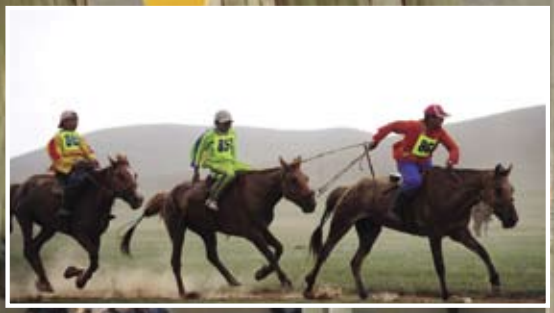
Government of Mongolia
Ministry of Food, Agriculture and Light Industry

NATIONAL FOOD SECURITY PROGRAMME

BRIEF for HIGH LEVEL DONORS' CONSULTATIVE MEETING
08-09 October 2009



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CURRENCY EQUIVALENTS

(UN Exchange rate : April 2009)
USD 1.00 = MNT 1,540

ABBREVIATIONS, ACRONYMS AND GLOSSARY

Aimag	Province
ADB	Asian Development bank
Bag	Sub-district
Dzud	snow storm
EU	European Union
FAO	Food and Agriculture Organisation of the UN
GAP	Good Agricultural Practice
GDP	Gross Domestic Product
GHP	Good Hygienic Practice
GMP	Good Manufacturing Practice
GOM	Government of Mongolia
GTZ	German Technical Cooperation
HACCP	Hazard Analysis Critical Control Point
IFI	International Financial Institution
KR2	(Japan) Kennedy Round Two
MDG	Millennium Development Goal
M&E	Monitoring and Evaluation
MNT	Mongolian Turgrugs
MoFALI	Ministry of Food, Agriculture and Light Industry
MFPA	Mongolia Food Producers' Association
NGO	Non-Government Organisation
NFSP	National Food Security Programme
SDC	Swiss Development Corporation
Soum	District
SPFS	Special Programme for Food Security
TCOS	(FAO) Food Security Service
UHT	Ultra High Temperature
UNDP	United Nations Development Programme
UNICEF	United Nations Children's' Education Fund
USDA	United States Department of Agriculture
WHO	World Health Organisation

Geographic Location of Mongolia

Source: FAO

Message from the Minister of Food, Agriculture and Light Industry

Volatile international food prices are a serious and immediate threat to Mongolia. As the country is land-locked and faces lack of some important food production at home, we depend on the import of many food staples to feed our people. All our rice, vegetable oil and sugar are imported along with about 50 percent of our wheat and flour.

While we are setting objectives to attain self-sufficiency in the food staples, which can be efficiently produced in Mongolia, excluding rice and sugar, we also care about and support the livelihoods of our poor and vulnerable people.

Food security is a key aspect of the Mongolian MDG targets, which were re-cast in 2007. While target 2 under MDG-1 aims to "halve, between 1990 and 2015, the number of people who suffer from mal-nutrition", the attainment of many of our other MDG targets depends too on achieving the MDG mal-nutrition target.

It is against this background that the Government of Mongolia resolved, as a priority, to upgrade food security with support from the FAO. Since 2008, a cross-sectoral national team has: (i) reviewed the achievements of the first national plan of action for food security, which ran from 2001 to 2007, and (ii) used the lessons learned to develop an improved National Food Security Programme (NFSP) for the period 2009 to 2016. This timeframe harmonises with our National Development Plan, our Agriculture Sector Development Strategy and our National MDG Targets.

The NFSP embraces commercial as well as household food security and is budgeted at USD 1,289.23 million over two phases: (i) 2009-2012 and (ii) 2013-2016. The budget includes USD 500 million for the supporting Agricultural Investment Fund. The NFSP comprises four priority areas or pillars covering: (i) the enabling environment; (ii) food security; (iii) food safety and (iv) nutrition. Crafted by stakeholders, the overarching aim is: ***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 and the public and private sectors.*** *The NFSP has 27 major components and the financing plan*

envisages a public-private sector partnership with investments from: (i) the private sector (43.3%); (ii) Government (34.7%); development partners (20.6%) and Local Government/NGO (1.4%).

The NFSP was endorsed in 2008 at a national validation workshop and provincial meetings by farmer to consumer food chain stakeholders. It was approved by Cabinet in February 2009 under Government Resolution 32/2009. Implementation will be coordinated by a high level Inter-ministerial Committee headed by the Minister of Food, Agriculture and Light Industry.

This brief is one of the key working documents prepared by the Mongolia-FAO team for the donors' consultative meeting for the NFSP to be held in Ulaanbaatar from 08-09 October 2009.

The Government of Mongolia is welcoming active participation and contribution from the public, private sector investors as well as international donor organizations to the successful implementation of the NFSP through direct investment, soft loans, aids and other assistance.

I look forward to meeting you in Ulaanbaatar!

T. Badamjunai
Minister
Food, Agriculture and Light Industry
Ulaanbaatar
May 2009

1. INTRODUCTION

1. Background

1. In Mongolia food security and food safety go hand in glove. One Mongolian term is used for the English terms "food supply", "food security" and "food safety". The National Food Security Programme (NFSP) for the period 2009 to 2016, is a multi-sectoral initiative prepared during the first half of 2008 in consultation with all Government of Mongolia (GOM) Ministries, agencies in central and local government, civil society and the international development community. Implementation of the NFSP will involve not only the Ministry of Food, Agriculture and Light Industry (MoFALI)[1] but also other agencies in central and local government, as well as non-government organisations (NGOs) and the private sector, coordinated through a new high level Inter-ministerial National Food Security Committee to be located in the Prime Minister's Office.
2. The NFSP (2009-2016) is harmonised with the recently articulated Agriculture Sector Development Strategy (2006-2015), published by MoFALI in 2007[2]. The NFSP also takes note of the following national plans, strategies and frameworks.

- National Plan of Action of Food Security, Food Safety and Nutrition: 2001-2010 (2001)
- Economic Growth Support and Poverty Reduction Strategy (2003)
- Government Action Plan: 2004-2008
- Medium-term Budgetary Framework: 2006-2008
- Comprehensive National Development Plan (2007)
- UN Development Assistance Framework: 2007-2011 (2007)
- In-depth review of *Food production, supply and security situation* made by the MoFALI Minister to the National Security Council in 2007
- Joint Government/UN Food Security Assessment Mission to Mongolia, FAO, UNICEF, UNDP (April 2007)
- National Millennium Development Goals (MDGs) and Targets (as revised by Government Decree on 31 December 2007)
- Millennium Development Goals based comprehensive National Development Strategy of Mongolia
- Food Security and Livelihoods in the Small Urban Centres of Mongolia.

1 In late 2008 the Government ministries and institutions were restructured, with the Ministry of Food and Agriculture becoming the Ministry of Food, Agriculture and Light Industry. In this brief the new title is used for the Ministry, even though most of the preparatory work was done under the erstwhile Ministry of Food and Agriculture.

2 Agriculture Sector Development Strategy: 2006-2015. MoFALI and Asian Development Bank, 2007.

Findings of the *Aimag* Centre Food Security Assessment. USDA, SDC and MercyCorps (March 2008).

3. The overarching aim of the NFSP (2009-2016) is to enhance national and household food security, food safety and nutrition, with special focus on the enabling environment (legislation, policy, consumer education, capacity building and needs-based vocational training, financing the essential investments, oversight etc). And to adapt priority interventions to the widely varying conditions and policy priorities in the country. The added value of the NFSP is that the previous National Plan of Action, which ran from 2001 to 2007, did not address priority food security issues within a coordinated and actionable investment framework. The NFSP is intended to provide a strategic programme framework with a set of prioritised actions, implementation modalities and indicative investment costs that will be funded by the government, private sector and donors/International Financial Institutions (IFIs).
4. This brief is prepared for the high level donors' consultative meeting scheduled to be held in Ulaanbaatar in October 2009.
5. In recognition of the importance of food security, the Government declared 2008, the year in which the NFSP was developed, as the *"year of food security and safety"*. The initiative was launched in Parliament by the President of Mongolia and the Minister of Food and Agriculture on 13 January 2008.

