Beneficiaries	<ul style="list-style-type: none"> • Dairy farms and cooperatives in peri urban and settlement areas. • Milk processing plants and workshops that cooperate with dairy farms; • Transporter, stockman and sales persons which cooperate with milk and dairy farms; • Livestock specialists, trainees and institutions which promote knowledge on dairy farming; • Consumers of milk. 			
Implementing agencies	<ul style="list-style-type: none"> • MOFALI develops this project and will implement in cooperation with the capital city, region, aimag center and settlement centers administration, agricultural and other NGOs, juridical persons engaged in milk production, residents as well as broad public. 			
Expected outputs	<ul style="list-style-type: none"> • Support to stablish no less than 600 dairy farm and at least 40 secondary cooperatives, which would have at least 14000 cows of high productivity Khar tarlan, Simmental and Swiss breed / over 2500 liters per annum/ undertaken; • Dairy farms and cooperatives will deliver at least 28000 tons of milk to the population of Ulaanbaatar, Darkhan, Erdenet, Choibalsan, Underkhaan8 Khovd and Uliastai cities. 			
Budget US\$ million.	Government	15.3	2008-2012:	24.06
	Donors and NGOs	14.5		
	Private sector/civil society	10.3	2013-2016:	16.04
	Total	40.1		

Title	2.3 Poultry production			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> The physiological daily intake of eggs for Mongolians equals to 0.7 gram eggs, which makes up 45.6 pieces per annum per capita, therefore it is required 108.5 million eggs to comply with dairy rate. As NSO survey reveals the urban consume 25 eggs per year, while the rural consume only 2 eggs. About 46 percent of the overall population lives in soum center and farther on in remote areas. Therefore nearly half of the population does not consume egg at all. It is considered that this component has high likelihood to be implemented as poultry farming is less exposed to nature and climate associated risk, is cost effective and might be developed at household and small entity level the traditional way. The poultry farming has a potential to meet the need of the rural population for protein and protein rich food, reduce unemployment and increase the household income. 			
Objective	<ul style="list-style-type: none"> Support and promote development of intensive poultry farming based on industrial technology in regions close to the capital city, large cities and settlements; Increase income and food supply of low income residents residing in plots in rural area, the cities and settlements; Develop poultry farming in peri urban areas of the large cities and improve supply of eggs to the population. 			
Strategy	<ul style="list-style-type: none"> Support large poultry farms based close to cities and settlements to expand their production, renovate machinery and technology through provision of concessional loans; Support small poultry farms and farmers to breed laying hens based on order, the Government to buy baby birds and distribute to low income residents free of charge; Ensure income tax exemption for the household based poultry with less than 500 hens, residents and small cooperatives engaged in local chicken breeding, provide with concessional loan to purchase a fodder, assist to breed baby bird ordered by the Government; 			
Main Beneficiaries	<ul style="list-style-type: none"> Low income residents residing in rural areas and ger districts in the cities; Poultry farming entrepreneurs, farmers, cooperatives in peri urban areas; Meat processing and egg plants, workshops, transporters, stock keepers, salesman; Poultry specialists, trainees and institutions which promote knowledge on poultry farming and awareness building. 			
Implementing agencies	<ul style="list-style-type: none"> MOFALI develops this project and will implement in cooperation with the capital city, region, aimag center and settlement centers administration, agricultural and other NGOs, juridical persons engaged in egg production, residents as well as with participation of a broad public. 			
Expected outputs	<ul style="list-style-type: none"> Poultry farms in peri urban areas of Ulaanbaatar, Erdenet and Darkhan and other regional pillar centers have at least 300.000 laying hens, which will cover fully the demand for egg of the urban population. Number of households in rural areas, which are engaged in poultry farming, will increase up to 9.000 households with at least 80.000 laying hens and those farms will deliver 30.0% of the egg demand to the rural population. Production of chicken meat will increase three times vs. present production. 			
Budget US\$ million.	Government	0.33	2008-2012:	1.176
	Donors and NGOs	0.23		
	Private sector/civil society	1.40	2013-2016:	0.784
	Total	1.96		

Title	2.4 Fish production			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> • According to recommended daily intake consumption of fish per adult equivalent makes up 1.46 kg of fish per year. As of 2008, a total of 4.6 thousand tons of fish and fish produce is required to comply with RDI. • As there is no collated information available on domestic fish extraction, only import figures were used to compute fish consumption, which says that a total of 23.3 tons of fish produce were imported meeting only 5 percent of the overall demand. • Based on the above it is required to develop and implement "Fish" sub program which covers all aspects related to fishery development including identification of resources, breeding, fishing and export and import. 			
Objective	<ul style="list-style-type: none"> • Identify the fish resources in local lakes, arrange for breeding and exploitation, limit the export; • Arrange for local processing of fish an industrial way; • Explore a potential to harvest fish in fishery zones in international waters, and purchase fish produce from the payment received for the use of the Mongolian flag; • Prepare professional staff to work in fishery, expand research works related to fishery. 			
Strategy	<ul style="list-style-type: none"> • Identify the fish resource and fishing period to extract from domestic lakes; • Impose ban on export of domestically extracted fish; • Provide financial support to economic entities which were selected through bidding to extract fish from domestic lakes and ponds and deal with fish processing industrial way; • Provide methodological support and engage in foreign projects and programs the economic entities which were selected through bidding to extract fish from natural, man-made lakes and ponds; • Promote fish meal to residents to get used to consume fish and make it into a habit; • Study a potential to extract fish in international waters and import fresh and processed fish. 			
Main Beneficiaries	<ul style="list-style-type: none"> • Economic entities, farmers and cooperatives engaged in fish farming based on river, lake, water reservoir, pond resources; • Processing plants, workshops, transporters, stock keepers and salesman which cooperate with fish farms; • Fish specialists, trainees and institutions which promote knowledge on fishery. 			
Implementing agencies	• MOFALL initiates this project and develops in cooperation with Ministry of Nature, Environment & Tourism and State Central Administration organization in charge of ocean issues.			
Expected outputs	<ul style="list-style-type: none"> • Reliable information on fishing in domestic lakes will be made available; • Initiatives to develop fisheries in natural and man-made lakes and ponds undertake; • 25 percent of annual fish consumption would be met by domestic production; • Fishing in international waters and consumption of sea fish would be made available. 			
Budget US\$ million	Government	0.18	2008-2012:	0.72
	Donors and NGOs	0.24		
	Private sector/civil society	0.69	2013-2016:	0.48
	Total	1.20		

