

DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA



AGRICULTURAL REHABILITATION AND RECOVERY PROGRAMME 2008

Special Emergency Programmes Service
Emergency Operations and Rehabilitation Division
FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, Italy

INTRODUCTION

The purpose of this document¹ is to provide FAO's past, current and prospective new donors with a brief update of FAO's emergency programme in the Democratic People's Republic of Korea (DPR Korea) during the past 12 months and to request financial support for up to eight operations being initiated as 'concepts' – each with the potential to be developed into full project proposals. This document is divided into three parts:

- Part 1 revisits the 2007 the programme submission of the Special Emergency Programmes Service (TCES) for resource mobilization when the annual appeal was launched in October 2006 with meetings in Beijing, Seoul and Pyongyang; and the subsequent responses received.
- Part 2 provides an update on the agricultural situation in DPR Korea during the past year, in the context of a slow and gradual recovery for crop production in the past six seasons.
- Part 3 presents the 2008 programme 'concepts', as developed in conjunction with FAO's line ministry partners: Agriculture, Lands and Environmental Protection, Forestry and Fisheries.
- The **Annex** is an itemized compilation of recently completed and ongoing FAO projects.

Launch of FAO's 2008 Programme in DPR Korea

This year's launch is planned to start in Pyongyang on 24 October 2007, followed by Beijing (25 October) and Seoul (29 October), when briefing meetings will be held with donors' representatives. The launch is arranged by FAO's TCES, in conjunction with the FAO Representative in China.

¹ Also available electronically, upon request.

ABBREVIATIONS AND ACRONYMS

CA Conservation agriculture

CERF Central Emergency Response Fund

FAO Food and Agriculture Organization of the United Nations

FMD Foot-and-mouth disease

MoLEP Ministry of Lands and Environmental Protection
OCHA Office for the Coordination of Humanitarian Affairs

TCES Special Emergency Programmes Service

PART 1. FAO PROGRAMME FOR 2007

The programme launched in 2006 was based on five concepts, all considered appropriate in soliciting humanitarian assistance totalling US\$3 750 000. The five concepts and amounts sought consisted of:

		US\$
•	Strengthening oil crops production	750 000
•	Support to mariculture	800 000
•	Support to coastal fishing	750 000
•	Support to livestock recovery	800 000
•	Rehabilitation of coastal salt-affected croplands	650 000
		3 750 000

Each of these concepts was presented in a compact one-page 'project profile' with a description and financial summary. Each concept had a budget covering basic similar components: (i) equipment and inputs, (ii) training/capacity building, and (iii) technical expertise.

Some of the project profiles were envisaged as consolidation of activities² already launched the previous year while others were completely new. These projects were considered supplementary to other ongoing projects initiated in 2006 and planned for implementation into 2007 and 2008. These include conservation agriculture (including horticulture) receiving Swedish/Sida funds, school gardens' development with New Zealand support and already-implemented projects such as avian influenza prevention and control, financed by Australia/AusAID and Norway. (More details are available in the Annex.)

It was explained that in the event of receiving assistance in lesser amounts to those sought that these would be utilized, and that the project components would be proportionally reduced to the amounts provided.

Funding pledges and responses for investment in 2007 were disappointingly low. The main source of support was the Central Emergency Response Fund (CERF) from the Office for the Coordination of Humanitarian Affairs (OCHA) for under-funded life-saving projects, which approved US\$700 000, or approximately 19 percent of the total requirements. OCHA also supported another US\$600 000 operation as a rapid response to the damage to agriculture caused by the August floods. None of the 2007 project profiles received any specific support, which was particularly disappointing in view of the fact that the agricultural sector is a key area requiring frequent and consistent levels of assistance until the Government can take responsibility to fully manage its own programmes in this priority sector, ranked as national No.1 priority for many years.

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² Oil crops production (soy bean oil presses) was funded by Turkish support in 2006, while Norwegian financing was received to assist coastal fishing cooperative farms, 2005-2006.

PART 2. 2007 UPDATE OF AGRICULTURAL SITUATION

Unfolding events in DPR Korea are confirming a dramatic year. While outside focus was on the nuclear issue and the aftermath of the recent North-South summit, the country has been experiencing both positive aspects and untimely setbacks with a backdrop of continued economic difficulties and fresh natural calamities.