1.2. The NFSP Formulation Process

6. The preparation of the NFSP was carried out by an eight member, part-time, cross-sectoral national team[3] during 2008 under the SPFM/MON/8801 project: *"Formulation of a National Programme for Food Security in Mongolia*. The team was guided by the MoFALI Minister's Council and the Strategy, Policy and Planning Department and supported by a short-time FAO Adviser. The FAO project was prepared in January 2008, approved and signed in February and started on 01 March. The agreed timetable for the formulation process, including a rapid assessment of the first National Action Plan for Food Security (2001-2007) is indicated in the workplan in the project document.
7. During the NFSP preparation period FAO fielded a number of other technical missions as indicated below. The reports containing the

3 The team comprised: (i) Team Leader/Agriculture and natural resources management specialist: G. Davaadorj; (ii) Water management specialist: S. Chuluunkhuyag; (iii) Food safety specialist: Kh. Giimaa (Mrs); (iv) Animal production specialist: D. Buyankhishig; (v) Animal health specialist: Kh. Ganzorig; (vi) Household food security and nutrition specialist: B. Enkhtungalag (Mrs); (vii) Post-harvest management, agro-processing and marketing specialist: L. Damdinsuren; (viii) Rural financial specialist: D. Shombodon; (ix) Adviser: B. Dugdill: (i) 13 to 26 January 2008; (ii) 18 April to 19 May 2008; (iii) 20-30 April 2009.

respective mission findings and recommendations were not available to the team at the time of drafting the NFSP (mid-June 2008); though the joint WHO/FAO food safety mission and FAO meat mission shared their preliminary findings.

- Joint WHO/FAO Food Safety Assessment Mission: two member specialist international technical team (16 to 28 April 2008).
- FAO TCP project: *Improved Meat Hygiene and Commercial Meat Processing (TCP/MON/3105)*: inception mission: FAO Meat and Dairy Officer (06-15 May 2008)
- FAO TCP project: *Support to the Productive Water Sector (TCP/MON/3102)*: pre-investment mission by five-member specialist technical team (11-31 May, 2008).

8. As detailed in chapter 4, the NFSP is a programme with a Millennium Development (MDG) connected goal and four strategic pillars covering:
   (1) The enabling environment
   (2) Commercial and household food security
   (3) Food safety and public health
   (4) Nutrition
9. Each pillar contains a set of prioritised and costed components. The NFSP is a rolling programme targeting: (i) rehabilitating the crop and horticulture sectors, (ii) restructuring food safety and control, and (iii) lifting the nutritional condition of vulnerable people. It will be implemented over the period 2009 to 2016, the target date for achieving the national MDGs, and focuses on those issues that are a priority today, and over the medium term. Mongolia recently recast its own national MDG targets (box 1). Some NFSP tasks can only be specified after more detailed scoping work has been done. New activities and resourcing requirements will be identified over the years to come, resulting in periodic updating. The purpose and structure of the NFSP are outlined in this brief along with and a list of prioritised and focussed components for financing and implementation.
10. The basic proposals for the NFSP were reviewed on 08 May 2008 at a validation workshop held at MoFALI Headquarters in Ulaanbaatar. Eighty three public and private food and agriculture sector delegates attended, including producers and processors, consumers, Deputy *Aimag* Governors, NGOs, civil society at large and foreign development partners and donors. The proposed components of the NFSP were discussed and prioritised. Feedback from delegates was incorporated in the programme. This was submitted for consideration to the Minister of Food, Agriculture and Light Industry's Council on 19 May 2008. Again, feedback was incorporated into the draft.
11. Simultaneously, the draft NFSP document was circulated to all line

Ministries for review and comment. Feedback was incorporated into the draft.

12. On 03 June 2008 the President of Mongolia held an Open Forum in Parliament on *Burning Issues for Food Security and Safety in Mongolia*. One of the many issues raised was whether the draft NFSP should be submitted for approval to Cabinet or to Parliament. A cross-sectoral Working Group, chaired by the Minister of Food and Agriculture, and including members of the NPFS team was set up to harmonise activities relating to food security and safety.
13. A further meeting of the MoFALI Council on 13 June 2008 gave further guidance on the content of the NFSP and directed it should be submitted to Cabinet in the established format for Cabinet submissions. Unfortunately the revised NFSP could not be tabled before the elections, which were held on 29 June 2008.
14. The NFSP team also travelled to *aimag* centres during August and September for meetings with stakeholders during which the NFSP proposals were further refined.
15. The NFSP was approved by the Government on 04 February 2009 under Resolution 32/2009 (attached as annex 1).

1.3. Food Security Definition and Dimensions

16. The following UN/FAO World Food Summit (Rome 1996) definition of food security and its associated dimensions is generally accepted in Mongolia: *all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.* The main elements are:

(1) **Availability:** food supplies must be sufficiently adequate to feed the population. Food availability thus covers food production, productivity, post-harvest management, processing and marketing.

(2) **Access:** people must have physical, social and economic access to sufficient food. Where appropriate, access thus includes food safety nets for vulnerable groups in combination with income generating activities.

(3) **Utilisation:** food must be safe and nutritious. In addition, nutrition security is described as a situation where all people at all times have the ability to utilise biologically sufficient nutrients to live an active and healthy life.

(4) **Stability:** access and availability must be assured at all times. Food stability thus includes food stocks, disaster mitigation and management etc.

2. THE AGRICULTURE AND FOOD SECTORS

2.1. Geography and Climate

17. With a land area of 1.6 million square kilometres Mongolia is larger than the combined territories of France, Germany, Italy and the United Kingdom. Moving from the southern border with China to the northern border with the Siberian region of Russia, the country is broadly separated into: (i) desert, (ii) desert-steppe and (iii) steppe bands, each with mountain ranges, some rising to well over four thousand metres. Being landlocked and so far from the sea, the climate is extreme continental with temperatures ranging from as low as minus 45°C on the steppe in winter to plus 45°C in the Gobi desert in summer. The summer growing period is very short (100-120 days); the autumn-winter-spring period, when nothing grows, very long. Less than one per cent of the land is settled or down to crops, but some 73 percent is grasslands used for extensive livestock raising.
18. The population is just 2.7 million (2008), making Mongolia the third most sparsely populated country in the world. This is especially so for rural Mongolia where the population density is less that one person per square kilometre – many rural households and food producers are in great distances from markets. The country is rapidly urbanising and Ulaanbaatar, where almost half of the population now live, is the coldest capital city in the world; and almost 2,000 km from the nearest seaport at Tianjin in China.

2.2. Importance to the Economy

19. The livelihoods and wellbeing of the majority of the population still depend largely on agriculture, especially on livestock, though the mining and services sectors are growing rapidly. During the rapid transition from collective socialism to the market economy in the 1990s agriculture and the food industry, like other industries, virtually collapsed. Food insecurity and poverty worsened. The great winter *dzuds* of 1999, 2000 and 2001, when one third of the national herd of 34 million animals (cattle, yaks, camels, horses, sheep and goats) perished, exacerbated the worsening situation. Results from the most recent livestock census (December 2007) show numbers have recovered and surged to 43.2 million heads, indicating the vigour of traditional livestock raising and coping systems on the steppe. Dairy cattle and goat numbers increased the most reflecting the gathering pace in rebuilding the dairy sector and recent high cashmere prices.
20. Following transition to the market economy, crop production sector

also collapsed from virtual self-sufficiency to supplying just 25 percent of the domestic consumption of wheat, 47 percent of vegetables and 86 percent of potatoes prior to 2008. About 73 percent of the country's total land area of 156.4 million hectares was classified as agricultural in 2005. Of this, the total arable area is 700,000 ha of which only 32.3 percent (225,300 ha) was sown and only 25,000 ha (3.6 percent) of arable land is irrigated in 2005. The agricultural machinery was obsolete with 701 tractors, 486 combine harvesters and 1500 seeders, available to plant on only 170,000 ha.

In 2008, The Government of Mongolia launched implementation of the "Third Crop Campaign" national programme (Crop-III) to revive the crop production sector (2008-2010), setting objectives to attain self-sufficiency in wheat, potatoes and vegetables by domestic production, renovate agricultural machinery up to 80 percent of the machinery park and educate the new generation of national agricultural specialists and skilled technicians. The principle was set to maintain the ecological equilibrium through rehabilitation of the previoulsy utilized lands and implement the Crop-III through direct participation of the citizens and private sector business entities, improving the legal environment and increasing the tenure of land. Mongolia implemented crop campaigns in 1957 and 1976, as the result of which reached 100 percent self-sufficiency in wheat and total cultivated area of 1.2 million ha by end of 1980s.

The results of the first year of implementing Crop-III are promissing. A bumper harvest of 205,800 metric tons of wheat; 142,100 tons of potatoes; 80,600 tons of vegetables; 15,700 tons of fodder crops was collected in 2008. Compared to 2007, wheat production increased by 91,200 tons, potatoes by 28,500 tons, vegetables by 1,500 tons, thus meeting the annual domestic requirement in wheat by 50%, potatoes by 100%, vegetables by 49%.