Title	2.5 Crop diversification		
Starting date	2009		
Duration	8 years to 2016		
Justification	<ul style="list-style-type: none"> • About 50 percent of overall rotation field have been processed through semi fallow, which reduces rotation field utilization rate and degrades the soil fertility. • Although a number of projects have been developed to establish intensified livestock production in peri-urban areas of the cities, the issue of fodder supply has not been duly attended. • Based on the need to redevelop cultivation of some crops such as rye, millet, soya bean, for which the country is net importer, it is intended to put into circulation virgin lands to run production of new crop varieties and reduce the import of these. This is the rationale for development of this sub project. 		
Objective	<ul style="list-style-type: none"> • Improve crop field utilization; • Protect soil fertility from wind caused erosion; • Produce some part of food and fodder plants domestically to reduce the import; • Make stable the income of crop produce ; • Support to intensified livestock development. 		
Strategy	<ul style="list-style-type: none"> • Survey to explore potentially suitable cropping field undertaken, results made available to broad public, and the economic entities which put the new land into rotation receive the same support as secured under "Virgin Land III" program; • Undertake selection of the projects developed by economic entities and residents to plant fodder and new varieties of food crops and involve them in foreign projects and programs and provide with concessional loans; • Provide incentives and promotions to crop producers engaged in secondary crop and vegetable oil processing to ensure market availability for the crop producers; • Promote crop producers who introduced non- irrigated crop production technology with more than three 3-alternatives to enhance implementation of this sub component. 		
Main Beneficiaries	<ul style="list-style-type: none"> • The end beneficiaries of this project are crop producers, who managed to improve crop field utilization, protect soil fertility from wind caused erosion, the overall consumers of millet, rye, fodder, vegetable oil and technical plants, intensified livestock producers, processing industry (<i>rye bread, millet and vegetable oil producers</i>). 		
Implementing agencies	<ul style="list-style-type: none"> • MOFALI develops the present project and implements it with the participation of economic entities engaged in cropping and based on residents' initiative and participation. 		
Expected outputs	<ul style="list-style-type: none"> • At least 30 percent of demand for millet, vegetable oil, silage and other annual fodder crops are supplied through domestic production; • Conditions to run intensified livestock production (meat and milk cattle, sheep, pig and poultry farming) due to increase of fodder production have been set up. 		
Budget US\$ million.	Government	2.84	2008-2012: 9.0
	Donors and NGOs	1.9	
	Private sector/civil society	10.26	2013-2016: 6.0
	Total	15.0	

Title	2.6 Irrigated crop production			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> • As of present, 98 percent of the overall wheat harvest is harvested from non irrigated field. • However, the persisting climate change exposes increasing risk for crop production in the result of which the harvest amount has been decreasing in years in a row leading to flour shortage. • The majority of irrigation systems established under previous regime were left ownerless at the start of the privatization process, making them incapable to pay for operational cost due to which they aborted their activity; the equipment was pilfered and come into unusable condition. • Taking into account the present climatic conditions, it is required to support each initiative to establish irrigation systems using the waters of local rivers and springs to enable harvesting at least 30 percent of the wheat from irrigated crop field, otherwise the country would face shortage not only of wheat and flour but even the seeds and be forced to import at soaring prices. 			
Objective	<ul style="list-style-type: none"> • Supply regularly with crop produce the domestic market and sustain the economy; • Increase and make stable the income of crop producers; • Promote investors to crop production; • Ensure through Government coordination rational utilization of fields which have potential to irrigation. 			
Strategy	<ul style="list-style-type: none"> • At the order of crop producers the professional organization develops design and drawing of the system, MOFALI and MOF call for bids to rehabilitate or construct the system and the Government support through partial financing of proposed investment provided. 			
Main Beneficiaries	<ul style="list-style-type: none"> • The crop producers engaged in irrigated crop production, plant origin food processing plants, designers of irrigation system, construction workers who construct the system. 			
Implementing agencies	<ul style="list-style-type: none"> • MOFALI to call for bids and implements with participation and support of the Ministry of Finance. 			
Expected outputs	<ul style="list-style-type: none"> • By 2015, 10.000 ha irrigated area have irrigation system installed with water reservoir, construction and rehabilitation and introduction of irrigation systems at area of 25.000 ha which use the waters of rivers, lakes, ponds and underground water will have undertaken. 			
Budget US\$ million.	Government	90.9	2008-2012:	112.488
	Donors and NGOs	15.08		
	Private sector/civil society	81.5	2013-2016:	74.992
	Total	187.48		

Title	2.7 Renovation of crop equipment			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> • The present number and capacity of machinery used in cropping is hardly sufficient to plant and harvest crops on area of 100 thousand ha. • Besides, the machinery is obsolete, about 90 percent of the machinery were produced before 1990s, the production of the spare parts had long ago aborted in the producer country. • The renovation of cropping machinery to ensure production of crops to fully meet the domestic demand is a key to implement the program objectives. • The implementation of the present sub program is a crucial part of comprehensive policy to rebuild the cropping sector. • As "Virgin Land-III" program adopted by the Government in 2008 does not cover cost related to renovation of crop machinery, the project team had to additionally include these costs. • Consequently, the present cost estimation aggregates cost of renovation of machinery required under "Virgin Land-III" program and further costs required for renovation after the implementation of "Virgin land" program. 			
Objective	<ul style="list-style-type: none"> • The crop machinery will have been completely renovated, tractors, combine machines and associated agricultural attachments such as trailers, reapers etc will have been procured to ensure introduction of new crop lands of 112 thousand ha by 2011 and 391.4 thousand ha by 2016 to set up enabling environment to rebuild the crop sector and meet the objectives of the program. 			
Strategy	<ul style="list-style-type: none"> • MOFALI to change the present procurement practice applied for procurement of machinery and equipment, so that the economic entities dealing with import and leasing service will have procured machinery based on request of the crop producers; • The Government will either pay 40 percent of the price to leasing companies for the machinery or pay the interest rate to leasing companies so that the crop producers enjoy interest free leasing. 			
Main Beneficiaries	<ul style="list-style-type: none"> • Economic entities and residents engaged in crop production, as well as economic entities engaged in leasing service to agriculture. 			
Implementing agencies	<ul style="list-style-type: none"> • MOFALI calls for bids to select economic entity to supply with new machinery based on the request of economic entities and residents. 			
Expected outputs	<ul style="list-style-type: none"> • The funding of US\$ 125.6 million for procurement of machinery and equipment required under "Virgin Land-III" program approved by the Government will have been resolved and the procurement taken place by 2010; • Allocation in the Government budget of US\$ 53.1 required annually after 2011 for procurement of additional machinery will have taken place; • In the result of this actions machinery to process 730 thousand ha of rotation field would be made available to ensure stabile harvest. A total of over 860 high capacity tractors, the same amount of harvesting combine machines and other agricultural attachments will have been procured. 			
Budget US\$ million.	Government	89.41	2009-2012:	107.292
	Donors and NGOs	11.62		
	Private sector/civil society	77.79	2013-2016:	71.528
	Total	178.82		

Title	2.8 Fertilizer		
Starting date	2009		
Duration	8 years to 2016		
Justification	<ul style="list-style-type: none"> • Mongolia has no local production of minerals and fertilizer. Before 1990, the Government imported 44.0 thousand of mineral fertilizer in agent equivalent, and supplied crop producers through investment. • Due to transition to market economy this service had been aborted, the crop producers terminated application of fertilizer as they could hardly cope with fuel bills. • Vegetable growers do use a small amount of bacterial fertilizer and animal manure in potato and vegetable production; however, in crop production no fertilizer is used at all. • This situation impedes harvesting of higher harvest; especially in regard of irrigated crop production as without application of fertilizer it has low productivity. • Further on it is required to use in proper dosage minerals and fertilizers to protect soil fertility and collect good harvest. • In view of low financial capability to pay for imported fertilizer it is envisioned to establish domestic production of fertilizer based on local raw materials, and provide support to fertilizer importers 		
Objective	<ul style="list-style-type: none"> • The Government arrange for import of fertilizer based on the request of local crop producers until the local production starts; • Support to economic entity engaged in production of minerals, fertilizer and bio fertilizer; • Promote the economic entities which apply bio fertilizer, and introduce certification on ecologically clean status and provide price incentives; • Produce locally 20-30 percent of the required fertilizer 		
Strategy	<ul style="list-style-type: none"> • Call for bidding to select economic entity which will import fertilizer based on crop producers order; • Call for bidding to select a project developed by economic entities to establish fertilizer production of large capacity and provide financial preference. 		
Main Beneficiaries	<ul style="list-style-type: none"> • Importers of fertilizer; • Producers of fertilizer; • Crop producer who applies fertilizer. 		
Implementing agencies	• MOFALI initiates the project and implements with participation of crop producers, importers and producers of fertilizer.		
Expected outputs	<ul style="list-style-type: none"> • Ensure import of 10.000 thousand tons of fertilizer annually till 2010 through Government support delivered to importers; • Support to establishment of fertilizer plants with annual capacity of 15.000-20.000 thousand tons after 2010. 		
Budget US\$ million.	Government	1.50	2009-2012: 2.25
	Donors and NGOs	1.75	
	Private sector/civil society	3.10	2013-2016: 1.50
	Total	3.75	

