

CHINESE DEVELOPMENT STRATEGIES AFTER MAO

in Historical Perspective, *md*

by

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## INTRODUCTION

In 1949 China faced the complicated task of restoring and rehabilitating its war-torn, inflation-ridden economy. Given China's backwardness and enormous population this job would prove to be an extremely difficult one. Certain questions had to be answered with regard to the objectives of industrialization in China and what specific plans should be adopted to achieve these goals. The urge for modernization in China was reinforced by the pressures of population. And as China has come into contact with the more advanced countries, through whatever means, the regime has become conscious of the fact that there is a link between modernization and the welfare of the country's population.

Traditionally, the Chinese have viewed their country as a world in itself and felt little need for outside contacts. This was primarily due to the fact that China's land could provide almost all the resources required to sustain life. This self-reliance ideology continued under the Communists and has affected much of China's development through the 1960's.

In the late 1970's and early 1980's China began a serious program for modernization based upon past experiences, actual conditions in the People's Republic, and the country's potential for the future. This paper examines China's development strategies and their results from 1949 to 1981, discusses China's latest blueprint for modernization, and analyzes its appropriateness for the modernization of China.

## STATEMENT OF OBJECTIVES

The purpose of this paper is to delineate China's post-Mao strategies for development in historical perspective and to analyze the

appropriateness of China's latest plan. More specifically, I will:

- 1) discuss China's development strategies and their results from 1949 to 1976.
- 2) discuss the changes in economic development strategies that occurred in the immediate post-Mao period and the subsequent readjustment that was necessary.
- 3) present China's latest blueprint for modernization.
- 4) discuss the importance of the development of a socialist spiritual civilization in order to ensure that modernization occurs along a desirable path.
- 5) explore China's population growth policies and their role in modernization.
- 6) discuss the changes made in foreign trade policy and their implications for achievement of modernization goals.
- 7) explore changes in educational, scientific, and technical policies in relation to growth.
- 8) discuss industrial and agricultural growth in China and their importance in modernization.
- 9) discuss the possibility that the Chinese leadership has finally designed a program best suited for the modernization of the People's Republic.

#### PLAN OF THE PAPER

The paper consists of an examination of Chinese economic development strategies from 1949 to the present and a conclusion concerning the appropriateness of the latest plan for future development. The beginning of the paper will be a discussion of the history of economic strategies and activity from 1949 to 1976. This will lead into the immediate post-Mao period and the changes in development strategies that the new leadership brought. The effects of the new policies will be delineated next, after which will be a discussion of China's latest strategy for development. This section of the paper will include discussions concerning the socialist spiritual ideology and population

growth strategies which are deemed necessary components of the modernization plan. In addition, the role of foreign trade, education, science, and technology, agriculture and industry will be presented. In conclusion, there will be a discussion of the appropriateness of the new modernization scheme.

#### LIMITATIONS

There was one major limitation encountered in writing the following report. This involves the availability, consistency, and reliability of statistics. Prior to 1978 very few statistics on the Chinese economy were available. From 1961-1964, following the failure of the Great Leap Forward, statistics for the economy virtually disappeared. During 1965 and 1966 statistics were fragmentary and then again during the 1967-1970 period they disappeared as a result of the Cultural Revolution. From 1970-1978 statistics were a little more available, but remained fragmentary. This illustrates a tendency to withhold unfavorable information, publishing only statistics that showed successful development.

In 1979, for the first time in two decades, China released overall statistics on key aspects of the economy. Since then figures have been released on a gradual basis. Interpretation of these statistics is very difficult due to differences between Chinese and Western statistical practices. This indicates that there are uncertainties regarding their accuracy. It is true that the statistics provide important data on the Chinese economy, but they should be used with reservation.

The general consensus of economists is that:<sup>1</sup>

- 1) for the 1952-1957 period official statistics are generally re-

liable and consistent, but during the Great Leap Forward (1958-1960) the statistics were highly inflated;

- 2) there was incomplete coverage in the agricultural sector from 1950 to 1952 causing an understatement in figures for the period and an overstatement of growth occurring in later years;
- 3) in the industrial sector double counting occurred causing inflated aggregate data. In addition, the pricing system inflated output value and, consequently, overstated growth; and
- 4) official GNP growth figures are overstated due to the above biases.