In this year of 2009, 280,000 ha of land are cultivated with wheat, 12,500 ha with potatoes, 7,500 ha with vegetables, 10,000 ha with fodder crops. The expected harvest of 330,000 tons of wheat, 150,000 tons of potato, 102.000 tons of vegetables, 25,000 tons of forage crops, which has to satisfy the domestic consumption of wheat by 78 percent, potatoes by 100 percent, vegetables by 60.7 percent.

21. GDP doubled over the period from 2004 to 2006 and reached USD 1,075. Notwithstanding the successful diversification into mining, construction, trading and tourism, the agriculture and food sectors still dominate the economy accounting for 18.8 percent of GDP. Extensive livestock keeping makes up 84.3 percent of agricultural GDP. Agriculture accounted for 14 percent of export earnings and employs 40 percent of the labour force in 2008.

22. The Agriculture Sector Development Strategy mentioned above contains excellent background information on the role of the agriculture sector in the Mongolian economy, including: (i) agriculture's comparative advantage, (ii) current agricultural development policies, (iii) budget resources committed to agriculture (see box 3, para 30) and (iv) existing agricultural development initiatives. For more details the reader is referred to the strategy document.

2.3. Vulnerability and Poverty

23. The transition to the market economy was so rapid that considerable disruption was caused to both urban and rural livelihoods adding to persistent poverty. The proportion of people living under the poverty line in 1995 was 36.3 percent[4]. The level had actually gone up slightly to 36.5 percent by 2005, but fell to 32.2 percent in 2006. A further 20 percent of the population live just above the poverty line. Poverty is particularly persistent in rural areas where there are large numbers of households that exist around the poverty level. In Mongolia, food security (access to nutritious foods) is closely linked to poverty (inability to achieve an acceptable standard of living).
24. Rural poverty is also a result of privatisation of the national herd in the 1990s to all engaged in agricultural production. This created a large number of relatively small-scale and often subsistence herding households[5]. As a direct result, rural migration into urban centres accelerated, and urban poverty also increased. Today, there are approximately 250,000 rural households, comprising about 40 percent of the population; 171,000 are herding households.
25. The agriculture and food sectors remain vulnerable to extreme weather conditions as seen by the impact of the severe *dzuds* at the start of the century. These caused further declines in agricultural output. The economic shocks caused by increasingly frequent natural disasters have a direct effect on rural poverty and urban migration. Also, the marked trend of lower rainfall has a direct effect on agricultural productivity and competitiveness, notably in the crop sector (box 2, page 9).

2.4. First Re-building Initiatives – the 1990s

26. Towards the end of the 1990s the Government introduced a number of measures to remedy the worsening food security situation. These

4 Poverty in Mongolia is defined in terms of minimum living standards. The National Statistical Office determines the minimum levels by region. Households with an income of less than 40 percent of the minimum living standard and who are unable to provide for their basic food needs are defined as households in extreme poverty.

5 It is estimated that 82 percent of rural households raising livestock have herd sizes less than 200 head, the minimum number for subsistence.

included the "Green Revolution" (crops and vegetables) programme in 1998 and the "White Revolution" (milk) programme in 1999. Resource allocations for both programmes are reported to have been limited.

The Green Revolution was implemented from 1997 to 2004 with a program budget of USD 1.7 million and has been subsequently extended with second phase in 2005-2010. Annual allocations during the first phase have been of the order of MNT 70 million to MNT 180 million while the planned allocation for 2006 was MNT 120 million (the equivalent of USD 100,000). Its main initiatives included the distribution of mechanized equipment to private producers on a subsidized basis requiring 50% repayment over a three year period without interest. The program reported satisfactory repayments from beneficiary farmers in accordance with their agreed schedules.

It also provided free seed material and other production inputs as an incentive to grow produce that was more poverty related than to promote commercial production. The program has been evaluated as successful in that household incomes have risen by the target amounts and vegetable yields in particular have achieved the target levels. However, due to lack of resource allocations, reportedly there were difficulties to accomplish the programme objectives.

2.5. The New Millennium – Accelerating Development Interventions

27. In 1999 the UN was asked for assistance to address food insecurity. Accordingly, a National Plan of Action for Food Security, Food Safety and Nutrition for the period 2001 to 2010 was prepared with WHO (World Health Organisation) support, hereinafter called the first programme. The first programme was to be implemented in two phases: (i) 2001-2005 and (ii) 2006-2010, under an Inter-sectoral working group led by the Ministry of Food and Agriculture. The first programme contained 14 major objectives, 34 sub-programmes and 120 major activities, and had a budget of MNT 64.4 billion (USD 55 million). It was adopted for implementation under Government Resolution No. 242/2001. In 2006 the MoFALI Monitoring and Evaluation Department conducted an in-depth evaluation, concluding that very limited progress had been achieved.
28. Following the MoFALI evaluation, a joint GOM-UN (FAO/UNDP/UNICEF) Food Security Assessment Mission visited the country in August 2006. Its findings were published in early 2007[6]. At the national level the food security situation was reported to be satisfactory. Food prices were stable, with per capita consumption of basic staples (wheat,

6 Joint Government/UN Food Security Assessment Mission to Mongolia, FAO, UNICEF, UNDP (April 2007). The figures quoted in section 2.3 on under-nutrition ands poverty and taken from this report.

meat, milk and vegetables) increasing and intake rates for meat and milk especially high by regional standards. This encouraging situation masked some worrying underlying problems. According to the mission, food insecurity affected about 30 percent of the population (800,000 people). It was on the increase in the largest cities (Ulaanbaatar, Erdenet, Darkhan) due to migration and where Mongolia's strong traditional kinship networks are not as effective. The mission recommended that the first food security programme be reviewed and updated. Since the mission reported, food prices in Mongolia, and globally, have soared and become more volatile (see figure 1, para 40).

29. GOM accepted these recommendations and MoFALI signed a Memorandum of Understanding with FAO in August 2007 requesting assistance for updating the programme. Though the updating would be a nationally-led process, FAO agreed to provide financial support through a Technical Cooperation Project (TCP) and a part-time Adviser.
30. In the situation of soaring food prices of 2007-2008, MoFALI has implemented jointly with FAO a technical cooperation programme "Input supply to vulnerable populations under the soaring food prices" of USD 500,000 grant within the framework of the FAO Initiative on Soaring Food Prices (ISFP) launched in December 2007. By implementing this TCP project in 2008-2009, agricultural inputs as high quality certified potato and vegetable seeds are distributed to the vulnerable farmers in Mongolia. Final assessment on the implementation will be carried out after collection of harvest in September, 2009. Expansion of this initiative to mid-term and longer term activities with technical assistance from FAO may contribute to the successful realization of the "Green Revolution" national programme.

2.6. National Millennium Development Goals

31. The global MDGs were developed under UN leadership in 2001 and thus not included as indicators for the first programme. In 2007 the Government prepared its MDG-based Comprehensive National Development Strategy and approved by the Resolution #12 of Parliament in January 31, 2008. It also published revised national MDG targets[7]. These are summarised in box 1. The report indicates the country is on track to achieve its MDG and Word Food Summit targets of reducing the absolute numbers of undernourished and poor people from 800,000 to 400,000 by 2015. The achievement of many of the other MDG targets also depends to a large extent on achieving the MDG-1 poverty and hunger targets.

7 Targets revised by Government Decree on 31 December 2007

Box 1: Mongolia's Millennium Development Goal Targets (as set by GOM, December 2007)

Goal 1: Reduce Poverty and Hunger

Target 1: Halve, between 1990 and 2015, the proportion of people whose income is below the national poverty line

Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from mal-nutrition

Target 3: Develop and implement strategies for decent and productive work for youth. Create jobs for unemployed people, especially for youth by giving more opportunities for land use, simplifying the procedure of opening small and medium enterprises, giving more opportunities for unemployed citizens to get micro-credits.

Target 4: Reduce negative effects of population concentration and migration, to create legal environment to protect interests of migrant citizens, provide them with job places and establish system of their enrolment in medical, education, cultural and other social services.

Goal 4: Reduce child mortality

Target 7: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate.

Goal 5: Improve maternal health

Target 8: Provide access to all individuals of appropriate age to required reproductive services and reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.

Goal 7: Ensure environmental sustainability

Target 12: Integrate the principles of sustainable development into country policies and programmes, eliminate air pollution in urban areas, especially in Ulaanbaatar.

Target 13: Reduce the drop in water levels through protection of sources of rivers and streams.

Target 14: Halve by 2015, the proportion of people without sustainable access to safe drinking water.

Target 15: By 2015, have achieved significant improvements in the lives of slum dwellers.