Title	2.9 Plant protection		
Starting date	2009		
Duration	8 years to 2016		
Justification	<ul style="list-style-type: none"> • With transition to market economy the Government support to crop production has been aborted. • In connection with this plant protection activities were suspended which lead to reduction of potato and vegetables harvest. • Although non application of chemicals is good for hygiene reasons, the dry and hot weather in the recent years resulted in poor vegetation growth which made harmful insects and pest to move across the country causing huge damage. • In view of this it is required to support import and domestic production of biological and chemical origin fertilizers which are accepted internationally. 		
Objective	<ul style="list-style-type: none"> • Reduce harvest losses associated with weed, insects and pests and diseases; • Introduce production of internationally accepted plant protection substances and initiate application of them. 		
Strategy	<ul style="list-style-type: none"> • MOFALI jointly with Ministry of Nature, Environment & Tourism under inspection of the professional organization call for bids to select economic entity to initiate domestic production of biological and chemical plant protection substances, which have no negative impact on environment and comply with food hygiene and provide support through access to preferential loan; • MOFALI calls for bids to select importer economic entities to supply pesticides based on the crop producers order at no discount prices but at harvest loan until the domestic production starts. 		
Main Beneficiaries	<ul style="list-style-type: none"> • Domestic producers of pesticides, • Importer economic entity and residents, • Crop producers. 		
Implementing agencies	<ul style="list-style-type: none"> • MOFALI and MNET jointly develop and implement this project based on request of crop and fertilizer producers and importers. 		
Expected outputs	<ul style="list-style-type: none"> • Application and import of seed disinfection reagent (fungicides), weed protection herbicides, and environmentally friendly substances to combat disease and insect will increase three fold vs. 2007; • Establishment of production with capacity of 1-5 thousand tons of biological and chemical origin pesticides undertaken; • The harvest of crops to increase by 15-20 percent. 		
Budget US\$ million	Government	1.0	2009-2012: 2.58
	Donors and NGOs	0.5	
	Private sector/civil society	2.8	2013-2016: 1.72
	Total	4.3	

Title	2.10 Vegetables and Potatoes			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> • Mongolia's domestic vegetable production provides 50% of its domestic need, especially due to successful implementation of the Green Revolution programme, which was started since 1997. Total area for vegetable production has been increased two times. However, there is still number of vegetable varieties are very few and yield per ha is not very high, reaching only 12.6 tons per ha in 2008. • But in rural areas, consumption of potato and vegetable production cannot reach even 10% in total nutrition basket, because of lack of access and chain services for constant and reliable vegetable supply and household level storage. • The main reason that affects to grow few vegetable varieties and low harvest yield are Mongolia's temperate climate, short vegetation period (95-110 days), very high cold temperature (up to -40C) in winter time and very dry hot summer (total precipitation during vegetation period is 270mm), reaching +40C . • Greenhouse, especially year round operational greenhouse development in Mongolia is weak (total winter greenhouse area is 4 ha). Since there is only one time harvesting season, the majority of vegetable products are required to be either processed or imported from China. 			
Objective	<ul style="list-style-type: none"> • To increase year around supply of fresh vegetable by establishing full time operational plastic and glass greenhouses around urban and settlement areas and provide with improved access to vegetable consumption among rural people by increasing vegetable processing and conservation enterprises. 			
Strategy	<ul style="list-style-type: none"> • To provide subsidized assistance such as greenhouse plastic and required equipments to small entities and citizens, who are involved in greenhouse vegetable; • To provide entities and citizens, who are engaged in winter greenhouse vegetable production with soft loan and involve them in donor funded projects and grant assistances; • To promote initiatives for domestic production of greenhouse plastic and equipments domestically through soft loan approaches. 			
Main Beneficiaries	<ul style="list-style-type: none"> • Household level farmers • Herders • Greenhouse vegetable growers, • Small and medium enterprise developers • Total population. 			
Implementing agencies	<ul style="list-style-type: none"> • MOFALI and local governing offices, NGO's, • Citizens and entities 			
Expected outputs	<ul style="list-style-type: none"> • To provide 100% domestic supply with domestically grown vegetable production • Increased amount of fresh vegetable consumption; • Increased employment; • Small and medium enterprise development /vegetable drying and conserving machineries, production of greenhouse coverage, plastic and equipment /. 			
Budget US\$ million	Government	2.5	2009-2012:	7.2
	Donors and NGOs	4.0		
	Private sector/civil society	5.5	2013-2016:	4.8
	Total	12.0		

III. Pillar/Priority Area 3: Food Safety

Title	3.1 Introduction of modern inspection system into food production and processing		
Starting date	2009		
Duration	8 years to 2016		
Justification	<ul style="list-style-type: none"> The majority of food plants have weak internal control, hygiene and sanitation discipline, which is one of the preconditions to food contamination during the production process. 		
Objective	<ul style="list-style-type: none"> The main objective of this component is introduction of Good Manufacturer Practices and Good Hygiene Practices into food production to reduce risk of food contamination and thus set up conditions to introduce threat analyses and Hazard Assessment Critical Control Points system. 		
Strategy	<ul style="list-style-type: none"> Improvement of inspection activities and internal inspection internal standard in each stage of production technology starting with raw materials and up to end produce to reduce three fold risks to compare to 2008; Establishment of unified inspection and surveillance system on food borne diseases prevalence took place; Prevention of food produce from physical, chemical (drug, chemical poisoning etc) bacteriological and mechanic contamination, regularization of inspection to reduce risks twofold vs. present situation. 		
Main Beneficiaries	<ul style="list-style-type: none"> Primary raw materials suppliers, local food producers and consumers 		
Implementing agencies	<ul style="list-style-type: none"> Food Department, MOFALI Primary agricultural raw materials producers Food-processing factory's NGOs. 		
Expected outputs	<ul style="list-style-type: none"> Up-grade producers responsibility, support to renovation of food production technique and equipment, introduction of new technologies, and conduction/organization of consistent training on Good Manufacturer's Practices and Good Hygiene Practices; Up-grade food production plants competitive capacities, improve internal quality inspection, and increase responsibility over food produce quality and safety. Introduction of below inspection system which is based on food production and service risks: Good Agricultural Practices (GAP) Good Manufacturers Practices (GMP) Good Hygiene Practices(GHP) Hazard Assessment Critical Control Point / HACCP 		
Budget US\$ million	Government	0,5	2009-2012: 1.8
	Donors and NGOs	1.0	
	Private sector/civil society	1.5	2013-2016: 1.2
	Total	3.0	