Floods, with tragic loss of life, crops and livestock and infrastructural damage, that occurred during the passage of typhoons in August and September, have again shown how precarious the situation is for producing summer food crops, and how a longer period of rehabilitation and recovery is required for getting the economy back on track.

The year begun with a localized outbreak of foot-and-mouth disease (FMD); a blow to local meat producers. This was offset to some extent by reasonably good early crop yields, especially potato production. A dry spell in early June permitted favourable harvesting conditions for wheat and barley, but caused some moisture stress for summer crops. Good rains in July restored favourable growth conditions until the floods caused damage and additional hardship to the rural and urban populations.

A pine caterpillar outbreak in the coniferous woodlands around Pyongyang dramatically and rapidly expanded into four provinces, due in part to a relatively mild winter 2006/07 and only a short hibernation period. The affected area of discoloured and defoliated pines is now in excess of some 100 000 hectares in the lowlands below 800 meters altitude. And while there is no imminent risk for damage to crops, there is cause for concern that the caterpillars/moths will destroy the entire pine forest that protects cropping areas below from slope runoff rains.

DPR Korea, due to its topographical characteristics and somewhat precarious climate (long winters, summer typhoon risks and occasional droughts) is limited in its agricultural potential. The critical shortage of locally produced inputs (e.g., mineral fertilizers, plastic sheeting, spare parts for tractors and farm machinery, etc.) negatively affects agricultural production in a country already exacerbated by a chronic lack of fuel and energy constraints.

The land use system comprises annual and perennial croplands, permanent meadows and pastures, forests and woodlands. The shortage of arable lands and the policy of food grain self-sufficiency have led the country to opt for high-intensity agriculture. There is very limited scope for expanding cultivable areas. Agricultural land is organized and cropped within approximately 3 900 cooperative farms and 100 state farms in nine provinces and municipality areas.

Persistent food shortages have forced a policy of coping strategies that involve cultivation expansion onto fragile soils on sloping lands, some with high gradients and only marginal potential. The deforestation consequences, and related soil erosion and general degradation, have required recent decisions on the rational use of such sloping lands. More than one million hectares of hill lands are now being used for cropping, and plans are underway to manage the slopes prudently, utilizing contour terracing, vegetative barriers, alley cropping and cover crops, including orchard and fuelwood trees, in an integrated agro-forestry approach. Runoff drainage management is a key factor in this sloping land management strategy; however; there is considerable scope to apply conservation agriculture (CA) techniques onto sloping lands.

Previous (FAO emergency) emphasis had been on supporting the national double-cropping policy by procuring farm inputs such as fertilizers, herbicides and plastic sheeting. The annual deficit in fertilizer availability still prevails, leading to low production levels. It has been demonstrated that the availability of fertilizers for double cropping would be inadequate if it were not for the support this programme receives through the international agencies. In addition to the natural constraints such as adverse weather and poor soils, double cropping suffers from a number of physical constraints such as insufficient irrigation and inadequate mechanization and plant protection measures. Rates of fertilizer application based on soil tests represent one of the most appropriate tools for ensuring higher levels of fertilizer-use efficiency. Although soil test based fertilizer recommendations have long been used in the country, it is only in the past three years that FAO has established a model soil test laboratory in an agricultural area of good potential (South Pyong'an province, catering for two provinces), and this year it is intended to equip another laboratory in South Hwanghae, which will likewise cater for two provinces.

A new departure was to enhance support for the national double-cropping policy by promoting CA. This entailed the importation of farm machinery items suited to the needs of CA. These allow for increased use of crop residues and minimum or zero tillage when sowing/planting. Crop rotations are practiced, more especially integrating legumes (such as soya) and green manure cover crops into cropping patterns. This activity was further enhanced in 2007 with purchases of additional CA sowing and planting equipment.

The soil fertility aspect is related to other factors such as soil moisture retention, use of green manure cover crops and improved rotations between cereals, tubers and legumes. These are now being addressed by a CA approach that has made rapid impact on some 22 pilot cooperative farms during the past three years, demonstrating that the approach has brought about considerable reductions in the use of fuel.

