



DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA

BACKGROUND

Aid and foreign investment have remained below the levels which the Democratic People's Republic of Korea requires to revive key sectors of the economy, in particular agriculture. FAO has adopted the collective goal of the UN Country Team to assist the Government in its efforts to improve the quality of life for all its citizens.



The effects of the mid-1990s natural disasters, chronic input problems, scarce arable land, short growing seasons and intermittent power supply, have led the country into a state of severe food shortages. Although the food security situation has improved significantly since 2001, largely as a result of the humanitarian assistance provided by the UN, bilateral agencies and NGOs, the country still faces serious food shortfalls and the agricultural sector requires considerable support.

FAO'S FIELD PRESENCE

The country office is based in Pyongyang, under the FAO Representation which is based in Beijing. The presence, in Pyongyang, of the Programme Coordinator has enabled FAO to increase contact and collaboration with operational and policy personnel in Government line ministries. The Coordinator represents FAO in the UN Country Team and acts as the focal point for the Agriculture/Food Security theme group overseen by the UN Resident Coordinator, a.i.

A national Assistant FAO Representative is also based in Pyongyang, as part of the FAO Representation structure.

RESOURCE MOBILIZATION AND DONORS

Funding from donors continues to play a vital role in safeguarding and promoting the well-being of the population, especially children and women, in the priority areas chosen. The Government recognizes FAO as a main player in the agriculture sector and has endorsed the Organization's contribution in responding to priorities by developing compact short- and medium-term projects for implementation.

Upon request of the Government in 2004 to link humanitarian programmes to longer-term recovery and development, transition was effected towards rehabilitation and more sustainable development. This was accomplished by linking emergency and rehabilitation operations to the ongoing core-funded FAO programme, which concentrates on technical assistance, in-country training and capacity building, and by gradually diversifying the content and scope of project interventions.

Programme reviews, intensive consultations with partner line ministries (agriculture, lands and environment, fisheries and forestry) and an examination of previous assessments made at cooperative farm level, resulted in the annual formulation and implementation of the FAO rehabilitation programme. Donor assistance to this programme has helped to overcome constraints in food insecurity for some of the neediest people in the country.

Democratic People's Republic of Korea Donor Contributions to FAO in 2007

	US\$
New Zealand	35 000
Norway	190 000
OCHA	1 300 000
Sweden	2 345 000
Turkey	20 000
Total	3 890 000

BENEFICIARIES

Agricultural land in the country is organized and cropped through approximately 3 900 cooperative farms and 100 state farms. FAO has mobilized resources to assist cooperative farms with a range of agricultural inputs, machinery and associated

spare parts. Assistance has been focused on the plains areas of the main cereal crop-producing region, known as the 'cereal bowl' comprising parts of Pyong'an, Hwanghae, Kangwon and Hamgyong provinces and Pyongyang.

FAO's focus

Double cropping

Double cropping is one of the national policies adopted to utilize lands suited to consecutive food crop production in spring, summer, and occasionally, autumn. FAO has strongly supported this programme in agreement with the Ministry of Agriculture (MoA). It is perhaps the most significant contribution from FAO in its effort to promote sustainable agriculture in the country.

The programme supports beneficiary households by providing cooperative farms with fertilizers and other agricultural inputs and machinery. Increases in crop yields have been achieved from the programme and were found to be sustainable when a package was developed to include green manures, cover crops and improved rotations. FAO enhances plant protection measures in the country by supporting local biological-control efforts and promotes integrated pest management (IPM) to protect natural predators. Post-harvest losses were reduced by equipping cooperative farms with better harvesting facilities and improved storage. Dramatic yield increases were achieved following the launch of a conservation agriculture approach on several pilot cooperative farms.



The approach ameliorates tillage operations and enhances soil moisture retention leading to organic improvement, with a marked increase in the presence of earthworms. This facet of the programme has been welcomed by farming families as it has led to considerably reduced fuel costs and lower labour requirements.

The technical assistance provided by FAO under this programme includes in-country training, workshops and study tours. Several study tours on

conservation agriculture and IPM were organized in China and India (with emphasis on training of trainers) for cooperative farm technicians, senior MoA managers and other agricultural technicians. The double cropping concept is evolving continuously and is having a positive impact on beneficiaries, with high demand for required equipment and training.

Soil fertility management

Within the double cropping programme, the promotion of soil fertility management is amongst the key needs identified. FAO has assisted the MoA to promote a more sustainable organic approach by supplementing mineral fertilizers with green manures and nitrogen-fixing legume crops. Green manure seed was provided to selected cooperative farms, in order to carry out on-farm multiplication aimed to create more seed for distribution to other farms. The Academy of Agricultural Sciences also received seeds for multiplication under its Research and Development programmes.

Horticulture

FAO has supported fruit and vegetable production on cooperative farms with the assistance of the Pyongyang Vegetable Research Institute, and more recently, the Fruit General Bureau. Building materials and inputs have been provided by the programme for the rehabilitation of greenhouses and the construction of seed potato stores/bunkers. Vegetables are generally grown in greenhouses during winter and early spring, and during other times of the year, are cultivated in the field. Vegetables are also grown in household kitchen gardens, and surpluses are sold on urban farmer markets. Support to orchard production of apples and pears from nursery rootstock and grafting stages is currently being initiated. Linkage was developed over three planting seasons between FAO and two NGOs, both of which are implementing potato projects. FAO is also working closely with other NGOs.