Title	3.2 Integrated of agricultural and processing factories			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> During the transition to market economy system, the former cooperation and regulation between agricultural and food processing plants have been lost, crop producers and herders were deprived of the Government support, and faced uncertain marketing of production, while industrial producers lacked high quality raw materials, and were forced to import or buy through middleman high price foreign raw materials which have negative impact to income of both producers and herders and crop producers. In case the both parties manage to reach agreement and establish joint economic entity the problems cited above would disappear, therefore the Government intends to support such initiatives. 			
Objective	<ul style="list-style-type: none"> Under the sub programme agricultural and food processing complex will be established, condition to cooperation between animal and plant origin food producers and processing industry, make joint investment will be set up, marketing and supply of raw materials will be sustained, middleman excluded, and conditions to produce relatively cheap produce would be set up. 			
Strategy	<ul style="list-style-type: none"> The basic strategy of the sub programme is establishment of joint economic complex based on agreement between herders, crop producers and processing industry and introduction of higher form of economic cooperation through financing upon final results. The Government provides support through concessional loan and tax policy to establish and reproduce such economic cooperation. 			
Main Beneficiaries	<ul style="list-style-type: none"> The beneficiaries of the sub programme are agricultural and processing complex, economic entities, residents dealing with meat, milk, potato, vegetables storage, transportation, distribution and sale as well as food technology science and training institutions. 			
Implementing agencies	<ul style="list-style-type: none"> To implement the present sub programme MOFALI will provide support jointly with foreign partners and cooperators. 			
Expected outputs	<ul style="list-style-type: none"> Demand for flour will be fully covered by domestic production, 60% of the meat and milk delivered to urban population will be processed industrial way; Establishment of model economic entities which combine agriculture and processing industry will take place; Supply system when "Wholesale center" in cities and settlement centers sell to retailers food produce that meets hygiene, sanitation and quality requirements will be established. Storage, transportation, distribution of agricultural raw materials and food produce will be improved reducing losses and costs; Export of pasture bred animal sorted, freezed and canned meat of Mongolian brand will have initiated; Export of pasture bred animal condensed and pasteurized milk and milk protein preparation will have initiated; Export food products made of potato and vegetable which grow on pristine Mongolian soil rich of minerals will have taken place. 			
Budget US\$ Million	Government	9.9	2009-2012:	114.0
	Donors and NGOs	27.6		
	Private sector/civil society	152.5	2013-2016:	76.0
	Total	190.0		

Title	3.3 Prevention of food produce from physical, chemical, biological and mechanic contamination and improvement of inspection			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> The main constraint of the food safety in Mongolia is food contamination threat which increases incidents of salmonella, hepatitis and brucellosis, it is required to conclude on deterioration of food quality and safety, identify contamination on each stage of production starting with raw materials preparation up to final product to ensure food safety and conduct risk assessment. It has been proven that animal disease treatment and preventive drugs, growth stimulating various drugs, preparations and hormones transform into human body through meat and milk causing cancer, allergy and other diseases, sometimes lead to distorted development of some organs, and addiction to drugs. In connection with this, in recent years, some countries prohibited or limited use of some antibiotics, such as chloramphenicol in animals used for consumption purposes. In addition, conduction of annual regular inspection on drug residuals in animal origin produce and ban on sale and import of products which were identified with residuals takes place. Food consumption of Mongolian population is characterized with high proportion of animal origin products consumption. In recent years, countries that import animal origin products i.e meat and sub products from Mongolia require certification of chemical residual free status or minor content which is not harmful to human body. Countries that import meat, intestine and meat products from Mongolia as well as countries that are willing to import like EU, Russia, Korea, Japan, PRC included additional veterinary and hygiene requirement i.e. laboratory certification on animal drug residual free status prior to import. As for Mongolia, having pasture livestock breeding and relatively low animal drug utilization, meat and sub products might be considered ecologically clean, however, due to transition to market economy and uncontrolled, chaotic import of animal drugs and consumption, selfwilled drug use by whoever who has livestock and affords payment, uncontrolled sale of animals and milk after drug use, there is no ground to say that we produce ecologically clean produce and deliver it to domestic and foreign markets. 			
Objective	<ul style="list-style-type: none"> Conduct food produce contamination risk assessment on scientific ground to affirm actual food quality and safety status; Introduce contamination risk assessment mechanism; Establish reference information fund on contamination; Develop contamination inspection standard ; Implement program and plan to inspect animal drug residuals. 			
Strategy	<ul style="list-style-type: none"> Develop and follow national and international standards based on techniques accepted the world over, collect and process information on food contamination and implement the program based on information on supplementary preparations, drug, chemical poison and other sources of food contaminants used in food; Strengthen capacity of inspection mechanism to identify and analyze food contamination level in accordance with international methodology that is applied generically; Take preventive actions through identification on scientific grounds of unacceptable amount of chemical preparation and bacterial contamination in food produce chain; Improve management and risk assessment of chemical poison contained in food produce (conduct study to identify contamination acceptable rate and contamination dosage), and develop and follow national standard, which complies with international one; Improvement of management to inspect various chemical preparations in food produce, contamination inspection, risk assessment to ensure provision with clean, safe food which responds to international indicators; Establishment of a system to prevent from contamination on different stages of food production technology from raw materials to end product, including storage, transportation and sale will be undertaken to ensure food health and safety status. In accordance with animal drug residuals program and plan inspection and certification will take place. 			
Main Beneficiaries	<ul style="list-style-type: none"> Primary raw materials suppliers, local food producers and consumers. 			
Implementing agencies	<ul style="list-style-type: none"> MOFALL will develop the inspection program and inspectors and professional researchers will implement this program based on Veterinary State Central Laboratory and State Agency for Specialized Inspection laboratory dates and indicators. /Scope of the program: primary producers of agricultural produce, domestic food plants, food importer domestic economic entities, food sale network shops, wholesale traders and cafeterias/. 			
Expected outputs	<ul style="list-style-type: none"> Improvement of perception and understanding on risk assessment of contamination threat will be attained, establishment of approaches and mechanism to compute contamination threat impact will be undertaken to provide healthy food to the population. A number of food borne disease incidents will have reduced. 			
Budget US\$ Million	Government	1.0	2009-2012:	1.2
	Donors and NGOs	0.7		
	Private sector/civil society	0.3	2013-2016:	0.8
	Total	2.0		

Title	3.4 Food reserve			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> The Government establishes Reserve Fund in specified goods, quantities and location in order to overcome natural disaster, drought, dzud, flood, industrial accident, animal and human infectious disease prevalence, economic recession, another words to overcome with minimal losses the times of hardship and impediments. To identify the location of Reserve Fund the population settlement, regional emand, consumption and demand peculiarities, strategic importance, climate factors are considered to comply with the most shortest and fastest delivery and supply to regions in need. At present the Government Food Reserve Fund is located in Ulaanbaatar, Khovd, Orkhon, Dornod aimags. Establishment of Reserve Fund, its administering is subject to "Law on Reserve Fund" and "Disaster Protection Law", "Law on the State Confidentiality", and other legal documents and regulations. According to "Food Law" food reserve comprises of carcas meat, dehydrated meat, canned meat, vegetable oil, flour, rice, sugar, granulated sugar, tea, milk powder, salt and ethyl alcohol. Identification of food amount to keep in Reserve Fund is based on NSO survey datas i.e. per adult equivalent monthly average consumption and normatives effective for harmful labour conditions. Assuming that the Fund is sufficient for 10 days of emergency to supply with basic food items the population, it is required to keep 2.600 tons of flour, 35.0 tons of pastry or pasta, 1.250 tons of various types of rice, 210 tons of sugar, 60.0 tons of milk powder, 30.0 tons of vegetable oil, 50.0 tons of various tea, 40.0 tons of salt, 1.200 tons of carcas meat, and 80.000 cans of canned meat. In addition, in view of possible lengthy economic recession, it is required to maintain a stock of durable food produce and main raw materials, as to 23.000 tons of wheat to produce 17.000 tons of flour. There is no freezer storage facility to keep reserve meat and meat products. The assignment to keep meat and meat products never been implemented. There is a need to establish quality control laboratory to inspect the food quality. 			
Objective	<ul style="list-style-type: none"> Revise daily food consumption normative during disaster times; Revise food produce variety, its volume required during disaster times i.e economic recession and unsustainable situation and locate rationally in the regions. 			
Strategy	<ul style="list-style-type: none"> Implement actions to allocate funds in annual budget and engage Reserve fund in foreign projects and programs and aid for the purposes to maintain necessary food and materials stock in quantities indicated in the law. Allocate funds for rehabilitation of old storage facility and construction of a new one; Set up laboratory capacity to check quality of incoming and outgoing as well as stocked goods on timely and fast manner; Implement actions to construct new cooling storage facility to stock meat and meat products. 			
Main Beneficiaries	<ul style="list-style-type: none"> All residents in disaster. Vulnerable people in times of economic recession and food supply deterioration. 			
Implementing agencies	<ul style="list-style-type: none"> Bag, soum, ditsrict, aimag, capital city administration. Emergency and food and agriculture organizations. NGOs, state and private juridical persons engaged in production of food produce and raw materails, broad public. 			
Expected outputs	<ul style="list-style-type: none"> Between 2009-2016 following outcomes are expected in establishment, storage, protection of Reserve Fund, including; Construct new food storage facility, locate and distribute state reserve in view of regional and strategic importance; Establish at least 10 days stock for staple food items such as meat, meat products, flour, pastry, various types of rice, sugar, milk powder, tea, salt and vegetable oil, as for wheat set up the compulsory reserve for one to one and a half month, and locate these stocks in Reserve Fund branches appropriately; Procure mobile laboratory to conduct timely and fast inspection of food and materials quality, to carry out spot check of incoming, outgoing and stored food products, thus ensure food safety. 			
Budget US\$' Million.	Government	17.13	2009-2012:	11.9
	Donors and NGOs	1.7		
	Private sector/civil society	0.5	2013-2016:	7.93
	Total	19.83		