Among the medium-term needs, increased assistance from the international donor community is being sought for the continued strengthening of the institutional capacity of the Ministries of Agriculture, Forestry, Fisheries and Lands/Environmental Protection. The overarching goal during 2007 and beyond will be to support the Government in developing viable approaches to improve agriculture by implementing selective programmes in order to sustain and consolidate increased agricultural productivity and rural development through exposure to new technology and policies developed in neighbouring countries.

Agricultural Production in 2005, 2006 and 2007

Due to comparatively favourable climatic conditions, water availability and the timely supply of seed and fertilizers, satisfactory yields were achieved for both spring and summer cereals and tuber crops, supplemented by quantities of soya, millet, sorghum and buckwheat as well as horticultural production of vegetables and fruits. The success of increased cereal production in previous years is partially due to double cropping of spring and summer crops in sequence on the same lands, which has been promoted under the FAO programme with donor support. Notwithstanding flooding in July (South Pyong'an) and several months later in October 2006 (Kangwon), the overall production figures were somewhat better than expected.

On a total of 1 517 250 hectares, the amounts in Table 1 were harvested, confirming 2005 as the best season since the late 1980s and early 1990s. This had followed the 2001-2004 period of incremental increases of approximately 3 percent annually in crop production. Season 2006 had a total of 1 428 578 hectares, the amounts harvested were slightly below 2005 production, but with improved yields for early crops.

Table 1. Crop production, 2005 and 2006

Area 2005, 1 517 250 ha	Paddy rice	Maize	Potato*	Wheat/barley	Other crops
Yield (tonnes/ha)	4.42	4.16	8.8	2	
Production (tonnes)	2 581 710	2 062 411	479 962	279 600	47 615
Area 2006, 1 428 578 ha	Paddy rice	Maize	Potato	Wheat/barley	Other crops
Yield (tonnes/ha)	4.25	3.97	10	2.1	
Production (tonnes)	2 478 521	1 964 623	470 451	289 698	50 813

^{*} To calculate potato yields and production as 'cereal equivalent', divide by 4.

Potato production has remarkably increased (see Table 2), with significant successes in both lowland and upland regions. Improved crop yields have been achieved because of donors' input support for virus-free tubers, locally produced and improved winter seed storage. Considerable emphasis has also been given to organic manure production.

Table 2. Early crops 2006 and 2007, under double cropping

Area 2006, 210 200 ha	Winter wheat (spring barley)	Potato (cereal equivalent)
Yield (tonnes/ha)	2.155 (1.968)	9.336 (2.334)
Production (tonnes)	213 245	232 003
Area 2007, 210 000 ha	Winter wheat (spring barley)	Potato (cereal equivalent)
Yield (tonnes/ha)	2.483 (2.178)	11.116 (2.779)
Production (tonnes)	216 155	307 353

Some agricultural machinery is also in antiquated condition and requires renovation. There is also a need to rehabilitate greenhouses, potato storage, irrigation, soil testing/analysis and veterinary health testing facilities. This rehabilitation needs to be supported by the adequate and timely supply of essential inputs.

The purchase, distribution and use of agricultural inputs (fertilizers, farm machinery, fishing equipment, etc.) are monitored and supplemented by technical expertise through FAO's international Programme Coordinator based in Pyongyang. Strengthening FAO's in-country presence, by the appointment of the Programme Coordinator, was seen by the resident United Nations Country Team in DPR Korea, donors, NGOs and the Government as a means to improve coordination with other agencies and stakeholders in-country and to ensure a more strategic programming approach. Coordination and technical assistance has been particularly important in attempting to develop a mechanism for increased food security with a longer-term agricultural production strategy framework to provide training and institutional capacity building, complementary to inputs' support.

Livestock and Fisheries

There has been a notable increase in livestock production (ruminants, poultry and fish, rabbits) signalling a continuing, although gradual, agricultural recovery with more meat, eggs and dairy produce becoming available. Avian influenza has most regrettably forced the culling of infected chickens in 2005 and damaged commercial poultry units in one of the important fledgling industries. FMD, likewise, has obliged the slaughter of some 400 cattle and several thousand pigs, thereby seriously affecting the livelihoods of small-scale domestic production (pork).