Although Chinese and Western statistical practices may differ slightly, causing variations in published data, there is agreement concerning the progress China has made since 1949. This note on statistics is not implying that the accuracy of the following data is misleading. It is not. The differences, in general, were slight. The purpose of these remarks is to explain any differences the reader might observe due to previous research.

In this paper Western statistics were used due to the fact that they were more available, except for figures from the Beijing Review as recorded in the endnotes.

## ECONOMIC BACKGROUND - 1949-1976

## THE STATE OF THE ECONOMY IN 1949

The traditional economy was a dual economy with a small commercial sector which gained its lifeblood from the agricultural sector. In this respect market elements were combined with subsistence elements. Rural areas located near urban areas were closely involved in the market network. At the other extreme were remote regions with little access to transport systems and were, therefore, only slightly involved with the market. The country was thus characterized by a complex structure of local, intermediate, and regional markets. This caused fluctuating scarcity and differing prices between localities with the result of local famines.<sup>2</sup>

Beginning with the civil war in 1927 growth began to stagnate. Agricultural output declined largely due to the military drafting and to the enormous population movements from rural areas to urban areas. Industrial development was hampered by the inability to unify the country and bring an end to civil conflict. In addition, following the Japanese surrender in 1945, the Russians dismantled the most advanced industrial plants (about 50 percent of capacity) which also contributed to the decline in industrial output. The distribution and transportation systems had been destroyed making it much more difficult to distribute the smaller quantity of goods.<sup>3</sup>

The war also led to chronic inflation, an unstable monetary system, and large budget deficits (primarily financed by new notes which led to hyperinflation) in the post-1945 period.<sup>4</sup>

Inflation in the economy was spurred by the concomitant existence

of shrinking production and rising government expenditures. Inappropriate monetary policies led to demand-pull inflation. Money began losing its purchasing power as inflation continued to exist and hyperinflation set in. The upshot was an increase in barter transactions.<sup>5</sup>

In 1949, then, the economy that the People's Republic inherited was characterized by backwardness, low labor productivity, low savings and investment rates, illiteracy, and widespread poverty. The government determined that the most critical problems were backwardness, population pressures, and low labor productivity.

As a consequence of their situation the Chinese began to recognize two basic developments in 1949. One problem involved the relationship between population growth and food supply growth. The other development involves the beginnings of industrialization. Incomes were extremely low which led to investment funds unable to cover the depreciation of the nation's capital. These pressures resulted in the realization that modernization was required in order to improve conditions in the economy. In order to initiate the necessary changes some methods needed to be adopted to initiate growth over an immense geographical area and to strengthen the power of the government.<sup>7</sup>

The most urgent short-term tasks were to restore lost production and distribution capacity and to lay the groundwork for long-run industrialization. It was also deemed necessary to undergo institutional reform in order to obtain the maximum degree of Communist Party authority over the distribution of resources. These formed the basis for policymaking decisions in the ensuing years.<sup>8</sup>

## DEVELOPMENT FROM 1949 TO 1976

Since 1949 China has made significant progress although the path has been very erratic. The years from 1949-1952 were ones of recovery and rehabilitation. Immediately after the new leadership obtained power the private sector was seized. All financial institutions, industrial and agricultural operations, communication and transportation systems, and all other privately owned wholesale and retail companies were placed under government control. Each of these were then owned exclusively by the government or owned and managed jointly by the private sector and the government sector. Following this change output increased and efficiency in the distribution of goods and services improved.<sup>9</sup>

Economic stability also had to be restored and inflation slowed. Attempts to achieve these goals were made by controlling prices of all commodities and wages and rationing consumption goods. In this manner the government controlled all resources and manpower similar to the Soviet system of planning. The National Budget Administration consolidated all other budgets and government deficits were curtailed.<sup>10</sup>