Title	3.5 Prevention of food borne disease		
Starting date	2009		
Duration	8 years to 2016		
Justification	<ul style="list-style-type: none"> • Inavailability of unified registration system on food borne communicable disease, infection and food poisoning as well as factors that affect them (various chemicals containing microbes, bacterial poisoning, virus, micotoxins, marinetoxins, environmental pollution, prohibited food supplement, poisonous compounds, pesticidis, food raw materials, livestock, food production and trade, import and transportation environment) impedes prevention actions against infection and poisoning, estimation of economic impact. • The information related to this is kept in paper format in Infectious Disease National Center, State Agency for Specialized Inspection, Custom Office, Veterinary Institute and Health Agency, there is no feedback, no definite actions are taken on the level of implementing ministries and agencies, capital city, aimag, soum and district administrations. • In the stage of food preparation, processing, storage and sale hygiene and safety regime is not followed, leading to production of food with gastrointestinal bacteria, viruses, and supply with food contaminated with parasites to consumers. This is the main reason behind food borne poisoning and infectious disease incidence. • Surveillance of food borne communicable disease is becoming key issue of social health. Over 30 percent of infectious disease incidents such as communicable gastrointestinal disease, food poisoning, and infection are applicable to food contamination, non compliance with food higyene and sanitation requirement. Conduction of food borne disease surveillace survey is the first step to implement the program to reduce disease incidents. 		
Objective	<ul style="list-style-type: none"> • Establishment of mechanism to reduce food borne disease incidents, conduct study, register, control, provide with information, take preventive actions, reduce prevailance incidents, take immediate actions upon receipt of information. 		
Strategy	<ul style="list-style-type: none"> • Conduct baseline survey based on risk assessment on food borne communicable diseases; • Prepare and train staff able to conduct risk assessment on scientific grounds, get them experienced; • Conduct laboratory analyses in compliance with international standarts, identify the disease nidus, establish prevention and information exchange system; • Develop and follow generic regulation to conduct food borne communicable disease surveillace in 3-5 years of disease free period. 		
Main Beneficiaries	<ul style="list-style-type: none"> • Baseline survey on food borne communicable disease conducted, consumers awareness on preventive actions improved, which will have positive effect on the population health. 		
Implementing agencies	<ul style="list-style-type: none"> • Ministry of Health will develop the program and vacant food safety unit will assume responsibility over implementation. 		
Expected outputs	<ul style="list-style-type: none"> • Food borne disease incidents reduced, risk based evaluation made and a system to exchange information established; • Unified survey on disease prevailance undertaken, expansion of international cooperation took place, development of risk based food safety system undertaken and assessment mechanism set up; • Preventive capacity set up through establishment of capacity to conduct baseline studies on food borne disease prevailance in accordance with international standards and methodology and approaches and establishment of risk assessment and information exchange mechanism established. 		
Budget US\$ million	Government	0.8	2009-2012: 0.9
	Donors and NGOs	0.7	
	Private sector/civil society	-	2013-2016: 0.6
	Total	1.5	

Title	3.6 Set Up “Mongolian Brand Name “			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> • Mongolia has no domestic production of minerals and fertilizers, plant protection chemicals, animal origin fodder, growth stimulating hormones and has weak purchasing power to import these. • Chemicals that are applied in small quantities are all internationally accepted ones, with little affect to animals, plants, human health and environment. This allows saying that domestic production of animal and plant origin products is likely to be clean and ecological. • However, application of small quantities of animal drug, vaccines and plant protection chemicals is accompanied by technological violation, i.e. availability of FMD, Pox, Equine influenza and other communicable disease nidus, and regular break of technological regime in mining activities does not allow saying that domestic food is ecologically clean and safe. There is no evidence to prove or to reject such statements. • No standards on agricultural origin products safety (use of chemicals in compliance with international standards, no excess of allowable residual in food produce) and ecologically clean food (no use of chemicals and drugs at all) produce were approved and followed. • No system to certify food safety and ecologically clean status, price and tax differentiation has been established yet. • Break of hygiene and sanitation and quality control over each stage of food production technology, transportation, storage and sale is experienced and no significant production growth is observed. • There is no unified sales network for agricultural primary producers to sell their products, no differentiation between ecologically clean, safe, and other products takes place. This causes huge economic opportunity losses to those who produce ecologically clean food and raw materials. • Although on the world market ecologically clean food price is 5-10 times higher than the ordinary food, Mongolia exports its meat at the lowest price. • Based on above, it is required to develop safe, ecologically clean products classification and standard for Mongolian origin food produce and certify it and deliver to world market Mongolian brand name meat, milk, potato, vegetables and natural berries to increase herders and crop producers income and rise the competitive quality of these products at the domestic and world markets. 			
Objective	<ul style="list-style-type: none"> • Establish specialized markets depending on geographical location to sell potato, vegetables and pasture bred animal meat, milk and dairy products that were produced in clean and healthy soil; • “ Initiate export of Mongolian brand food; • Ensure quality, safety and hygiene status on every domestic and import food produce. 			
Strategy	<ul style="list-style-type: none"> • Register agricultural origin ecologically clean and safe food produce with Mongolian geographical coordinates, develop and follow quality and safety standard, register the intellectual property rights; • In compliance with geographical location and Regional Development Program increase volume of production produced in ecologically clean region and provide support to the production; • Certify meat, milk, dairy products, potato, vegetables and fruits produced in ecologically clean region and introduce unified “Warranty Food” food label; • Enter membership of international geographical coordinate network, register produce with Mongolian geographical coordinates, establish safe and clean new brand food produce and intensively develop marketing and advertising activities. 			
Main Beneficiaries	<ul style="list-style-type: none"> • Primary producers of agricultural and livestock raw materials, processing plants and consumers. 			
Implementing agencies	<ul style="list-style-type: none"> • MOFALI, Research institutes researchers and scientists and Local administration • Agricultural raw materials producing and processing plants. 			
Expected outputs	<ul style="list-style-type: none"> • Ecologically clean and safe food standards developed and followed; • Specialized market network to sell ecologically clean and safe food established; • Certification of food produce produced by economic entities and residents undertaken to initiate export to foreign markets; • Mongolian brand ecologically friendly meat, milk, potato and vegetables delivered to the world market and market segment identified; • A number of herders, crop producers, processing plants engaged in ecologically friendly production increased, they are registered in foreign countries to sell their produce through sales network. 			
Budget US\$ Million	Government	0.5	2009-2012:	1.08
	Donors and NGOs	0.3		
	Private sector/civil society	1.0	2013-2016:	0.72
	Total	1.8		