3. RAPID ASSESSMENT OF THE FIRST NATIONAL PROGRAMME (2001-2007)

3.1. Findings

32. During March 2008 the National Project Team conducted a rapid assessment of the impact of first food security programme[8], which, by and large, corroborated the above-mentioned GOM-UN assessment mission findings.
33. The key findings were:

(1) **Food staples:** though national targets on staple food such as meat, milk and potatoes were largely met, rural people consume three times more meat and milk than urban dwellers who, in turn, consume twice as much potatoes, fruit and vegetables as the rural population. Processed milk and meat account 1.7%[9] and 7.8% of consumption respectively indicating the aim of boosting production of "safer" processed foods was not met. Domestic production produced only 50% of flour demand and 49 % of vegetables demand against respective targets of 50-60% and 60-70%.

(2) **Post-harvest food supply management:** many small and medium scale food enterprises were set up, but outdated technologies/equipment/distribution systems limited their bearing on the market. There was plenty of meat and milk available for processing, but limited working capital for processing raw materials from herders; collection of milk and animal from nomadic herders is costly. Many flour mills lack raw materials and operate well below capacity due to failure to revive domestic crop production. There is widespread mislabelling of foods, e.g. UHT milk made from imported milk powder sold as "fresh" milk. Significant quantities of food of unknown quality and origin are reportedly imported by unlicensed small traders.

(3) **Food stability:** the overall aim to sustain and balance food supplies was not met as cold season supplies of meat, milk, potatoes and vegetables were half that of the warm season and prices were 25-40% higher.

(4) **Food safety management and control:** the State Special Inspection Agency was established to unify food inspection and control, but responsibility for food and raw materials production, transportation, storage and sales remains under many different ministries and agencies. There are about 70 food laboratories and 700 food inspectors/quality

8 Rapid Assessment of National Plan of Action for Food Security, Food Safety and Nutrition: 2001-2007, Field Document 2, Formulation of a National Programme for Food Security in Mongolia Project SPFM/MON/8801, MoFALI and FAO, April 2008.

9 More informed sources put the figure at 6-8 % by 2007.

assurance staff. Food inspection focuses on end-products with limited attention to other parts of the food chain including primary production, transport, storage and marketing. In general food industries have no norms for food control or GHPs (Good Hygienic Practice). The food control system does not provide early warning about potentially serious food safety threats. The National CODEX team has been re-established and started to develop food standards according to FAO/WHO CODEX guidelines.

(5) **Nutrition:** targets were partially met, e.g. improvements were made in: (i) mothers breast-feeding, (ii) setting up the child growth and development information fund, (iii) fortifying milk and dairy products with vitamin C, (iv) strengthening M&E (table 1). Targets were not met for: (i) reducing vitamin D deficiency, (ii) improving the vulnerable group nutrition and food intake, (iii) developing and implementing a strategy to improve child nutrition, (iv) creating social awareness about the need for targeted and tailored food and nutrition support for vulnerable households and groups (table 2). The public-private sector partnership school meals launched by the Government in late 2006 and based on domestically produced and fortified foods, especially milk and dairy products, has the potential to significantly improve the diets of school children and boost domestic production and processing. Health and growth problems related to micro-nutrient deficiency are still a sizeable problem among certain vulnerable groups, especially children.

Table 1: Under-nutrition among vulnerable groups[a]

Year	2000 (actual)	2005 (actual)	2015 (target)[b]
Total under-nourishment	38.8 %	27.0 %	
Under-nourished children < 5	12.7 %	6.3 %	2.0 %
Growth deficiency children <5	25.0 %	21.0 %	13.0 %
Under-weight children <5	5.5 %	2.2 %	1.0 %
[a] Source: Second National MDG Implementation Report (GOM/UNDP, 2007)			
[b] Targets revised by Decree of Mongolian Parliament on 31 December, 2007			

Table 2: Micro-nutrient deficiency among children <5 in 2006[a]

	2006 (actual)
Vitamin D deficiency	41.0 %
Symptoms of rickets	20.8 %
Symptoms of anaemia	21.4 %
Symptoms of goitre (6-12 yrs)	13.8%
[a] Source: Second National MDG Implementation Report (GOM/UNDP, 2007)	

(6) **Finance and credit:** some supportive measures were introduced towards the end of the period: (i) pilot livestock insurance scheme, (ii) preferential import duties and VAT rebates for some of the domestically produced and imported food, (iii) relief on loan interest for wheat/flour imports. Growth along the entire food chain was held back by: (i) high cost of borrowing, (ii) short repayment periods and (iii) in particular, small-scale food producers and processors found loans and credit difficult to access.

(7) **Water:** rehabilitation of water resources for agriculture and for clean drinking and sanitation was, until recently, largely neglected. There are serious concerns about water quantity and quality in many rural and urban areas, especially in mining areas. 38.5 percent of the urban population have no access to safe water (box 2). Since 2004 GOM has embarked on an ambitious scheme to revive and expand irrigation and by 2007 had increased the total irrigated area from 5,000 ha to 25,000 ha.

(8) **Coordination:** the Inter-sectoral Committee responsible for managing implementation of the first programme comprised very busy officials who had little time to focus on implementation. There was no operational framework for assigning tasks and responsibilities to members and the agencies they represented. Many of the activities included in the programme were not implemented. The committee's task was further complicated because the programme was quite ***rigid*** and had many objectives (14), sub-programmes (34) and major activities (120).

(9) **Food statistics:** the rapid assessment of the first programme was based on Official Statistical Yearbook data, which are said to be disjointed and unreliable, e.g. they do not take household food production into account; there are discrepancies reported between aimag and central statistics. Overall, the team's findings have to be treated with caution because contradictory data makes meaningful assessment difficult.

(10) **Recommended daily food intake norms:** these were formulated in the 1980s when most families lived in rural areas; today more people lead more sedentary urban lives. Thus the norms specify over-consumption of some items (potatoes) and under-consumption of others (flour, fruit); lack of disaggregated consumption figures makes drawing real and accurate conclusions and, subsequently, demand forecasting, difficult.

Box 2: Water resources and utilisation[a]

Overview

- Water resources are very unevenly distributed in Mongolia
- Surface resources: lakes (83.7%), glaciers (10.5%), rivers (5.8%)
- Distribution: 85% is fresh water of which 93.6% in contained in Lake Huvsgul
- River flows: 50-70% (snow melt/glaciers/frozen rivers), 5-10% (rainfall)
- In the 21st century aggregate evaporation change is expected exceed precipitation growth by 6-10 times
- Underground water is fast being depleted, especially around urban centres
- In 2000 total water consumption was 500 million m3 – 1.5 times lower than in 1990
- Climate change and irresponsible use is adversely affecting water availability. As of 2003 there were:
  5,565 rivers and steams, of which 683 (13%) had dried up
  9,600 springs, of which 1,484 (15%) had dried up
  4,193 lakes and ponds, of which 760 (18%) had dried up

Agriculture

- Livestock used 80 million cubic metres (mm3) water in 2006
- From 2001- 2007, 1,085 new wells were constructed and 408 rehabilitated, providing water to 3.8 million ha pasture
- There were over 70, 000 registered irrigation schemes in 1993.
- Following privatisation most of the irrigation schemes were dismantled with the metal pipes and gate valves removed and sold to scrap metal merchants
- By 2001 the total area under irrigation had fallen to 5,000 ha; since 2004, MoFALI had increased this to 25,000 ha in 2007, i.e. 3.6% of the total area classified as arable land.
- Under the National Crop Rehabilitation Programme: 2008-2010 (Crop-II), GOM plans to increase the total irrigated area from 25,000 ha to 54,000 ha, to achieve self-reliance in wheat.

Industry

- In 2005 the mining industry and thermal power stations consumed 93.8 mm3 and 27.6 mm3 water respectively
- Many rivers are contaminated with mercury and arsenic due to unrestrained gold mining (see also section X).
- The food and animal products industries consume 18 mm3 water
- Nearly all bottled water is filtered tap water, not spring water as labelled, and does not meet current standards

People

- 30.8% have access to clean and safe mains water and sanitation
- 69.2% hand carry water from: distribution facilities (24.8%), wells (35.7%), springs/streams (9.1%)
- Usage: urban mains water = 230-250 litres per person per day hand carried water = 5-10 litres person per day
- Many water sources, especially in the Gobi aimags, have mineral and hardness levels above safe standards
- The Ulaanbaatar water supply is being depleted faster than it is replenished
- UB "treated" sewage water does not meet standards and contaminates the Tuul river
- Water (and food) borne diseases are a serious, nut manageable problem

[a] Source: Working Paper 5: Water Assessment Report. National Water Management Specialist, SPFM/MON/8801 project (March 2007)

3.2. Past and On-going Interventions

34. The Agriculture Development Strategy lists government programmes and donor funded activities during the period 2000 to 2006, roughly the same period as the first food security programme. As indicated

in table 3 below, some MNT 59.4 billion (US$ 51.0 million at the June 2008 exchange rate) was invested under six programmes from the government budget, with more than half allocated to animal health; just over one percent was allocated to the food programme.