Beginning in 1949 the leadership engineered the land reform of 1949-1952. This was an attempt to stimulate agricultural development by substituting attitudinal and organizational changes for capital investment. It was also an attempt to gain the peasants' support of the Party. On June 23, 1950, during the Second Session of the National Committee of the Chinese People's Political Consultative Conference, Mao stated that the evolution of Communism in China had to go through three critical stages in which each step was a prerequisite



for succeeding stages of development. These stages, Mao determined, were civil war, land reform, and the realization of socialism. Therefore, the advent of socialism was dependent upon the success of the land reform program.<sup>11</sup>

To make land reform successful the Party felt they had to employ three strategies:<sup>12</sup>

- 1) In order to satisfy the peasants, the regime claimed that land reform was not to nationalize the land, but only to redistribute land to peasants from the landlords.
- 2) The regime had to accept the middle peasants as allies, otherwise the peasants would become isolated, contributing to the failure of land reform.
- 3) The land reform program required that only a part of the land rented out by the rich peasants would be redistributed.

Land reform was, therefore, a deceptive measure used to increase peasant support while beginning to nationalize agriculture.

Land reform, however, resulted in few gains for the agricultural sector. It did not improve per capita land holding nor increase the rate of capital formation in agriculture. Instead, it only caused new problems. First, by dividing the land into smaller holdings the reduced size of the average farm decreased the ability of the peasants to accumulate capital. Second, the division led to shortages and the uneven distribution of farm animals and equipment. Large numbers of animals were overworked and underfed which led to the death of many of them. Finally, redistribution increased consumption in rural areas, thus leaving less available for urban workers. Combined with the growing size of the urban labor force severe food crises developed in the cities. These problems led to further reform of the agrarian sector. In 1952 the collectivization process began.

With the Communist Party's increased control over the agricultural and industrial sectors the leadership began to develop a long run strategy designed to improve the performance of the economy. The 1952-1976 period can be divided into five phases of development:<sup>14</sup>

- 1) The Period of Fastest Growth (1952-1959)
- 2) The Great Depression (1959-1961)
- 3) New Economic Policy (1961-1965)
- 4) The Cultural Revolution (1966-1970)
- 5) The Revival of Growth with Trade (1970-1976)

#### The Period of Fastest Growth (1952-1959)

During the 1952-1959 period industrial and agricultural output grew extremely fast. The growth rate of production during this period was twice as great as the average 1952-1977 trend. At the same time State Budget Revenue increased at an average rate equal to three times the entire period (Table 1). This is illustrative, primarily, of the increased power of the State.<sup>15</sup>

With the increased control by the government, the capture of Lenin's "commanding heights" in the economy, and the fact that agricultural output and industrial output had returned to the best pre-1949 levels, the authorities came to believe that the country was ready for an industrialization drive, rapid economic development, and structural transformation. Despite the importance of agriculture the Chinese placed greater emphasis upon industry, commerce, and transport in the general economic plan. The reason for this can be attributed in large part to the Sino-Soviet alliances that were drawn up at the inception of the People's Republic. Party Chairman Mao Tse-tung felt that communism and capitalism were two mutually exclusive and hostile economic camps and, therefore, he advocated a "lean-to-one-side" policy in support of the Soviets.<sup>16</sup>

Table 1: Rates of Growth of Key Economic Indicators, selected periods, 1952-1975 (percent per annum)

	I 1952-59	II 1959-61	IIIA 1961-75	IIIB 1965-70	IV 1970-75	1952-75
Industrial Output	20.52	-21.6	16.32	9.5	8.79	10.51
Grain Output	4.44	-14.44	5.92	3.56	2.51	2.01- 2.37
Total Trade	13.62	-16.61	5.49	-1.19	12.1	5.57
State Budget Revenue	17.46	-16.45	5.76	4.39	4.58	6.71
GNP	6.69	-12.4	13.28	6.08	6.43	5.79
Gross Investment	24.37	-16.25	9.3	7.16	10.72	10.93
Population						1.9-2.15

SOURCE: Howe, Christopher. China's Economy, A Basic Guide. (New York: Basic Books, Inc., Publishers), 1978, p. xxii.