The Government recognizes the significant contribution of fishing to the national economy and food security. Emphasis has been placed on improved fisheries for both local consumption and export to generate the necessary food, income and foreign exchange. This is particularly relevant to the coastal dwelling populations, which have less access to arable land and derive much of their livelihood from sea-based fishing, foraging and aquaculture activities.

Some 10 000 vessels are reported to operate in the country, 2 000 of which are motorized. In addition to capture fisheries, the country has an important seaweed and fresh water aquaculture industry. According to unconfirmed estimates, capture fisheries currently produce not more than 500 000 tonnes. The decline of this sector appears to be mainly due to a lack of spare parts and appropriate fishing equipment. There is an urgent requirement for stock-taking in capture fisheries and aquaculture in the light of the recent crisis and identification of sectoral constraints and potential leading to development of a rehabilitation programme for sustainable fisheries.

Forestry

Environmental sub-sector activities have been addressing the energy crisis, particularly the diminishing quantities of fuel-wood for domestic heating. In view of the increased demand for trees, many cooperative farms have established nurseries to supplement trees propagated in county forest nurseries. It is of critical importance to maintain the indigenous mixed forest in the face of economic pressures for mono-culture of fast-growing species. Watershed management and sustainable agroforestry also require attention.

ACHIEVEMENTS 2005–2007

The evolving FAO approach has diversified from the original single focus of providing mainly inputs by also recognizing urgent training needs at various levels, from Pyongyang-based policy formulators and technocrats, researchers and agricultural university academics to provincial, county and cooperative farm managers, engineers and work team leaders, for both in-country and short-term external training. Hence, FAO's revised and evolving balanced rehabilitation and recovery programme now consists of input support, technical assistance, training and capacity building.

Complementary to inputs provided, some initial success was met in the area of capacity building during 2006 and 2007, with the arranging of several study tours in neighbouring and other countries. Such short tours provided exposure to various topics for ministry (policy and technical), academy (research and development), university as well as county and cooperative farm-level managers and work team leaders. Table 3 provides more details.

Table 3. Study tours and external and in-country training

Topic	Host	Duration	Participants	
Conservation agriculture, autumn crops	China	2 weeks	12	Ministry, Academy, Cooperative Farm engineers
Conservation agriculture international seminar	China	3 days	4	Ministry, Academy, Cooperative Farm manager
Conservation agriculture, spring crops 2006 and 2007	China	2 weeks	12	Ministry, Academy, Cooperative Farm engineers
Conservation agriculture, summer crops	India	2 weeks	6	Ministry, Academy, Cooperative Farm engineers
Horticulture (fruit production in orchards)	China	3 weeks	4	Fruit General Bureau, including Pomology expertise
Integrated pest management, training of trainers	China	2 weeks	2	Vegetable Research Institute technicians
Integrated plant nutrition management	China	1 week	2	Academy
Veterinary training	China	4 weeks	4	Ministry, veterinary laboratory technicians
Veterinary diagnostic laboratories, surveillance, epidemiology	China	1 week	2	Ministry, veterinary laboratory technicians
Veterinary diagnostic laboratories BSL- 2, surveillance, epidemiology (foot and mouth disease)	China	3 weeks	3	Ministry, veterinary laboratory technicians
Soil classification and mapping training	China	2 weeks	2	Academy
Veterinary diagnostic laboratories, surveillance, epidemiology	Vietnam	2 weeks	4	Ministry, veterinary laboratory technicians

PART 3. PROGRAMME FOR 2008 AND FINANCIAL SUPPORT REQUIREMENTS

The emergency period following the mid-1990s natural disasters that caused the Government of DPR Korea to make an initial appeal for international humanitarian assistance is long finished. Although the initial emergency received considerable humanitarian attention in terms of water/sanitation, health/nutrition and food aid, there has been a gradual transition towards rehabilitation and recovery and eventually towards longer-term development. Nevertheless, a complex humanitarian situation still exists. Previous responses to emergency and rehabilitation requirements had taken place against a backdrop of continued economic difficulties. Donor assistance has helped to overcome some of the constraints met in increasing food production. The Government's focus on longer-term recovery has increased over the past three years.