Table 3: Agriculture Sector Investment Programmes from the Budget (2000-2006)

Programme	Investment	
	MNT (million)	USD (million)[a]
Animal Health	33,170.1	28.50
Livestock Management and Breeding	4,995.0	4.29
Water Resources	5,191.9	4.46
Cropping Initiatives	7,955.0	.6.83
Food Programme	775.0	0.67
General (coops, extension, State Reserve Fundb)	7,325.2	6.29
Total	59,412.2	51.04

[a] UN exchange rate MNT 1164.00 = USD 1.00 (June 2008)
[b] Emergency food stocks
Source: Agriculture Sector Development Strategy: 2006-2015 (MoFALI/ADB, 2007)

35. During the 2001 to 2006 period seventeen donor funded programmes and projects are listed with a total investment of MNT 130.62 billion (USD 112.2 million) and summarised in table 4).

Table 4: Donor Funded Initiatives in Agriculture (2000-2006)

Project	Donor	Cost
(USD million)a		
Agriculture Sector Development	ADB	19.14
Rural Poverty Reduction Programme	IFAD	19.20
Integration of Crop and Livestock Production	EU-TACIS	3.51
Sustainable Grasslands Management	Dutch/UNDP	3.03
Sustainable Livelihoods	World Bank	22.12
Conservation and Sustainable Management of Nat. Res.	GTZ	0.79
Green Gold Pasture Ecosystem Management	SDC	3.65
Rural Agribusiness Support Programme	USDA	8.00
Gobi Regional Economic Growth Initiative	USAID/MercyCorps	10.00
Rural Self Help Group Development	GTZ	5.20
Support to Veterinary privatisation	GTZ	4.03

Capacity Building in Agriculture	ADB	7.00
Development of Agricultural Services	EU-TACIS	2.42
Dairy Food Security	KR2-Japan/FAO	1.96
Agriculture Sector Strategy Study	ADB	0.35
Support for Food Safety	France	1.21
Cooperative Management	GTZ	0.60
Total		112.21

[a] UN exchange rate MNT 1164.00 = USD 1.00 (June 2008)
Source: Agriculture Sector Development Strategy: 2006-2015 (MoFALI/ADB, 2007)

36. Box 3 indicates the proposed investment under the Agricultural Sector Development Strategy period from 2006 to 2015, budgeted at MNT 508.7 billion (USD 508.4 million at the June 2008 exchange rate).

Box 3: Agriculture Sector Development Strategy (2006-2015) Investment Proposals

billion MNT

Livestock ***335.7 (57%)***

(1) Agricultural land utilisation and management
(2) Risk management Livestock disease monitoring and emergency outbreak response
(3) Strengthen links between Livestock producers and processors
(4) Improved quality of livestock (management and breeding)

Crop ***216.4 (38%)***

(1) Irrigation rehabilitation and construction
(2) Expansion of fodder and feed markets
(3) Commercialisation of horticulture
(4) Seed breeding and varietal development

Sector-wide initiatives ***37.6 (6%).***

(1) Agricultural support services
(2) Access to term credit
(3) Strengthening food quality and hygiene standards
(4) Structural adjustment in agriculture
(5) Research

Total proposed investments ***589.7***
USD 508.4 million [a]

[a] UN exchange rate MNT 1164.00 = USD 1.00 (June 2008)
Source: Agriculture Sector Development Strategy: 2006-2015 (MoFALI/ADB, 2007)

3.3. Lessons Learned

37. These findings were used by the National Project Team to draw out the key lessons for developing the updated NFSP for 2009 to 2016.

(1) **Legislation and policy:** the current food law failed to provide adequate clarity to regulators, industry and consumers.

(2) **Coordination and oversight:** too many organizations have over-lapping responsibilities for food security (access, safety and nutrition). Moreover the first programme had too many objectives, sub-programmes and activities for efficient implementation. Oversight and coordination was generally weak, resulting in unplanned programme implementation and a lack of accountability. The quality and reliability of food and agriculture data collection and analysis needs to be improved to facilitate monitoring and evaluation and demand forecasting.

(3) **Livestock:** while numbers have recovered spectacularly of late, the need now is to focus on raising productivity and off-take; and in, so-doing, reduce overall numbers for more sustainable steppe and pasture management.

(4) **Crops:** programmes to boost wheat production were, at best, ad hoc. The Crop-III programme introduced in 2008 plans a more integrated approach. However, it does not consider the introduction/re-introduction of other dual purpose food and animal feed grain crops that grow well under Mongolian conditions, e.g. millet (to partially substitute rice), oats, barley, rye etc.

(5) **Water:** the dwindling water resource is arguably the key factor for boosting food production, as well as for human use. A twin-track water investment approach is needed for providing: (i) access to clean drinking water and sanitary latrines for all urban and rural households (ii) water harvesting and irrigation systems that are economically viable and environmentally sustainable, i.e. responsive to the economic and environmental realities faced by new crop producers, large and small, and the growing number of household gardens.

(6) **Food processing:** diversifying food processing capacity, e.g. into vegetable canning, vegetable oil refining, potato-based processed foods, modern technologies, improved vocational skills, investment incentives are all needed to boost the sector. The high cost of borrowing (up to 36 percent annual interest and onerous collateral requirements) and unfavourable tax environment hampered development during the initial part of the programme and were major factors in limiting growth of smaller scale food production and processing enterprises. More needs to be done to improve access to credit under more favourable terms and to provide financial incentives to food producers and processors to increase production and productivity.

(7) **Food safety management and control:** interventions should now target:
   a. Food Standards: the national CODEX team should accelerate the review and updating process to bring in line with international standards
   b. Food production and processing: begin the step by step process to introduce: (i) GAPs (Good Agricultural Practices) at primary producer level, (ii) GMPs (Good Manufacturing Practices) at processing and distribution level, (iii) GHPs (Good Hygienic Practices) throughout the food chain, (iv) then to move on to introducing HACCP (Hazard Analysis Critical Control Point) safety management systems.
   c. Food inspection and certification: to focus on: (i) covering the entire farm (or first entry point for imports) to consumer food chain, not just finished products, (ii) rationalizing food inspection and certification systems, (iii) upgrading laboratories to cover primary food control and safely hazards along entire food chain, (iv) building human capacity and improve food control coordination and management.

(8) **Nutrition and public health:** intervention should now target:
   a. Recommended dietary intake norms: updating and tailoring these to the dietary requirements of the changing lifestyles of modern urban Mongolian people
   b. Improvements required: (i) to improve year-round availability of staple foods in rural areas, (ii) to improve awareness and knowledge about the importance of healthy diets for children and breast milk for infants until 6 months old, (iii) to deal with under-nutrition and micro-nutrient deficiency by further improving dietary intake of children and other vulnerable groups and (iv) reducing transmission of non-communicable food borne diseases.

(9) **Food stability:** there have been many improvements, but much more to do related to intensifying activities, including:
   a. Coping with the "hungry" period in rural areas in early spring
   b. Improving the ability of poorer urban families and other vulnerable groups to cope with higher food prices in early spring
   c. Considering more innovative food access schemes for vulnerable groups, e.g. social cards, vouchers, tailored to local situation.

(10) **Vocational skills:** though there is good training available for school leavers, e.g. at the Food Technology College in Ulaanbaatar, there is very limited vocational job-oriented training for food industry workers and managers.

(11) **Funding for the first programme:** while the general consensus in Government is that one of the main reasons for poor performance

was insufficient funding. Analysis of expenditures by GOM and development partners/donors indicates funding seems to have been substantially higher than the original budget of USD 51.0 million. With GOM contributing USD 51.0 million and donors USD 112.2 million, a total of USD 163.2 million was available (tables 3 and 4). Even allowing for inflation, this was more than double the original cost estimate. It thus appears that funding was more than adequate but, perhaps, not well-targeted, especially by the donors.

3.4. Current Situation

38. In 2007 it was estimated that 1.13 million tons of food was consumed in Mongolia, which was by 25 percent short, compared to the recommended daily intake of 1.50 million tonnes. Domestic production contributed to about 75 percent of the consumption.
39. Food production had started to accelerate by 2006-2007, i.e. towards the end of the first programme period. Self-reliance in the major staples, along with targets and outcomes, is indicated in table 5. These figures would need to be adjusted upwards by about a quarter to meet the current daily recommended food intake norms.

