

OA4. Effects of Super-Corn Development Program to increase Food Production in North Korea

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Objectives

This study summaries effects and outcomes of super-corn program that has been carried out in North Korea from 1998 to 2002.

Materials and Methods

The program started in 1998 and has two prime tasks: increase corn production by Suwon 19 and develop new hybrids for different ecological zones. International Corn Foundation(ICF) has supported the first task with seeds and fertilizers. Ministry of Science and Technology has supported the research. For 5yrs, Suwon 19 was planted in 5583 Cooperative Farms and a total of 27,000 expt. crosses were tested at 25 stations.

Results and Discussion

Suwon 19 yielded 20% higher than local cultivars and renamed as Kangnaingi 19. It covered 15% areas with 1000tons of annual seed production. For five yrs, 1.45 million tons increased with half m. tons annual in recent. For super-corn development research, 27,000 crosses were tested at 25 stations and 43 new hybrids were selected with ten very outstanding. Side effects are to adopt science based self-reliance farming, keep optimum density, increase hybrid purity, inter-plant soybean into corn fields, supply foods to farmers first, compete production among farms with incentives, decide production packages by farms, allow farming diversity, and pursue seed revolution. This project has played a catalytic role to increase food production with sustainable farming technology and minimizing hunger.

Table 1. Effects of super-corn program to increase corn production and farming system changes in North Korea

Year	Production (1000tons)	No. of testing			Remarks
		Co. Farms	Stations	Crosses	
1998	50	83	12	3,000	Optimum density(50%), transplanting(100%), hybrid purity(75%)
1999	150	1,000	18	6,000	Soybean inter-planting, direct sowing(10%), op. density(80%), hybrid purity(85%), foods first to farmers, suggested science based agriculture
2000	200	1,500	22	8,000	Soybean inter-planting(100,000ha), hybrid purity(95%), direct sowing(50%), compete among farms with bonus
2001	550	1,500	25	7,000	Soybean inter-planting(150,000ha), direct sowing (70%), nation-wide farm competition with bonus
2002	500	1,500	25	4,000	Soybean inter-planting(150,000ha), optimum density (90%), direct sowing(80%), farm competition
Total	1,450	5,583	102	27,000	Stable and sustainable farmings, competition for food production among cooperative farms

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