Working closely with the Russians, the Chinese formulated their first five-year plan (FFYP) for the period 1953-1957. The goals of the plan were to raise output per worker, equalize rural and urban living standards, improve communications, and to develop human capital. The development strategy designed to achieve these goals was formulated after the USSR model. The plan emphasized high rates of saving and investment; put first priority on heavy industry; promoted the use of capital intensive techniques for industry and labor intensive techniques for agriculture; utilized underemployed workers in State-run public works projects; and supported the export of agricultural products in order to fund the imports of industrial goods. The backbone of the plan emphasized industrial growth for which the Soviets supplied money and technical knowledge. Since the FFYP was not announced until mid-

1955 and negotiations with the Soviets were not complete until late 1953, most industrial growth from 1952-mid-1955 came about as the result of increased utilization of existing and rehabilitated facilities. Then, with two loans from the Soviets, totalling \$430 million and additional aid in the form of the transfer of completed plants and technicians, industrial growth was rapid.<sup>17</sup>

A major factor in industrial growth was the large labor force in this sector. Under the FFYP labor was recruited from the agrarian sector. Individuals were paid in both money and commodities based upon the type of job involved.<sup>18</sup>

However, while industrial output grew an average 20.52 percent per year from 1952-1959, agricultural growth was much slower (Table 1). Although the Chinese pursued a gradual approach to collectivization (it was not complete until 1960) in an attempt to avoid a feeling of suddenness and shock among peasants, there were significant social consequences of collectivization. Living standards were equalized in rural areas, but this does not mean that all farmers received equal incomes because some individuals were better farmers so these individuals earned more income. Collectivization did not significantly increase efficiency or productivity nor improve the land to population ratio. Distribution management and incentive difficulties also arose.<sup>19</sup>

In spite of these difficulties agricultural production rose slightly. However, the rate of growth was still less than the increase in the population growth rate. The most important factor was due to flood control and irrigation projects. Even in this area success waned when repairs and maintenance slackened. The rest of agricultural improvement

can be attributed to improvements in the use of tractors, fertilizers, draft animals, and shifts towards crops that are labor intensive and have high yields per unit of land.<sup>20</sup>

By mid-1955 Party Chairman Mao realized the economy was not progressing along a desirable path. He reorganized the plans and began to emphasize the agrarian sector along with heavy industry. This change in strategy deviated from the Soviet model. In addition, the new policy also stressed egalitarian income distribution. Mao realized that agriculture plays a strategic role in such a backward and populated country. Farm production had to be increased to keep pace with population growth. Industrialization could not be the sole initiator of growth because a larger urban labor force with a higher income leads to an increased demand for food. In addition, agriculture was a major supplier of raw materials to industry. Finally, a surplus had to be generated in the agrarian sector in order to purchase capital goods. Mao was convinced that it was possible to increase agricultural and industrial production at the same time. Therefore, he initiated the Great Leap Forward Movement in 1958. The Great Leap was intended to expand agriculture and factory output and small scale production. The idea relied upon changes in ownership, organization and a psychological transformation of the worker's motives for working. It was hoped that the employment situation would improve, that resources would be used more efficiently and effectively, and that the gap between the industrial and agricultural sectors would be narrowed.<sup>21</sup>

In an attempt to absorb surplus labor approximately 100 million workers were given jobs building water conservation projects. Furthermore, millions of small scale plants (backyard furnaces) were built throughout the country which provided work for an additional 60 million people using traditional production techniques. This caused shortages in the agrarian sector so communes were established and women entered the labor force in rural areas. At the time official reports indicated an increase in industrial and agricultural output. It was later learned that these initial figures were exaggerated.<sup>22</sup> The overall strategy of the FFYP was followed successfully, with temporary deviations, until 1958.

#### The Great Depression (1959-1961)

The effects of the Great Leap Forward movement were, in fact, more detrimental than originally thought. The small plants, more often than not, produced unusable products at excessive costs. Quantity was substituted for quality. These small plants also diverted available resources from modern industry, causing output in this sector to decline.