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Support to school gardens

As part of the horticulture programme, emphasis is placed on support to urban school gardens to complement WFP's in-country school feeding operation. FAO has assisted numerous school gardens in various provincial centres throughout the country, including those for disabled children and elderly people in retirement homes.

The main constraints to the development of this subsector were the lack of tools and equipment, limited watering facilities and varying levels of knowledge related to vegetable production amongst the teaching staff. The basic garden tools, equipment and submersible water pumps provided by FAO to the various urban schools had a huge impact on beneficiary motivation, notwithstanding the relatively small quantities of vegetables produced. To enhance this motivation, a Korean-language illustrated manual was produced.

Coastal fisheries

FAO assisted 14 coastal fishing cooperatives in North and South Hamgyong and Kangwon provinces in conjunction with the Ministry of Fisheries, by procuring essential equipment such as nets, ropes and sails for small boats. This intervention complemented earlier FAO activities that focused on infrastructural support for aquaculture and marine culture.

To build capacities in the fishery sector, in-country training was conducted and study tours to China and Norway were organized during 2006. Both inland aquaculture and marine fishing are vital food production components in ensuring national food security.

Avian influenza prevention

In early 2005, there was a reported outbreak of highly pathogenic avian influenza (HPAI) in three poultry production units. As a result, over 220 000 chickens were culled and strict biosecurity measures, movement control and enhanced surveillance were imposed. FAO has subsequently collaborated closely with the MoA Veterinary Service, the Ministry of Public Health and WHO on prevention measures.

FAO's emergency assistance for the control and prevention of HPAI has to date prevented the re-introduction of the virus by ensuring that the emergency preparedness plans, including diagnostic laboratory facilities and technical expertise, are fully operational. FAO provides surveillance support and is assisting the Veterinary Service in strengthening its national and provincial network. Training on epidemiology and vaccine quality control was conducted in-country and study tours to China and Vietnam were undertaken.

Assistance for early detection, response and control of foot-and-mouth disease outbreak

A rapid assessment mission was fielded by FAO's Crisis Management Centre to evaluate the foot-and-mouth disease (FMD) outbreak that was reported by the Government in January 2007. FAO is now assisting in strengthening the capacity of the veterinary services to effectively contain the current outbreak and to build the Central Veterinary Station's laboratory capacity to support these efforts through early detection of FMD and for verification of the success of the control measures.



Support to summer crops

To improve crop production on 200 cooperative farms, with 100 000 households in North and South Pyong'an, Kangwon and South Hamgyong provinces, FAO assisted in procuring urea fertilizer for summer crops during the 2007 cropping season, thus contributing to increasing food security levels.



Pine forest infestation

In spite of extreme efforts by the national authorities to use physical means to control the pine moth outbreak affecting more than 100 000 hectares of naturally regenerating indigenous coniferous forests and the collection of more than 300 tonnes of caterpillars this year (representing about 10% of the population), the field situation remained critical. FAO intervened by fielding an expert to evaluate the situation and propose tools

appropriate for the long-term management of the problem. The expert reported that due to the indiscriminate application of toxic broad-spectrum pesticides over the years, many natural predators such as birds, spiders, frogs, dragonflies, etc. were wiped out. An environmentally sound experimental product that breaks the life cycle using a sex pheromone was procured and applied on three pilot sites. It was also used in some indoor experiments to check its effectiveness. The remaining amount is being stored for use during the next mating season.



Alleviation of flood damage

Torrential rains in August 2007 followed by a typhoon in September caused severe damage to the agriculture sector throughout the country, with the greatest impact on the southern provinces that include key agricultural production regions, particularly of grains and rice. The summer season crops, normally harvested in September and October, account for some 87 percent of the country's annual production of cereals, the main staple crops. Estimates provided by MoA indicated that a total of 223 381 hectares of arable land cultivated to rice, maize and other crops was damaged. On average, domestic production accounts for 73 percent of total cereal consumption, suggesting that the damage will result in further aggravation of the country's food deficit. Furthermore, many of the farms lost their seed stocks of wheat and barley, as well as other agricultural inputs.

FAO is urgently assisting in the mitigation of the damage to arable land through improving cereal crop production in flood-affected areas by providing emergency agricultural inputs, including fertilizer and plastic sheeting, and by procuring and distributing barley seeds to replace destroyed seed stocks. This assistance will ensure early recovery of cereal production and thereby of farmers' ability to supplement winter crops.



FAO'S OBJECTIVES FOR THE FUTURE

Apart from instances of intensive precipitation, recent cropping seasons were productive, attributed to favourable climatic conditions, an abundance of water for irrigation and the availability of quality seeds and mineral fertilizers. In these circumstances, FAO's interventions have helped to establish sustainable and improved working methods across many sectors. However, financial support for the double cropping programme is only assured until early 2008.

The projects in 2007 supported the transition from emergency relief to long-term recovery programming by consolidating previous efforts and laying the groundwork for sound development of the agriculture and food security sectors. Projects that cover a longer timeframe are required for recovery and rehabilitation.

Activities for 2008 include a timely review of the agriculture sector and food security strategy with a view to strengthening the national seed sector, enhancing the double cropping programme and continuing horticultural production on cooperative farms and specialised fruit farms respectively. FAO in 2008 is also hoping to strengthen the recovery of both the fishery and livestock sub-sectors, support the formulation of a national forest protection policy and strategy, manage watershed and agroforestry activities on sloping lands and continue coordination of agricultural recovery and development programmes.