Substantial funding from donors continues to play a vital role in safeguarding and promoting the well-being of the population of DPR Korea, especially children and women, in the priority area of food security. The Government recognizes FAO as one of the main role players in the agricultural sector and has endorsed the Organization's contribution in responding to priorities by developing compact short- and medium-term projects for implementation.

The eight project profile concepts prepared for the coming one-year period have once again paid particular attention to the transition requirements needed to consolidate previous efforts and to lay the groundwork for eventual sound development of the agricultural/food sector. In addition, the limited response to the UN Flash Appeal following the August 2007 floods meant that requirements were not met and additional funds are sought to make up the shortfall.

The project profiles can be developed into full project proposals, containing objectives, targeted beneficiaries, expected outputs, activities, budget, implementing arrangements, work plan and reporting requirements. Each profile includes the procurement of technical inputs and spares, technical assistance, training and capacity building. Beneficiaries are those who may benefit directly from the assistance or more indirectly from the spin-off from actual production achieved. Typically, cooperative farm households³ are the direct beneficiaries.

Strategy for Use of Project Funds

- According to the requirements of the Government of DPR Korea, the priority areas are in the following order: (1) conservation agriculture, (2) coastal fisheries, (3) forest pests control, (4) horticultural production, (5) livestock recovery, (6) oil crops, and (7) salt lands.
- Each project has three basic components: provision of inputs (machinery, equipment, etc.), technical assistance and training/capacity building.
- Each of these projects requires resources of US\$750 000 in order to cover all three components.

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³ Cooperative farm sizes vary, but average about 500 households, many of which form part of 10-15 work teams. Typically, each household consists of six persons, of which four are women and young or school children. An average cooperative farm would have an approximate population of 3 000, of which 2 000 are women and children. Each household has an individual 'kitchen garden' limited to 100 m², where some fruits and vegetables are produced, some maize, beans and potatoes, and where some rabbits, poultry and pigs are raised. Goats are mainly communally owned and together with poultry numbers, have increased dramatically, whereas sheep and cattle (draught oxen) populations remain at about the same level. Fishing cooperatives also vary but also average about 500 households, only some of whom have access to farmlands and individual gardens, whereas others are totally dependant on catch fishing.

• In the event that funds received do not match the required amounts, the quantity of input support and technical assistance would be proportionally adjusted, while the level of training and capacity building would always remain unchanged.

	Proposed Project Profiles for the 2008 Programme* Project Cost (U			
1	Consolidating the Conservation Agriculture Approach	750 000		
2	Support to Coastal Fishing Communities	750 000		
3	Controlling Forest Pests	750 000		
4	Enhancing Horticultural Production for Fruits and Vegetables	750 000		
5	Support to Livestock Recovery Following Floods	750 000		
6	Strengthening Oil Crops Production and Processing	750 000		
7 Rehabilitation of Coastal Salt-affected Croplands 750 000		750 000		
8 Support to Ongoing Programme Coordination 250 000		250 000		
	Total amount being resourced 5 500 000			

^{*} The project profiles are arranged according to priority; "1" being the highest.

The proposed UN strategy for 'Increased Food Availability' aims at targeting six areas, on which the eight proposed FAO project profiles are based:

- (1) increased capacity for food crops and horticultural production;
- (2) increased capacity for livestock and fisheries producers;
- (3) improved management of food resources and improved households' access to food;
- (4) increased capacity for food processing;
- (5) sectoral strategic plan and sector policies developed and implemented; and
- (6) capacity for statistics compilation and data management enhanced.

PROPOSED PROJECT PROFILES AGRICULTURAL REHABILITATION AND RECOVERY PROGRAMME 2008

Project Profile No. 1: Consolidating the Conservation Agriculture Approach

Theme	Conservation Agriculture		
Objective	To strengthen the ongoing double-cropping programme through		
	further support to the conservation agriculture approach		
Targeted Beneficiaries	iciaries 40 cooperative farms in the Cereal Bowl area. Beneficiaries 120 000		
	persons: approximately 80 000 women and children		
Implementing Partner Ministry of Agriculture			
Project Duration January – December 2008 (12 months)			
Funds Requested US\$750 000			