In the agricultural arena losses were even more acute. In the face of reported growth in agricultural output Mao promoted a new policy of "plant less and reap more." This involved decreasing the amount of sown acreage, but increasing output per acre. By the time it was discovered that the initial reports were false the damage had been done. Output also declined due to the lack of peasant initiative which was caused by the inadequate pay system in communes. When bad weather appeared in 1959, 1960, and 1961 agricultural output was further de-

pressed. The result was acute food shortages by 1960 causing famine. This necessitated the import of grains.<sup>23</sup>

Because of the link between the agricultural sector and the modern industrial sector the decline spilled over into the urban sector. Production in this area was slowed due to raw material shortages. This decline led to the cessation of new plant expansion and a depressed demand for investment goods by the consumer goods and agrarian sectors.<sup>24</sup>

All of these problems were complicated by the deterioration of relations between the Chinese and the Soviets. By mid-1960 the Soviets withdrew all their technicians and advisors from China. They left many projects unfinished. The concomitant decline in farm production and consumer goods output also affected export capability and reduced China's ability to finance capital goods imports.<sup>25</sup>

In sum, the 1959-1961 period saw many natural disasters that were very detrimental to the Chinese economy. When these were accompanied by the withdrawal of Soviet aid the result was food and consumer goods shortages, famine, unemployment, and reductions in foreign trade. Therefore, instead of being a "Great Leap Forward" a more accurate term might be "The Great Leap Backward."

#### New Economic Policy (1961-1965)

The 1961-1965 period was one of general economic recovery. Agricultural and industrial output showed gradual and steady increases after 1962. This could be attributed partially to good weather which was not evident in the 1959-1961 period. More important were the gains made due to changes in economic policies toward the peasant population.<sup>26</sup> The new stabilization policy emphasized agriculture as the first prior-

ity. The objectives of these new economic policies were general economic recovery and increased self-reliance.<sup>27</sup>

Low levels of agricultural output from 1959-1961 are blamed on two factors. The first factor was the bad weather that occurred. The second reason for low production involves restrictions placed upon peasant households. There was an egalitarian approach to income distribution and to the transfer of private property to communal ownership. In addition, there were drastic changes in family life and there were significant problems encountered by commune management. All of these factors had a negative impact upon agricultural output during the Great Depression.<sup>28</sup>

However, changes occurred in 1962 which altered the peasant's lifestyle. Not only was the weather better, but agricultural policy changes led to increased output. First of all, the communes were split so that the size of each was reduced. In these new communes control was placed in the hands of the lower production units. Peasants were also allowed to engage in sideline occupations in order to augment family income. There was a gradual revitalization of peasant incentives including an increase in the size of private plots, an increase in the number of free markets, and an increase in the number of small enterprises with sole responsibility for profits and losses while output quotas on the household level were fixed.<sup>29</sup>

The immediate results of the new stabilization policy were a rapid expansion of fertilizer production and other modern inputs for agriculture. At the same time oil and petroleum industries were developed to complete self-sufficiency and there was an attempt to achieve balanced industrial growth. This required a de-emphasis on heavy industry,



in contrast to earlier periods. Both light and heavy industrial development were to be a function of agricultural growth. By 1963 agricultural output had risen to levels reached in 1957 and Soviet loans from the 1950's had been repaid. By 1965 agricultural output matched that of 1958. Growth continued through the 1967 harvest, thus providing a favorable environment for growth in non-agricultural sectors.<sup>30</sup>

On this foundation the "walking on two legs" policy was modified as more modern technologies were brought on the scene. In industry less emphasis was placed upon iron and steel and more attention was given to light industry and chemical fertilizer production.<sup>31</sup>

All of this growth took place following Soviet withdrawal, successive droughts, and few available investment funds brought about by stagnant production. Perhaps the most impressive fact about this growth was that it occurred in the midst of an ideological break with the Left.<sup>32</sup>

In industry, President Liu Shao-ch'i backed an industrial charter designed to place more power in managerial hands, to use profitability figures to indicate successful factory performance, to encourage wage differentials through incentive programs, and to improve material incentives in the agrarian sector.<sup>33</sup>

The pursuance of these objectives led to much opposition on all levels making political disagreements apparent. The struggle between the two policy lines was evident throughout the 1960-1965 period. Many economic planners and political figures felt that there existed an overemphasis upon material incentives. These individuals were deter-

mined to place China on an alternate path where the socialist man prevailed.<sup>34</sup>

