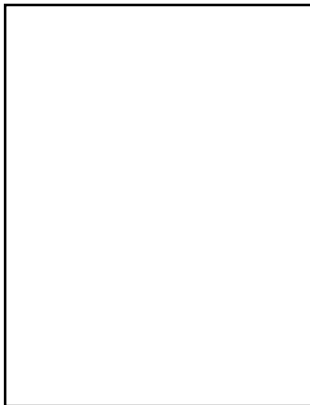


Rural industrialization through science and technology

Hyung Sup Choi

Rural industrialization is an effective way to achieve a balanced development of the rural and the urban, or the agricultural and the manufacturing, sectors of a nation's economy. This article describes the role of technology in the rural industrialization of developing countries. It uses a number of Korean examples, along with one from the USA, to illustrate and draw valid conclusions about the effectiveness of this role.



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Introduction

Since 1962, Korea has pushed its Economic Development Plans steadily forward under the leadership of the government, and has achieved a high growth rate for its national economy. Korea has passed the stage of a developing economy. The average annual GNP growth rate for the first Five-Year Economic Development Plan period (1962-1966) was about 7.8 per cent, while in the second Five-Year Plan period (1967-1971), the GNP grew at an average rate of 10.5 per cent. During the third period (1972-1976), the average GNP growth rate exceeded the estimated target of 8.6 per cent and recorded about 12 per cent.

Yet an examination of the high rate of economic growth by industrial sectors reveals considerable weaknesses in the economic structure. From 1962 to 1973, the mining and manufacturing industry grew at an average rate of 18.2 per cent, but the primary sector of agriculture and fishery experienced only a 3.8 per cent

growth rate. This difference reflects a historical concentration of economic development on the secondary sector and a strong pursuit of rapid industrialization.

The relative backwardness of the primary sector had resulted in a weakening of the economic base of rural communities and had limited the growth of the entire economy. In other words, by following an industrialization-oriented economic policy, the tertiary and urban sectors experienced high rates of growth, but the social structure of the agricultural and rural economy remained unchanged and even stagnated. This backwardness aggravated inter-industry imbalances and inter-regional differences and finally affected the whole economy.

Considerable gaps had developed between rural and urban areas, in terms of income levels, living standards, social environments and attitudes. These differences brought about rapid migration of the rural population to cities, leading to overcrowding and other problems in urban areas. While the labour force in rural