Project Profile No. 2: Support to Coastal Fishing Communities

Theme	Coastal Fisheries
Objective	To rehabilitate and improve catch facilities for coastal fishers
Targeted Beneficiaries	10 cooperative farms, on the West Coast
Implementing Partner	Ministry of Fisheries
Project Duration	April 2008 – March 2009 (12 months)
Funds Requested	US\$750 000

Project Profile No. 3: Controlling Forest Pests

Theme	Forest Pests		
Objective	To strengthen MoLEP's capacity to control caterpillar and moth		
	infestations in coniferous woodlands through safe biological		
	approaches and technology		
Targeted Beneficiaries	Indirect beneficiaries 120 000 persons: approximately 80 000 women		
	and children		
Implementing Partner Ministry of Lands and Environmental Protection (MoLEP)			
Project Duration January – December 2008 (12 months)			
Funds Requested US\$750 000			

Project Profile No. 4: Enhancing Horticultural Production

Theme	Horticulture	
Objective	To rehabilitate facilities for fruit and vegetable production in orchards and	
	greenhouses in order to enhance food security and improve the	
	livelihoods of cooperative farm families.	
Targeted Beneficiaries	Cooperative farms and specialized fruit and vegetable production farms.	
	Beneficiaries 120 000 persons, including 80 000 women and children	
Implementing Partners	Fruit General Bureau, Horticulture General Bureau	
Project Duration	April 2008 – March 2009 (12 months)	
Funds Requested	US\$750 000	

Project Profile No. 5: Support to Livestock Recovery Following Floods

Theme	Livestock Recovery
Objective	To support and accelerate national efforts to increase output of goat milk and meat in the lowlands provinces and contribute to food security and contain possible damage to the environment.
Targeted Beneficiaries	20 cooperative and 5 state farms (goats). Livestock work teams and farm households
Implementing Partner	Ministry of Agriculture, Livestock Bureau
Project Duration	January – December 2008 (12 months)
Funds Requested	US\$750 000

Project Profile No. 6: Strengthening Oil Crops Production and Processing

Theme	Oil Crops
Objective	To improve and increase efficiency levels by providing electrically powered expeller-pressed oil (screw) presses and to provide incomegenerating opportunities from the production of oil, oil-cake and small-scale candle making
Targeted Beneficiaries	Cooperative farm work teams and households
Implementing Partner	Ministry of Agriculture
Project Duration	January – December 2008 (12 months)
Funds Requested	US\$750 000

Project Profile No. 7: Rehabilitation of Coastal Salt-affected Croplands

Theme	Salt Land and Saline Soils	
Objective	To continue drainage and rehabilitation of lands inundated by sea	
	water in order to re-introduce food crops	
Targeted Beneficiaries	Coastal cooperative farms in the polder/dyke areas, west coast	
Implementing Partner	Ministry of Agriculture, Academy of Agricultural Sciences	
Project Duration	March 2008 – February 2009 (12 months)	
Funds Requested	US\$750 000	

Project Profile No. 8: Support to Ongoing Programme Coordination

Theme	Programme Coordination Unit
Objective	To provide and maintain management linkage between government ministries, donors and partners; also as focal point for other agencies and NGOs implementing projects in the agricultural sector
Targeted Beneficiaries	Direct and Indirect
Implementing Partners	Ministries of Agriculture, Lands, Fisheries and Forestry; National Committee for FAO
Project Duration	October 2008 – September 2009 (12 months)
Funds Requested	US\$250 000

LONG-TERM COMMITMENT

Since the mid-1990s, DPR Korea has suffered from low economic growth, with only limited access to international best practices and technological know-how. Aid and foreign investment have remained below the levels that the country requires to revive key sectors of the economy, in particular agriculture. This has been due largely to a complex external political environment, although there were positive signs shown during 2007 on initial steps taken on the hitherto unresolved nuclear issue.

DPR Korea however has not benefited from advances that have taken place globally in the economic and social sectors. Owing to the absence of international finance and major bilateral aid programmes, the UN system is an essential partner for the Government in capacity-building and development cooperation.

The Government of DPR Korea is currently engaged in a process of establishing a comprehensive set of relationships aimed at stimulating more predictable forms of development assistance. However, relatively weak government capacity and limited exposure to international best practices is a potential impediment for effectively absorbing possible larger-scale aid and investment.