In response to these difficulties Mao Tse-tung launched the Socialist Education Movement (1964) in an attempt to promote production through moral and ideological pressures. This movement never really evoked the response Mao desired and by mid-1966 Mao felt the state of the economy had improved to the degree that he could begin to campaign against his adversaries in the Party and State Administration. Mao, therefore, appointed Chen Boda to lead the Cultural Revolution.<sup>35</sup>

#### The Cultural Revolution (1966-1970)

The Cultural Revolution was essentially a power struggle, a political and ideological movement, that restated Mao's beliefs about the relationship between revolutions and raising productivity. Mao and his supporters objected to Liu Shao-ch'i's policy because they felt the policies would not establish the preconditions for development of the Socialist Man. The followers of the Maoist doctrine even went so far as to predict a shift towards capitalism.<sup>36</sup>

Mao took a new look at the relationship between the forces and relations of production and between the economic base and ideological superstructure. Mao felt that the conclusions drawn by Marx were applicable only to capitalist societies. Therefore, Mao concluded that in a country like China with such a backward economy a revolution begins in the superstructure which would push the productive forces forward causing a revolution. A cultural revolution, then, precedes a social revolution. This, Mao felt, was necessary to the process of socialist transition. In this manner the traditional Marxist view is

altered. Changes in ideas lag behind changes in material forces and a revolutionary process is necessary to bring them back into line.<sup>37</sup>

Officially, the goal of the Cultural Revolution was the "elimination of revisionism," because Mao believed it would change the course of development, thus inhibiting the achievement of the final goal of the Communist Revolution. In order to promote the socialist man ideology and the elimination of class differentiation there were major changes in the education system. Intellectuals were traditionally attributed a high status in China, but during the Cultural Revolution they were subordinated and placed at the bottom of the new social order. Colleges prevented individuals who were sons or daughters of these purged intellectuals to enroll and, instead, favored children of farmers, workers, and soldiers.<sup>38</sup>

Because of these restrictions China suffered significant losses of engineers and scientists. This was a great setback to technical advance and the quality of education did not recover until the mid 1970's.<sup>39</sup>

The leadership was anxious to keep the revolution out of factories and agriculture. This policy was successful with regard to the agrarian sector, but not in the industrial sector. The years 1967 and 1968 witnessed growth in agricultural output. However, the industrial, transport, and trade sectors were significantly affected in an adverse way. Much time was spent engaged in revolutionary activities which interrupted productivity. Freight space on trains was used for military purposes which meant that large quantities of raw materials and equipment was left by the side of the railroad. This cre-

ated raw materials shortages which led to a decline in production. The fall in industrial production combined with a disrupted transport system caused exports and imports to decrease in 1967 and 1968.<sup>40</sup>

The effects of the Cultural Revolution had subsided by 1969 and the economy was pointed forward again. In 1968 and 1969 agricultural output was lower than in 1967, but this was primarily due to bad weather. In 1970 the harvest was good—even better than 1967—and industrial production had also recovered.<sup>41</sup>

Following this recovery China was again ready for another industrialization drive. By this time many scientists and administrators who had been purged during the Cultural Revolution had regained jobs they previously lost. It was also decided by the Party leaders that future growth and development in China would follow Maoist doctrines.

#### The Revival of Growth with Trade (1970-1976)

Upon recovery from the Cultural Revolution the People's Republic was again carried forward by an expansionary momentum. Agricultural production had increased beyond levels set in 1970. However, not surprisingly, industrial growth and expansion in foreign trade was much more pronounced. Following the death of Lin Biao in 1971 the leadership reevaluated development policies which led to a significant improvement in economic development concerns in China. The altered policies emphasized a rise in investment spending. This included extensive orders for imported industrial plants from Western Europe, Japan, and the United States beginning in 1974.<sup>42</sup>

When examining overall growth rates in the Chinese economy it seems as if development in China has been very impressive since 1949.