Table 5: Self-reliance in Selected Food Staples

Food	Self-reliance (%)[a]			
	2001	2006-2007		2015
	Actual	Target	Outcome	Target[b]
Meat		100.0	98.3	100.0
Milk		100.0	95.2	100.0
Potatoes		55.0	74.3	100.0
Vegetables		65.0	45.3	100.0
Wheat/flour		55.0	36.4	100.0
Eggs	no data	50	25	100
Vegetable oils	Zero	Zero	Zero	30.0
Sugar	Zero	Zero	Zero	Zero
Rice/millet	Zero	Zero	Zero	10.0
Fish	no data	Zero	No data	25.0%
Fruit	no data	Zero	No data	15.0%

[a] Measured in terms of domestic over total consumption
[b] Average over 5 years

3.4.1. Food Safety Threats

40. Further inherent weaknesses in the food supply situation triggered new threats to food security and food safety in 2007. The updated NFSP was formulated at a time when food security and safety issues are receiving unprecedented publicity. First, recent high profile food safety incidents related to water and vodka have raised public awareness and concern about food safety. In April 2007 Mongolia suffered its first recorded environmental emergency. An informal operation to process gold ore using mercury and sodium cyanide polluted the ground, air and drinking water in Khongor *soum* (town) in Darkhan Uul *aimag* (province), 200 km north of Ulaanbaatar, causing intoxication among the population and loss of livestock[10]. In January 2008, sales of all alcoholic drinks, including beer, were banned for one month following the death of 14 people and hospitalisation of many others after drinking contaminated vodka.

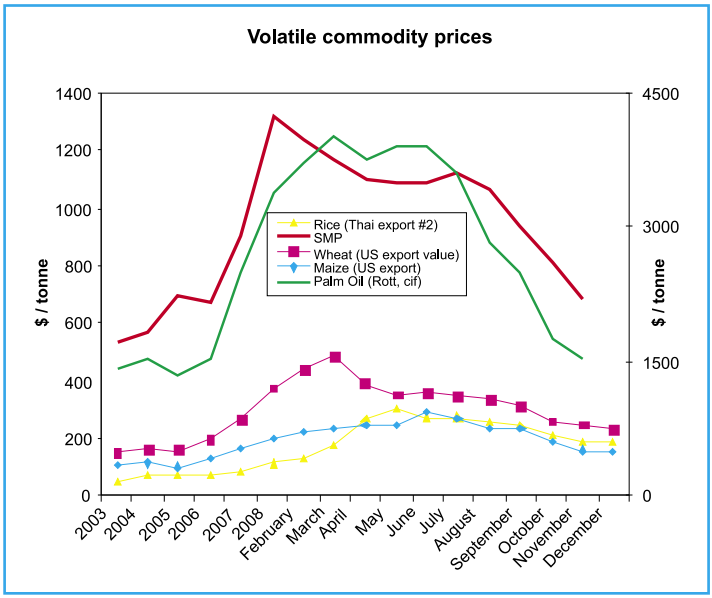
3.4.2. Soaring Food Prices

Second, in 2007 and 2008, soaring global prices for oil and the key staples that Mongolia imports, i.e. cereals, vegetable oil, rice and sugar, rapidly filtered through to consumers who had to pay double the price of a year ago, resulting in disturbances. In response to rapidly increasing food prices MoFALI initiated in early 2008 the National Crop Rehabilitation Programme: 2008-2010 (Crop-III), which aims to achieve self-sufficiency in wheat by 2010. In order to reach this target, the total irrigated area should be increased from 25,000 ha to 54,000 ha. More recently, to try to push down skyrocketing food prices, 3,000 mt of rice and 3,000 mt of sugar donated by the Government of India and equivalent to two three months supply, was distributed in July to vulnerable groups directly by MoFALI. As indicated in figure 1, prices started to drop back towards the end of 2008.

41. Because the nation is so dependent on imported foods, in May 2008 Mongolia applied to become a target country for FAO's recently launched Initiative on Soaring Food Prices.

10 Joint WHO/FAO Khongor Soum Water Contamination Mission (27 Feb.-05 March 2008)

Figure 1:



3.5. Conclusions and Opportunities

42. The first food security programme for from 2001 to 2007 was an ambitious endeavour to address weaknesses in the food supply chain to provide Mongolians with sufficient safe and nutritious food and to mitigate the risks posed by over-reliance on imported food staples. Today (2008) Mongolia is experiencing price escalation of food staples and serious food safety incidents.
43. The second NFSP is a unique opportunity to re-focus interventions on:
    - **food security** to improve food "self-reliance";
    - **food safety** to rationalize and make food management/control systems "fit for purpose";
    - **nutrition** to reach the MDG-1 target of halving hunger and under-nutrition by 2015.
44. The National Development Plan (2007) signals continued disengagement of the State as the primary means for securing continued development built on high mineral prices[11]. The "trickle

11 Since the NFSP was formulated, Mongolia's economic growth has slowed considerably to an estimated 2-3 percent in 2009 compared with 9 percent in 2008, mainly due to the global mineral price collapse. In March 2009 donors, including the Asian Development Bank, the World Bank and Japan pledged USD 160 million to bridge the budget gap forecast for 2009 and 2010.

down" effect is advanced as the primary means of poverty reduction. The updated NFSP promotes a more pro-active, pro-poor approach to further reduce poverty using a more targeted strategy in partnership with the private sector – as successfully piloted under Mongolia-Japan-FAO/UN Dairy Food Security Project completed in 2007. That said, the design of the second programme must factor in Mongolia's unique situation related to food security, in particular:

(1) traditional nomadic pastoral systems in rural areas;
(2) extreme vulnerability of herders and farmers;
(3) isolation of many rural households and communities;
(4) high concentration of urban population;
(5) unique food consumption patterns and seasonality;
(6) traditional food processing practices;
(7) neighbouring countries are significant food exporters;
(8) universal education and health services, extensive safety nets;
(9) strong cultural and community relations.

4. NATIONAL FOOD SECURITY PROGRAMME (2009-2016)

4.1. Rationale

45. The Mongolian Constitution (1992) safeguards the rights of citizens, including food and nutrition rights; current Food Law (1999) affirms Mongolia is committed to food security for all its citizens. The GOM decision to update and re-focus the food security programme to 2015 under Resolution 32/2009 recognises the role of agriculture in the national economy, the need to improve productivity and the importance of sustainable agriculture for food security, food safety and nutrition. The decision also recognises that:
    - Producing food under Mongolian climatic conditions poses serious challenges for the domestic food industry along the entire farm to consumer food chain.
    - Significant investments and donor assistance notwithstanding, food production and consumption remained, at best, stagnant under the first National Plan of Action for Food Security, Food Safety, Nutrition, which was implemented from 2001 to 2007
    - Under-nutrition and micro-nutrient deficiency still afflict a significant number of people, particularly during the "empty" spring period; children and the urban poor are especially vulnerable.
    - Year round availability of affordable food staples is uneven, with significant rural-urban disparities; the cost of the imports needed to meet the gap between food supply and demand is soaring.
    - Real food prices are volatile and, according to FAO, are likely to remain strong over the at least the next five to eight years, i.e. the timeframe for the updated NFSP (2009-2016).
    - Self-reliance in selected food staples that can be produced competitively in Mongolia must be aggressively pursued to keep food affordable for all people; self-reliance in the production these foods is enshrined in national policy.
    - Recent deadly food safety incidents have undermined the public's confidence in the food and drink produced in Mongolia, and the ability of the food control system to deal with such incidents.
    - Well-targeted public investments along the food chain, particularly in irrigation, have the potential to leverage significant private investments in food production, processing and marketing.
    - Well targeted investments also have the potential to position the agriculture and food processing sectors as instruments for reducing rural poverty reduction and sustaining the environment through

productivity enhancements and reduced animal numbers, i.e. to ensure that the food and agriculture sectors develop in a socially and environmentally responsible manner.

- However, many elements of the enabling environment for development of food self-reliance are lacking.
- This calls for a comprehensive and well-focused, actionable programme with immediate measures to accelerate competitive food production in the country; the programme will build on the experience and lessons of the first programme (2001-2007).
- The food security validation workshop of 08 May 2008, and the *aimag* centre meetings in August and September, reached a strong national consensus on the way forward, the strategic objectives to be attained and the main priority areas (pillars) to be addressed.