The UN Strategic Framework for DPR Korea (2006) represented the UN response to national priorities in five key areas of intervention where UN agencies can make a difference and add value to governments' efforts to achieve Millennium Development Goals (MDG). These are economic management, sustainable energy, environmental management, increased food availability and basic social services.

FAO supports the collective goal of the UN Country Team in DPR Korea to assist the Government in its efforts to improve the quality of life for all its citizens in order to attain levels reached before the onset of economic and humanitarian difficulties in the mid-1990s. The vision guiding this strategy, and indeed all UN efforts in the country, is informed by national development goals as well as the MDGs.

Some of the outcomes foreseen in the strategy may appear ambitious considering the likely resources available to the UN and the three-year duration of the strategy. However the UN strategy also aims to provide a blueprint for key development needs that have to be addressed if DPR Korea is to fully achieve the MDGs and to benefit from greater participation in the global economy.

ANNEX. SUMMARY OF ONGOING AND RECENTLY COMPLETED PROJECTS

The current TCES portfolio for DPR Korea contains support aimed at increasing food production through input supply of equipment and farm machinery to support conservation agriculture, post-harvest oilseed (soya) processing, plant protection and integrated pest management (IPM), horticultural (fruits, vegetables) recovery, double-cropping and improved crop rotation; enhancing crop production on targeted cooperative farms during cropping season 2007 by providing urea fertilizer; strengthening the capacity of the veterinary services to effectively contain the current foot-and-mouth disease (FMD) outbreak and to build the capacity of the Central Veterinary Station's laboratory for early detection of FMD and for verification of the success of the control measures. Current and previous activities also cover promotion of small-scale fisheries production, protection of forest resources by controlling the devastating effects of the pine caterpillar infestations; managing fragile sloping lands, as well as coordinating efforts for control of avian influenza⁴. Capacity-building is supported through provision of technical assistance, training and study tours abroad for local technicians, academics and cooperative management experts. Main donors are Sweden, Norway, Australia, New Zealand, Turkey, European Union, the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) and FAO.

1. ONGOING PROJECTS

TCP/DRK/3104: Emergency assistance for early detection, response and control of foot-and-mouth disease outbreaks (US\$430 000, May 2007 – October 2008).

The main objective of this FAO-funded project is to strengthen the capacity of the veterinary services to effectively contain the current FMD outbreak and to build up the Central Veterinary Station's laboratory capacity to support the above through early detection of FMD and for verification of the success of the control measures.

OSRO/DRK/701/CHA: Support to Summer Crops Production 2007 (US\$700 000, April – December 2007).

The objective of this CERF project⁵ is to improve crop production on 200 targeted cooperative farms comprising 100 000 households during the cropping season 2007 by providing urea fertilizer to cooperative farms in the 'cereal bowl' provinces. This complements existing projects on promoting conservation agriculture, already demonstrating crop yield increases, reduced fuel use and labour requirements. A total of 1600 tonnes of urea (46-0-0) fertilizer was delivered by early July and used rapidly on paddy and maize.

OSRO/DRK/603/SWE: Support to agricultural and horticultural production and to the coordination of emergency and rehabilitation interventions in agriculture and food security in 2006-2008 (US\$2 334 430, October 2006 – September 2008).

The general objective of this Swedish-funded project is to increase agricultural and horticultural productivity and produce a sustainable improvement in food security. The immediate objective is to assist the Government in its efforts to increase food production with the supply of farm machinery, greenhouse equipment and horticultural tools for the 2007 and 2008 spring and summer planting seasons, coupled with the provision of soil-testing laboratory equipment and land surveying

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⁴ In conjunction with WHO, Ministry of Public Health and the Veterinary Service of the Ministry of Agriculture.

⁵ Funded by OCHA.

instruments, including in-country training for a further expansion of conservation agriculture and horticulture and study tours abroad. The project is providing for the needs of approximately 200 targeted cooperative farms (about 100 000 households). Among the beneficiaries are some 150 000 women and 180 000 children (about 60 percent of the beneficiaries).

OSRO/DRK/704/CHA: Rapid Restoration of Food Crop Production and Food Availability (US\$600 000, October 2007 – January 2008).