IV. Pillar/Priority Area 4: Nutrition

Title	4.1. Improve the nutrition education of the population			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> • The health sector alone assumes responsibility on awareness building and provision of knowledge on food and nutrition among the population, while participation of other sectors, NGOs and residents is very low. • Provision of knowledge on correct nutrition, selection and consumption of food starting from kindergarten and school age is not sufficient. • The present content of training on food nutrition is sometimes contradictory, the methodology does not respond to requirement, non communicable disease risk factors, and communicable disease does not reduce having negative impact on human health and the country's economy. 			
Objective	<ul style="list-style-type: none"> • To improve the nutrition training program and methodology; • Set up training environment and strengthen national capacity in nutrition; • To provide food nutrition education among the population. 			
Strategy	<ul style="list-style-type: none"> • Identify need and demand for food nutrition education among the population of all ages based on age and sex peculiarities, develop training modules and program, standardization and adhere to; • Prepare staff to conduct training according to approved program and modules; • Establish training rooms for adequate nutrition based on meal workshop, kindergarten and school kitchen in settlement centers, engage economic entities and residents into their activities promote and support their initiatives and inputs; • In support of rational nutrition organize movement, competition among students, child organizations on the all administration (soum, district, sub district, bag, kheseg) and household level; • Provide support to healthy and adequate nutrition practices. 			
Main Beneficiaries	<ul style="list-style-type: none"> • Overall population. • Parents, child care sitters. • Health workers, academic and research workers. • Food producers and importers, students in all level schools. 			
Implementing agencies	<ul style="list-style-type: none"> • Ministry of Health, Nutrition Research Center of the Public Health Institute, Ministry of Education, Culture and Science, Mongolian Radio and Television Agency and Relevant state organizations. 			
Expected outputs	<ul style="list-style-type: none"> • Centers in settlement centers to provide methodological advice and conduct training on regular basis opened; • National trainees, volunteers, advisor mother, evaluators on food and nutrition prepared; • Lessons on food nutrition are detailed and included into curricula in all schools; • Awareness and knowledge of the population on breast feeding importance improved, indicator on exclusive breast feeding up to 6 months and proceeding up to 2 years increased by 20%. 			
Budget US\$ Million	Government	7.0	2008-2012:	7.56
	Donors and NGOs	5.3		
	Private sector/civil society	0.3	2013-2016:	5.04
	Total	12.6		

Title	4.2. Strengthening the capacity of nutrition scientific research work and Information system			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> • In the last ten years, a number of new technologies were introduced in food production, unprecedented huge variety of new food items are delivered to the market, and diversification of food produce is unexampled, despite this, no laboratory capacity is set up to identify in complexity calorific and nutrition value of the food produce. • There is no unified information and inspection system on food consumption, latest survey data's and reports on population food nutrition disaggregated by season, geographic location peculiarities are very poor. • Annual sample survey conducted by NSO on "Household income and expenditure" does not fully provide with information and data's related to food consumption of the population. • Research, training and statistical institutions use different types of evaluation approaches to assess food consumption, access, preparedness, calorific and nutrition value, which makes production of realistic evaluation and conclusion unlikely. • Development of defined rates and methodology to compute livestock productivity, losses during food transportation and storage, net and gross weight, and calorie and weight rates to transform food produce into basic raw material will take place and establishment of information unified network and fund is envisioned. • There is relates to lack of funding from the Government budget, as the Government does not allocate funds for research purposes, and weak research laboratory and human capacity. 			
Objective	<ul style="list-style-type: none"> • Improve food and nutrition survey analyses methodology and laboratory capacity; • Support to establishment of food consumption and human health related information and surveillance system; • Update and review of recommended dietary intake based on consideration of climate, geographical location, age and sex peculiarities and follow the recommendations; • Strengthens for food and nutrition research capacity at national level. 			
Strategy	<ul style="list-style-type: none"> • Development of detailed unified methodology and rates to compute livestock productivity, losses during food transportation and storage, net and gross weight, and calorie and weight rates to transform food produce into basic raw material will take place and establishment of information unified network and fund will take place; • Establish nutrition research reference laboratory; • Conduct study on food access, supply, preparedness, reserve, nutrition consumption and quality once in 3-5 years; • Establish unified information network on food production, import, export, household food production, consumption and health related risks; • Review and update recommended dietary intake and Food Based Dietary Guideline in view of basic metabolism of Mongolians, geographical location, season, urban and rural peculiarities, the population age and sex, physical activity and make revision once in 5-8 years. 			
Main Beneficiaries	<ul style="list-style-type: none"> • Research and training institute. • Employees of health and agricultural sector. • Inspection and information organizations. • Food producers and importers and the population. 			
Implementing agencies	<ul style="list-style-type: none"> • The Prime Minister office, Ministry of Finance, Ministry of Health, Nutrition Research Center of the Public Health Institute, Ministry of Education, Culture and Science, National Statistical offices, Monitoring and evaluation department and divisions in relevant ministries. 			
Expected outputs	<ul style="list-style-type: none"> • Study food and nutrition consumption carried out, assessment made, information exchange system improved; • Establishment of Food and Nutrition Research Institute undertaken, and the Institute provides unified methodology and management to relevant professional and research and training institutions; • Report of the national nutrition and food survey. • Development of recommended dietary intake for food produce and nutrition preparations undertaken; • Establishment of unified information network on food consumption and human health related risk factors undertaken. 			
Budget US\$ Million	Government	2.43	2008-2012:	3.9
	Donors and NGOs	2.75		
	Private sector/civil society	1.32	2013-2016:	2.6
	Total	6.5		