4.2. Goal

46. The over arching goal for the NFSP (2009-2016), crafted by stakeholder across the farm consumer food chain in 2008 and endorsed by Cabinet in February 2009 is: ***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 and the public and private sectors.***
47. This goal is consistent with the revised national MDG targets set by Mongolian Parliament Decree on 31 December, 2007, namely: *"Halve, between 1990 and 2015, the proportion of people who suffer from malnutrition"*

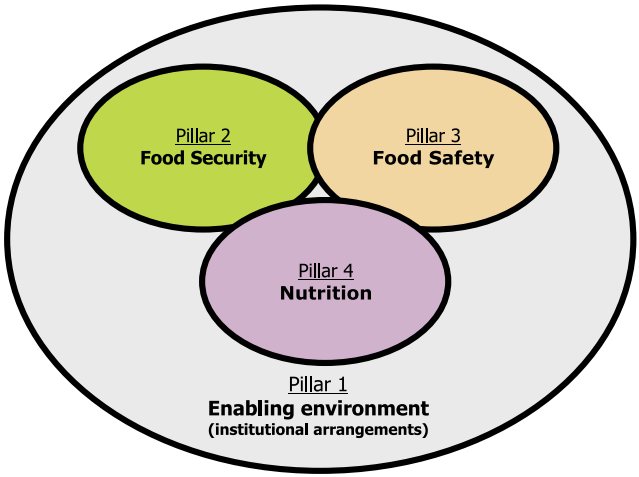
4.3. Strategic Objectives

48. The strategic objectives for the NFSP are:
    (1) **Enabling environment:** to promote institutions and policies that are critical to enhancing the productivity and competitiveness of the food and agriculture sectors, e.g. legislation, consumer education, capacity building and needs-based vocational training, financing the essential investments, oversight etc.
    (2) **Commercial and household food security:** to achieve self-reliance in those food staples that can be produced competitively and efficiently in the country, while caring for the poor and vulnerable.
    (3) **Food safety:** to rationalise the food management and safety system into a modern, pro-active structure that consumers can trust.
    (4) **Food nutrition:** with special focus on children and vulnerable groups, to achieve the national MDG nutrition target to "Halve, between 1990 and 2015, the proportion of people who suffer from mal-nutrition".

4.4. Priority Areas

49. The NFSP will address the challenges and objectives outlined above through strategic interventions under four mutually reinforcing priority areas or pillars as laid down by stakeholders (figure 2). Spanning the period 2009-2016 the programme will be practical, bankable and actionable at both national and local levels. The priority areas will be actioned through the implementation of the 27 components outlined below and summarised in table 6. The components are described in more detail in the annex attached to Government Resolution 32/2009.

Figure 2: The four pillars of the NFSP (2009-2016)



4.4.1. Pillar 1: Enhancing the Enabling Environment

50. The main focus of the priority area is to identify and promote policies and institutions that are critical to enhancing the bargaining power of food producers, other food chain operators and consumers, as well as providing safety nets for the poor and vulnerable. The pillar is tentatively budgeted at USD 535.6 million, which includes USD 500 million for the proposed Agricultural Investment Fund. The four priority components are:
    (1) **Capacity building - training:** strengthening needs-based, food chain vocational training for personnel involved in food security, food safety and nutrition for the food and agriculture sectors.
    (2) **Capacity building** - food policy and institutional framework: reforming to meet modern needs.

(3) **Promotion of food research, information and M&E:** enhancing food research and development, consumer awareness and education about food security, food safety and nutrition, especially for children and the vulnerable; upgrading the food data, statistics and analytical systems to improve forecasting and oversight.
(4) **Agricultural Investment Fund:** developing innovative financing and credit schemes for the essential investments.

4.4.2. Pillar 2: Commercial and Household Food Security

51. The pillar focuses on two aspects. First, it addresses commercial agriculture to increase national food production and generate incremental incomes in rural areas. Second, it supports food insecure households in rural areas in both intensifying and diversifying their agricultural production and, in urban areas, assuring their access to adequate and affordable food. The second aspect is to be implemented through farming and gardening around homesteads to take into consideration the problem of small land holdings. The outcome will be increased food self-reliance in those food staples that can be produced competitively in the country. The pillar is tentatively budgeted at USD 461.01 million and comprises ten priority components:
(1) **Meat:** intensification, improving productivity and market access.
(2) **Dairy:** intensification, improving productivity and market access.
(3) **Poultry:** intensifying commercial production, processing and market access.
(4) **Fish:** intensifying sustainable use of natural fish resources.
(5) **Crop diversification (including potatoes):** intensification of rain-fed production of wheat and introduction/re-introduction of new crop varieties, e.g. oil seed rape, soya beans, millet, oats, barley, rye etc for food and animal feeds.
(6) **Irrigated crop production:** increasing the area of arable land and crops under irrigation.
(7) **Crop mechanisation:** renovation and/or replacement with modern farm equipment.
(8) **Fertilisers:** boosting appropriate and efficient use, including for potato and vegetable production.
(9) **Plant protection:** focussed on potatoes and vegetable.
(10) **Horticulture:** boosting commercialization of vegetable production.

4.4.3. Pillar 3: Restructuring Food Safety

52. Much of the food available in Mongolia is either locally produced by the informal sector or imported by small traders. Both sectors are largely unregulated. The pillar will focus on modernising and expanding food

processing and on rationalising the food control management system into a modern, pro-active, cost-efficient structure. The outcome will be a system that consumers can trust and which ensures compliance with international standards and regulations for food for domestic consumption and for export. The pillar is tentatively budgeted at USD 218.13 million and there are six priority components as follows:

(1) **Food inspection and certification:** rationalising and re-structuring the system, including the national laboratory network along the entire food chain, including the step-by-step introduction of the following, and, thereafter, HACCP:
   - GAPs – Good Agricultural Practices
   - GMPs – Good Manufacturing Practices
   - GHPs – Good Hygienic Practices

(2) **Food processing:** modernizing and expanding food processing, mainly financed by the private sector

(3) **Food contamination:** control of sources of physical, chemical (drug and pesticide residues etc), bacteriological contamination

(4) **Food reserves:** re-organising strategic food stocks.

(5) **Prevention of food-borne disease (public health):** improving surveillance and control of food-borne diseases

(6) **"Natural Mongolian Foods":** certification, labelling and generic branding of clean, safe "organic Mongolian foods

4.4.4. Pillar 4: Promoting Nutrition and Public Health

53. Pockets of under-nutrition and micro-nutrient deficiency persist in rural and urban areas. This pillar will focus on children and other vulnerable groups. The outcome will be lower incidence of food-related diseases. There are seven priority components with a total budget of USD 74.49 million as follows:

(1) **Nutrition and public awareness:** updating and tailoring the Mongolia *"Recommended Dietary Intake"* to the needs of the changing lifestyles of the Mongolian people

(2) **Nutrition research and information:** supporting the entire food chain, including producers and consumers.

(3) **Prevention of micro-nutrient deficiency:** decreasing vitamin D, iron and iodine deficiency in children, pregnant and lactating women

(4) **Food fortification:** increasing food consumption and nutrient intake for young children and vulnerable groups

(5) **Reducing non-communicable diseases:** reducing transmission through foods

(6) **Under-nutrition:** improving food access for vulnerable groups

(7) **Clean water supplies:** providing access to safe drinking water and sanitary latrines for all urban households

4.5. Summary of Planned Investments

54. The NFSP will be implemented in two 4-year phases: (i) 2009-2012 and (ii) 2013-2016. There are 27 components under the four strategic pillars as summarised and listed in table 6 below. The components are described in more detail in the annex attached Resolution 32/2009.
55. The indicative budget is for the NFSP is USD 1,289.23 million (MNT 1,985.41 billion at the April 2009 UN rate of exchange of MNT 1,540 = USD 1.00) over the 8-year NFSP plan period, or USD 789.23 million (MNT 1,215.41 billion) excluding the proposed USD 500 million Agricultural Investment Fund.