The objective of this CERF project is to provide an adequate quantity of inputs for prompt resumption of autumn/winter and spring cropping to 200 cooperative farms in five provinces affected by the recent flood damage and loss of food crops.

2. PROJECTS COMPLETED IN 2007

OSRO/DRK/504/NOR: Emergency assistance for the control and prevention of avian influenza (US\$193 150, January 2006 – April 2007).

The primary objective of this Norwegian-funded project was to support efforts by the Veterinary authorities of the Ministry of Agriculture to prevent the re-introduction and establishment of avian influenza in the country by ensuring that the emergency preparedness plans are fully underpinned by a necessary surveillance programme and diagnostic laboratory facilities and technical expertise.

OSRO/DRK/601/MUL (NZE): Support to Urban School Garden activities (US\$18 985, February 2006 – April 2007).

The main objective of this New Zealand-funded project was to increase exposure for urban children, through active learning and the introduction of basic horticultural elements and nutritional knowledge; provide urban children with practical experience in vegetable production, without their being involved in the labour aspect; and improve children's knowledge of nutritional aspects.

OSRO/DRK/602/TUR: Support to Oil crop Production and processing (US\$20 000, August 2006 – February 2007).

The main objectives of this Turkish-funded project were to increase efficiency levels by providing electrically powered expeller-pressed oil (screw) presses and provide income-generating opportunities from the production of oil, oil-cake and small-scale candle making.

TCP/DRK/3006: Emergency assistance for the control and prevention of avian influenza (amount US\$218 000, September 2005 – February 2007).

The primary objective of this FAO-funded project was to support efforts by the Veterinary and Anti-Epidemic Department of the Ministry of Agriculture to prevent the re-introduction and establishment of avian influenza in DPR Korea by ensuring that emergency preparedness plans are fully underpinned by a necessary surveillance programme and diagnostic laboratory facilities and technical expertise. The project also provided technical assistance to improve the country's vaccines production quality control and vaccination strategy.

3. PROJECTS COMPLETED IN 2006

OSRO/DRK/501/SWE: Support to the summer-autumn crop production 2005 and 2006 and to the coordination of emergency, rehabilitation and recovery interventions in agriculture and food security in DPR Korea (US\$1 098 535, July 2005 – June 2006).

The objective of this Swedish-funded project was to increase crop productivity and produce a sustainable improvement in food security. The project provided for the needs of approximately 400 targeted cooperative farms (about 200 000 households) through the procurement of 1 165 tonnes of urea fertilizer and their distribution to 109 cooperative farms in 29 counties and districts in four provinces. Farm equipment and no-till machinery were distributed to 17 cooperative farms in four provinces coupled with hands-on demonstrations. Several extensive training courses were organized on double-cropping and conservation agriculture as part of the national programme.

OSRO/DRK/502/NOR: Support to the Coastal Fishing Cooperatives 2005 (US\$468 347, July 2005 – June 2006).

The objective of this Norwegian-funded project was to assist in increasing coastal fisheries production for food security and income generation by procuring basic fishing equipment and improved refrigeration facilities together with technical advice and training. Key fishing inputs were distributed to 7 000 households from 14 fisheries cooperatives in the three provinces. As a result, fish production in the participating cooperatives increased. Training and a study tour were organized. The project was particularly successful in contributing to capacity building in the fisheries sector, exposing key officials of the Ministry of Fisheries to new technology and policies developed in China and Norway.

OSRO/DRK/503/AUL: Australian emergency assistance for the control and prevention of Avian influenza in DPR Korea (US\$192 000, July 2005 – June 2006).

The objective of this Australian-funded project was to support efforts by the Korean authorities to prevent the re-introduction and establishment of avian influenza in the country by ensuring that emergency preparedness plans are fully underpinned by the necessary surveillance programme and diagnostic laboratory facilities and technical expertise. Project funding enabled the procurement of appropriate laboratory equipment for the central and provincial veterinary laboratories of the Ministry of Agriculture, benefiting technical and veterinary personnel. Staff of the Veterinary Anti-Epizootic (VAE) Department were trained in epidemiology and surveillance of poultry diseases. Further training was provided to technical staff in vaccine manufacturing quality control activities.