Title	4.3. Prevention of micronutrient deficiency			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> • Mortality likely hood among low weight babies is 20% higher than of the normal weighted ones and risk associated with wasting is three fold higher. • This is why Mongolia has higher rate of low weight, stunting among children up to 5 years, stunting, D vitamin deficiency, anaemia than in other Asian countries and the proportion does not show any decline. • In few provinces there is seasonal supplementary food sanatorium in operation. • Food access and nutrition quality of pregnant and lactating women is still insufficient. 			
Objective	<ul style="list-style-type: none"> • Establish mother and baby friendly environment; • Strengthen of infant and young children growth monitoring; • Implement complementary food program in support of breast feeding up to 6-24 months; • Establish food and curative workshops in local areas for provision of supplementary and curative food to infants. • Improve food consumption and nutrition quality of vulnerable groups. 			
Strategy	<ul style="list-style-type: none"> • Encourage and advertise exclusively breastfeeding up to 6 months, further breast milk combined with child complementary food up to two years old; • Provide to establish curative resorts in cities and settlements for children suffering from protein energy malnutrition, anaemia, vitamin D deficiency, and iron deficiency discords, and build up enterprises specialized in manufacturing health and child complementary foods based on improved involvements of residents and economic entities; • Improve nutrition quality and safety of food products supplied for "School Tea Break" program and include milk and dairy products into their rations not less than 60%; • Provide government supports to production of special-dietary uses foods made of buttermilk, fruits, berries, rye, barley, bran and offal rich with protein, vitamins and minerals for people in vulnerable groups subjected to nutrition deficiencies; • Identify demands of infant young children and pregnant and lactating women for vitamins and supplements preparations and take actions to select their suppliers and regularly supply the priority groups. 			
Main Beneficiaries	• Nutrition vulnerably group population, (<i>under 5 years old children, lactating and pregnant woman, and school age children, single elderly persons and disabled of vulnerable groups and poor families</i>).			
Implementing agencies	• Ministry of Health, Nutrition Research Center of the Public Health Institute, Ministry of Food, Agriculture and Light Industry, Ministry of Finance, Ministry of Social Welfare and Labor, Private sector, Donors and National Statistical Offices, Monitoring and evaluation department and divisions in relevant ministries.			
Expected outputs	<ul style="list-style-type: none"> • Mother and child friendly employment set up; • Development established and child growth and development monitoring national data base fund established; • Supplementary and curative food workshops opened in settlement centers for infants; • Hot meal service based on aimag and local welfare centers established for vulnerable groups, daily calorie intake and nutrition attained 80% of recommended daily intake; • Calorie and micro nutrition deficiency among vulnerable groups declined. 			
Budget US\$ Million	Government	2.65	2008-2012:	2.88
	Donors and NGOs	2.0		
	Private sector/civil society	0.15	2013-2016:	1.92
	Total	4.8		

Title	4.4. Increase of Production and Consumption Fortified Food with Minerals and Vitamins			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> • Elaborate and implement a policy on fortified food products and improve activities to monitor their production, consumption and outcomes and reporting. • Increase imports of micro elements used for food fortification and supply the internal markets with fortified foods and increase consumption of fortified foods by the population, based on introducing good practices. • Increase involvement of economic enterprises, research and non-government organizations in introducing technology of food products fortification with vitamins A, D and E and minerals. • Increase production of food products with regulatory effects. 			
Objective	<ul style="list-style-type: none"> • Fortify staple food items with iron, iodine, vitamin D; • Support to production and consumption of food produce which applies available local natural resources; • Identify list of special purpose food items and their demand (year/quarter, month/day basis) and set up conditions to produce them locally; • Support consumption of food produce fortified with vitamin A, D and C, calcium, selenium, copper, iron and zinc. 			
Strategy	<ul style="list-style-type: none"> • Participation of local Government, food producers, residents and economic entities in setting up conditions to store and keep a stock of available local food produce fortified with minerals and vitamins increases and all year around consumption ensured; • Attend to increase the production and consumption of food items for infant and young children, pregnant and lactating women such as food items made of animal insides that are rich in protein and iron, milk and dairy products that are rich in calcium and protein, buttermilk, sea-buckthorn rich with various vitamins, sweetbrier, bilberry, high acidity rye; • Investigate potential technology to produce staple food items fortified with iron, iodine and vitamin D, resolve jointly with assistance of the Government, economic entities and donors; • Identify supply sources of concentrates used to fortify food produce (iron, calcium and vitamin A and D) and resolve stocking jointly with the Government and donor's assistance; • This component will be implemented through establishment of monitoring and evaluation system to monitor food fortification, consumption of fortified food, control over outcome and provision of information. 			
Main Beneficiaries	<ul style="list-style-type: none"> • Overall population, particularly under 5 years old children, lactating and pregnant woman. • School age children • Single elderly persons and disabled of vulnerable groups and poor families. 			
Implementing agencies	<ul style="list-style-type: none"> • Prime Minister's office, Ministry of Food, Agriculture and Light Industry, Ministry of Health, Mongolian Food Association, Local Government and Food producers, Private sector, Donors and National Statistical Office, Monitoring and Evaluation Department and divisions in relevant Ministries. 			
Expected outputs	<ul style="list-style-type: none"> • Consumption of food fortified with vitamin A, D and C, calcium, selenium, copper, iron and zinc increased; • Technical requirement and standard on fortification of food produce with vitamin A, D and C, calcium, selenium, copper, iron and zinc developed; • Production and consumption of food fortified with vitamin A, D and C, calcium, selenium, copper, iron and zinc increased; • Protein, calorie, iron, vitamin D deficiency among vulnerable groups reduced two fold, and iodine deficiency eliminated completely. 			
Budget US\$ Million	Government	2.31	2008-2012:	2.94
	Donors and NGOs	1.8		
	Private sector/civil society	0.79	2013-2016:	1.96
	Total	4.9		

Title	4.5. Enhancing capacities for preventing from non-communicable diseases food related risk factors			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> • In Mongolia, since 1995, the number of mortalities because of diseases of the circulatory system and cancers is increasing every year. By the end of 2006, according to the official health statistics the five leading causes of death calculated per 10 000 population were circulatory system is 22.9%, cancers is 11.03%, injury and poisoning and other consequences of external causes is 10.95%, diseases of the digestive system is 5.67% and diseases of the respiratory system is 2.37%. • The National survey on "Prevalence of Non-communicable Disease of Risk Factors" conducted (n=3411) in 2005 revealed that 9/10 of the Mongolian population (90.6%) had common risks of non-communicable diseases and 1/5 (or 27% of the population) had more than three combined risks, especially 50% of men elder than 45 years had high risks to be subjected to non-communicable diseases (MOH, PHI, WHO, 2006) • 72.5% or the most of the surveyed population consumed less than 5 serving sizes of fruits and vegetables per day. • One in every five person is mainly used fatty meat with males higher by 1.5 times as compared to females and with 2.6 times higher use in rural areas as compared to urban areas. • The average salt intake was 10.0grams per day which exceeds WHO recommendation on salt intake; and 18.9% of the surveyed population reported using 8 – 10 grams of salt and 36.2% reported using 10 and more grams of salt a day. 			
Objective	<ul style="list-style-type: none"> • Improve the population knowledge, attitude and practice on prevention from non communicable disease risk factors; • Establish training centres to train the population on prevention and monitoring of non communicable risk factors, conduct awareness building activities; • Elaborate and implement the second phase of "Prevention from and monitoring of non communicable chronic diseases" program. 			
Strategy	<ul style="list-style-type: none"> • Increase participation of residents, Government and NGOs to introduce good nutrition practices and reduce consumption of animal origin fat, salt, sugar and increase consumption of fruits, vegetables, food items containing hydrocarbon to prevent form primary risk factors of non communicable diseases; • Intensify implementation of "Non communicable chronic disease surveillance, inspection and prevention" national program, develop two phase program and implement it; • Promote establishment of model kitchen network focused on healthy and rational nutrition, initiatives as to "Rational Nutrition Promotion Organization", "Rational Nutrition Promotion Family", and "Rational Nutrition Promotion School"; • With participation of the Government and NGOs, and donors worship active lifestyle, maintain appropriate body weight, deliver knowledge, attitude and good practices on rational nutrition among all segments of the population on regular basis, establish monitoring and information effective system. 			
Main Beneficiaries	<ul style="list-style-type: none"> • Adult population. • Non communicable disease risk group. • Doctors and medical workers. 			
Implementing agencies	<ul style="list-style-type: none"> • Ministry of Health, Public Health Institute, NGO's, Private sector and donor organizations. 			
Expected outputs	<ul style="list-style-type: none"> • Reducing non communicable food related risk factors • Second phase of "Prevention and monitoring of non communicable chronic diseases" national program. 			
Budget US\$ Million	Government	0.65	2008-2012:	0.72
	Donors and NGOs	0.45		
	Private sector/civil society	0.1	2013-2016:	0.48
	Total	1.2		