Table 6: NFSP (2009-2016) Indicative Investment Plan

Components / Projects		Indicative Budget (USD million)		
		Phase 1 2009-2013	Phase 2 2013-2016	Total
Pillar 1: Enabling environment				
1.1	Capacity building: vocational training	6.00	7.10	13.10
1.2	Capacity building - food policy & institutional framework	7.00	7.00	14.00
1.3	Promotion of food research, information and M&E	4.00	4.50	8.50
1.4	Agricultural Investment Fund	200.00	300.00	500.00
Sub-total		217.00	318.60	535.60
Pillar 2: Commercial and household food security				
2.1	Meat production	9.80	6.60	16.40
2.2	Milk production	29.70	10.40	40.10
2.3	Poultry production	1.20	0.76	1.96
2.4	Fish production	0.40	0.80	1.20
2.5	Crop diversification, including potatoes	10.10	4.90	15.00
2.6	Irrigated crop production	98.50	88.98	187.48
2.7	Crop mechanisation / equipment renovation	130.00	48.82	178.82
2.8	Fertiliser	1.50	2.25	3.75
2.9	Plant protection	1.50	2.80	4.30
2.10	Vegetable production	8.00	4.00	12.00
Sub-total		290.70	170.31	461.01
Pillar 3: Food safety				
3.1	Modernise food inspection, monitoring & control systems	2.00	1.00	3.00
3.2	Modernise & expand food processing	85.50	104.50	190.0
3.3	Prevention of food contamination	1.00	1.00	2.00

3.4	Food reserve	14.20	5.63	19.83
3.5	Prevention of food borne disease	0.80	0.70	1.50
3.6	Establish quality brand for "natural" foods	1.00	0.80	1.80
Sub-total		104.50	113.63	218.13
Pillar 4: Nutrition				
4.1	Nutrition education and public awareness	7.60	5.00	12.60
4.2	Nutrition research and information	3.50	3.00	6.50
4.3	Prevention of micro-nutrient deficiency	2.80	2.00	4.80
4.4	Food fortification for the under-nourished	1.90	3.00	4.90
4.5	Reducing of non-communicable food diseases risks	0.60	0.60	1.20
4.6	Improving food access for vulnerable groups	0.30	0.29	0.59
4.7	Clean water supplies	31.50	12.40	43.90
Sub-total		48.20	26.29	74.49
Total		660.40	628.83	1,289.23
Total MNT billion a		1,017.02	968.40	1,985.42
[a] UN exchange rate MNT 1,540.00 = USD 1.00 (April 2009)				

56. Financing for the NFSP will come from a mix of sources as indicated in table 7, broken down as follows:
    - Private Sector: ***43.3%***
    - Government: ***34.7%***
    - Development partners: ***20.6%***
    - Local Government/NGOs: ***1.4%***
57. Government funding estimates are based on the present budget allocations and funds to be made available to implement new plans and projects on a special basis. Funding requirements are substantial so as to take account of new national policies relating to: (i) developing water harvesting and irrigated crop production; (ii) modernisation crop machinery and equipment; (iii) restructuring food processing and control systems and (iv) building human capacity, especially job-oriented vocational training for young people.
58. The contribution of development partners is based on on-going and concrete pipeline programmes and projects. It is likely that Government and donor support will target those interventions that target the poor and under-nourished as well the enabling environment and large infrastructure investments such as water harvesting, while the private sector will invest in food production and processing.
59. Since the NFSP was formulated, Mongolia's economic growth has slowed considerably to an estimated 2-3 percent in 2009, compared

with 9 percent in 2008, mainly due to the global mineral price collapse[12]. In March 2009 the major donors, including the Asian Development Bank, the World Bank and Japan pledged USD 160 million to bridge the budget gap forecast for 2009 and 2010.

60. As indicted below, the Mongolian currency was relatively stable when the NFSP was formulated in 2008. At the timing of finalising this brief (April 2009), it had the depreciated by over 30 percent against the US dollar.
    - June 2008: MNT 1,164 = USD 1.00
    - April 2009: MNT 1,540 = USD 1.00

4.6. Target Beneficiaries

61. The NFSP is designed with explicit strategic objectives for transforming food security, food safety and nutrition in Mongolia; and scaling up the production, processing and distribution of those foods that can be produced efficiently and competitively. This includes strategic staples such as wheat and food safety nets for vulnerable people. While the programme of course is for the benefit of all Mongolians, it specially targets the following key groups. Within the target groups, special emphasis will be placed on the gender balance by ensuring both sexes have equal opportunities, especially for vocational and outreach training.
    - children under 10 years and food vulnerable people
    - all primary food producers
    - all food processors – large and small
    - food management and control agencies
    - policy makers.
62. The majority of actors in the food chain are private entrepreneurs: primary food producers, food processors, service providers, finance and micro-finance institutions and representative organisations such as the Mongolian Food Producers' Association. The NFSP therefore expressly targets the private sector, partly because it was not sufficiently involved in the first programme, but also for its crucial role in providing productivity enhancing goods and services and market access. Daily contact with rural households by, for example, milk collectors provides the opportunity for delivery of farm input supplies as well as other basic household needs.

12 Source: Joint statement of the international partners at the Government of Mongolia -External Partners' Meeting, Saturday, March 14, 2009 and Major Donors' Press Release (Ulaanbaatar, 14 March 2009)

4.7. Management, Monitoring and Evaluation

63. Resolution 32/2009 relating to the NFSP contains 37 outcomes, which are set out in the annex attached to Resolution 32/2009. Annual action plans will be prepared and implemented by MoFALI and the Aimag and Capital City Governors. Implementation will be supervised by an Inter-ministerial Committee convened by the Prime Minister's Office.
64. Monitoring and evaluation will be in accordance with Resolution 32/2009 and the established systems used by the MoFALI Information, Monitoring and Evaluation Department.

Table 7: NFSP (2009-2016) Indicative Financing Plan

Components / Projects		Indicative Budget (USD million)					
		Gov	Local Gov	Donors	Private sector	NGOs	Total
1.1	Capacity building: vocational training	7.00	-	7.00	-	-	14.00
1.2	Capacity building - food policy & institutional framework	7.00	-	7.00	-	-	14.00
1.3	Promotion of food research, information and M&E	3.50	-	3.50	1.50	-	8.50
1.4	Agricultural Investment Fund	150.00	-	150.00	200.00	-	500.00
	Sub-total	165.60	-	165.50	204.50	-	535.60
Pillar 2: Commercial and household food security							
2.1	Meat production	4.90	1.90	6.10	3.10	0.40	16.40
2.2	Milk production	12.30	3.00	14.0	10.30	0.50	40.10
2.3	Poultry production	0.16	0.17	0.23	1.40	-	1.96
2.4	Fish production	0.40	-	0.80	-	-	1.20
2.5	Crop diversification, including potatoes	2.40	0.44	1.60	10.26	0.30	15.00
2.6	Irrigated crop production	87.5	3.40	15.08	81.5	-	187.48
2.7	Crop mechanisation / equipment renovation	89.41	-	11.62	77.79	-	178.82
2.8	Fertiliser	1.50	-	0.50	1.75	-	3.75
2.9	Plant protection	1.00	-	0.50	2.80	-	4.30
2.10	Vegetable production	5.20	0.20	3.50	3.10	-	12.00
	Sub-total	204.70	9.11	53.93	192.00	1.20	461.01
Pillar 3: Food safety							
3.1	Modernise food inspection, monitoring & control systems	0.50	-	1.00	1.50	-	3.00
3.2	Modernise & expand food processing	8.00	2.40	27,60	152.00		190.0
3.3	Prevention of food contamination	1.00	-	0.70	0.30	-	2.00
3.4	Food reserve	17.13	0.50	1.70	0.50	-	19.83
3.5	Prevention of food borne disease	0.80	-	0.70	-	-	1.50
3.6	Establish quality brand for natural foods	0.50	-	0.30	1.00	-	1.80
	Sub-total	27.93	2.90	32.00	155.30	-	218.13
Pillar 4: Nutrition							
4.1	Nutrition education and public awareness	5.90	1.10	4.30	0.30	1.00	12.60
4.2	Nutrition research and information	2.30	0.13	2.53	1.32	0.22	6.50
4.3	Prevention of micro-nutrient deficiency	2.60	0.05	1.90	0.15	0.10	4.80
4.4	Food fortification for the under-nourished	2.10	0.21	1.80	0.79	-	4.90
4.5	Reducing of non-communicable food diseases risks	0.30	0.10	0.05	0.1o	-	1.20
4.6	Improving food access for vulnerable groups	0.12	0.06	0.31	0.06	-	0.59
4.5	Clean water supply	36.00	3.00	3.0	1.40	0.50	43.90
Sub-total		49.32	4.65	13.89	4.12	1.82	74.49
Total		446.92	16.66	265.32	557.92	2.02	1,289.23

[a] UN exchange rate MNT 1,540.00 = USD 1.00 (April 2009)

Annex

Unofficial translation from Mongolian

THE GOVERNMENT OF MONGOLIA

RESOLUTION

04 February 2009 No.32 Ulaanbaatar

RE: Approval of the National Program 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 Program 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 February 1st of each year.
4. That T. Badamjunai, Minister for Food, Agriculture and Light Industry, S. Bayartsogt, Minister for Finance as well as 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 24 October 2001 be revoked with the issue of the present Resolution.

PRIME MINISTER OF MONGOLIA **S.BAYAR**

MINISTER FOR FOOD, AGRICULTURE AND LIGHT INDUSTRY **T. BADAMJUNAI**

Annex to the Government Resolution 32/2009 (not attached)