Title	4.6. Food Access Improvement			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> The poverty reduced in rural area from 43.4% down to 37%, while the urban poverty declined from 30.3% down to 27.0% respectively, however, to compare to other countries the proportion is still high. The poor households being incapable to pay for food affect food preparedness status; they consume 15% of the required daily food with assistance of their relatives, friends through credit and begging. 16.1% of the rural households have no meat stock, 37.9% have no milk and dairy products stock, 42.9% no rice stock, 76.4% no potato stock, 89.4% no vegetable stock, 45.6% no vegetable oil stock, 51.2% no fat stock and 96.7% no fruit stock at all. Food access and nutrition quality of pregnant and lactating women is insufficient. In addition, vulnerable groups and disabled single persons, elderly people, poor families still suffer from malnutrition. According to World Bank survey, east and north Africa, the majority of Middle East countries, Armenia, Azerbadjan, Georgia, Afganistan, Mongolia and Bangladesh are in a group which is sensitive to food prices increase i.e impact of price increase would be adverse to these economies, terms-of-trade loss equal to more than 1 percent of the GDP. The main reasons for that are: <ul style="list-style-type: none"> - Population average food supply and actual consumption is projected based on adult equivalent, therefore vulnerable group food consumption stays beyond average indicator; - A system and mechanism to make vulnerable group people to generate income sufficient to cover their food demand, and specifically supply with food disabled people through social welfare system has not been established yet; - The Government policy to protect vulnerable groups from soaring food prices is unclear yet. 			
Objective	<ul style="list-style-type: none"> Establish food chain for supply of vulnerable groups and make poor families to generate income to feed themselves, provide Government support to household based economic activity; Orient donation and aid of international organizations and foreign countries to ensure sustainable and even access and supply of food to vulnerable groups. 			
Strategy	<ul style="list-style-type: none"> Identify criteria to vulnerable group, register vulnerable groups simultaneously with the population registration; Provide with social card and food vouchure to vulnerable people; Develop criteria for shop network and cafeteria to serve with hot meal and food to vulnerable people, establish service system; Select shop within food shop network and cafeteria to serve vulnerable people and make it operational in aimag and capital city; Establish information database, supervision, monitoring and evaluation system on vulnerable people actual food consumption; Concentrate funds of the Government, local administration, NGOs, donors under unified management and disbursement, set up reporting mechanism on activities to support household based income generation such as livestock and crop production and all other types of income generating activities. 			
Main Beneficiaries	750.000-850.000 persons of vulnerable groups, including children up to age 5 with food nutrition deficiency, poor mothers, pregnant women, elderly, disabled and invalid persons.			
Implementing agencies	Food Policy Council, Labour and Social Welfare Ministry, Ministry of Health, Aimag and capital city administrations, Ministry of Food, Agriculture and Light Industry.			
Expected outputs	<ul style="list-style-type: none"> The Government support provided to household based economic activity will enable poor households to generate income to cover their food demand and increase family income, thus hunger and food nutrition deficiency would be eliminated; Implement MDG objective to halve hunger and food nutrition deficiency by 2015 vs. 2009, and eliminate completely by 2016. 			
Budget US\$ Million	Government	0.425	2008-2012:	0.351
	Donors and NGOs	0.16		
	Private sector/civil society		2013-2016:	0.234
	Total	0.585		

Title	4.7 Drinking water supplies			
Starting date	2009			
Duration	8 years to 2016			
Justification	<ul style="list-style-type: none"> • Within the objective to ensure drinking water supply, hygiene and safety, in the last five years, the underground water resources were identified in ten aimags eleven soums and settlements. The Government provided funding for procurement and installation of water softening and refreshing equipment in 110 soums where the water resources do not meet a standard for drinking water. • In the cities used 2,052 wells and settlements water supply, 44.8% are not corresponding to quality and composition requirement and 38.5% of the population in settlement centers use water that does not meet the quality standard requirement. • The rural population uses drinking water from the same well, stream and spring as their livestock. Only 32.4% of drinking water sources were installed with protection zone, however, unavailability of regular control and maintenance lead to pilfering and made the wells non operational. 			
Objective	<ul style="list-style-type: none"> • Ensure reliable and sustainable drinking water supply to urban and rural consumers that meets standard requirement. 			
Strategy	<ul style="list-style-type: none"> • Conduct survey on water source/spring location and water resource identification, make assessment on water quality and safety; • Establish water protection zone around water source to protect from water contaminants, take under protection; • Issue passport to wells and water reservoirs in centralized settlements; • Regularize inspection and analyses on water quality and safety as well as on residual chloride in water reservoirs in centralized settlements; • Improve drinking water access, quality and safety to the rural and urban population, as well as inspection, water transmitted communicable disease surveillance and information system. 			
Expected outcomes	<ul style="list-style-type: none"> • Reliable and sustainable supply with drinking water that meets the standard requirement to 60% of the population in cities and settlements, water sources taken under protection, quality assurance to at least 50% of the drinking water sources in the rural area provided. 			
Main Beneficiaries	<ul style="list-style-type: none"> • Infant and young children; • Vulnerable group, pregnant and lactating women; • low and medium income families; • Residents and the overall population. 			
Implementing agencies	<ul style="list-style-type: none"> • MOFALI to develop and implement in cooperation with bag, soum, district, aimag, capital city, regional settlement centers. • All level administration, agricultural and other NGOs. 			
Budget US\$ Million	Government	39.0	2009-2012	26.34
	Donors and NGOs	3.5		
	Private sector/civil society	3.96	2013-2016	17.56
	Total	43.9		

Budget Summary of National Program for Food Security

No	Title of sub-project	Total cost, US\$ million
Pillar/Priority Area 1: Enabling Environment		
1	1.1 Capacity Building: Vocational Training for the Food and Agriculture Sectors	13.1
2	1.2 Capacity building of food laboratories	14.0
3	1.3 Promotion of Food Research, Information and evaluation	8.5
4	1.4 Agricultural Investment Fund (newly suggested)	500,0
	Sub total	535.6
Pillar/Priority Area 2: Food Security		
5	2.1 Meat production	16.4
6	2.2 Milk production	40.1
7	2.3 Poultry production	1.96
8	2.4 Fish production	1.2
9	2.5 Crop diversification	15.0
10	2.6 Irrigated crop production	187.48
11	2.7 Renovation of crop equipment	178.82
12	2.8 Fertilizer	3.75
13	2.9 Plant protection	4.3
14	2.10 Vegetables and Potatoes	12.0
	Sub total	461.01
Pillar/Priority Area 3: Food Safety		
15	3.1 Introduction of modern inspection system into food production and processing	3.0
16	3.2 Integrated of agricultural and processing factories	190.0
17	3.3 Prevention of food produce from physical, chemical, biological and mechanic contamination and improvement of inspection	2.0
18	3.4 Food reserve	19.83
19	3.5 Prevention of food borne disease	1.50
20	3.6 Set Up "Mongolian Brand Name"	1.80
	Sub total	218.13
Pillar/Priority Area 4: Nutrition		
21	4.1. Improve the nutrition education of the population	12.6
22	4.2. Strengthening the capacity of nutrition scientific research work and Information system	6.5
23	4.3. Prevention of micronutrient deficiency	4.8
24	4.4. Increase of Production and Consumption Fortified Food with Minerals and Vitamins	4.9
25	4.5. Enhancing capacities for preventing from non-communicable diseases food related risk factors	1.2
26	4.6. Food Access Improvement	0.585
27	4.7 Drinking water supplies	43.9
	Sub total	74.485
Grand Total		1289.225

Note: If Agricultural Investment Fund is excluded, the Grand total will be 789.225 US\$ million