From 1952 to 1977 the country's gross national product nearly quadrupled, increasing from 108 billion dollars to 433 billion dollars.<sup>43</sup>

The average annual growth rate of nominal GNP was 5.7 percent. It was felt by the leadership that China had experienced major accomplishments since the inception of the People's Republic. With respect to long-term rates of growth the figures were also impressive. Furthermore, output was distributed in an egalitarian manner and the Chinese had avoided excessive foreign debt since 1960. Finally, unemployment had been kept low, urbanization had been controlled (by sending 10-20 million individuals to rural areas), the rural arena was ignored to a degree, and inflation had not been extremely debilitating. From 1966-1975 the nation experienced a 6.17 percent average growth rate in GNP, but there was no growth in 1976.

Despite these gains China was still left with unresolved problems in the early 1970's. The most fundamental of these rested in the agricultural output lag relative to growing needs. Agricultural productivity rates remained much lower than industrial productivity rates. This was combined with the failure to achieve any significant increase in the productivity of industrial labor. Ever since 1958 increases in industrial output had been achieved by relying on more manpower. Industrial labor was used inefficiently. Many industries required modernization or else industrial growth could be severely stunted. There was a large amount of underemployment and overt unemployment was on the rise. Another problem stemmed from dissatisfaction with the low standard of living.<sup>45</sup>

In 1974-1975 Premier Chou En-Lai's "Four Modernizations" plan be-

gan to unfold. An essential part of this scheme involved an expansion of foreign trade. It also urged a reversion back towards central planning and a reemphasis on education. Much controversy surrounded Chou's plan. Many felt that it would lead to the rapid deterioration of the economy.<sup>46</sup>

Political disruptions that existed in the late 1960's and early 1970's have caused low growth rates and setbacks to development. In addition, planning and management inefficiencies had a negative effect upon growth due to bottlenecks and shortages.<sup>47</sup>

In September 1976 Mao Tse-tung died and signs of new economic policies were soon evident. Many of the past economic problems and inadequacies were blamed on the Gang of Four (all of whom were quickly identified following Mao's demise). It was felt that with the apprehension of these saboteurs a clearer path for the future could be designed.<sup>48</sup>

By 1977 the new Party Chairman Hua Guofeng had laid a new framework for development. This consisted of a shift away from the Soviet style of centralized control evident in the 1950's. Accompanying this was a modification of the military role. The policies encouraged were similar to those promoted by Chou and Teng in the early 1970's. Emphasis was on agricultural growth, then light industry, and finally, heavy industry. Furthermore, measures to limit population growth were adopted. Technological development required more skilled labor and this necessitated a more positive policy towards education and human resource development. The authorities realized that in order to get the most effort from the workforce there needed to be clearer incen-

tive policies.<sup>49</sup>

None of the above policies are new. Previously, they have aided China's economic development and were therefore seen as desirable. In order to promote modernization it was deemed necessary to raise the level of agricultural and industrial output. The new leadership believed this required central planning, human resource development, foreign trade, improved incentive programs, and a reduction in the population growth rate. It was thought by the Communist Party leaders that these new ideals contributed to rapid growth in 1977 and 1978.<sup>50</sup>

#### THE POST-MAO PERIOD

Mao Tse-tung dominated Chinese politics for more than 25 years. Upon his death the new leadership had to decide whether to continue following Maoist ideology or alter the strategies for modernization.

The post-Mao regime tried to redirect the nation's energies in a more efficient and effective manner so that modernization might be easier to pursue and attain. The leadership did not attempt to completely revise the system and eliminate Maoist characteristics. Instead, new policies were formulated within the framework of the inherited system. The new campaign was an attempt to "reorient the entire nation toward new goals, to new modes of operation, to new ways of thinking."<sup>51</sup>

#### THE IMMEDIATE POST-MAO PERIOD (1977-1978)

The new leadership took a more pragmatic view of China beginning in 1977. Attention was not only focused on the immediate situation, but even more, it was focused upon the country's apparent inability to

find solutions to certain basic, long-term, structural economic problems which, if they remained unresolved, would most likely cause slower growth and possibly lead to economic crises.<sup>52</sup> There was a shift towards economics controlling policies rather than politics determining policies. There was also less emphasis upon revolutionary practices and egalitarianism.

Despite differences between Party Chairman and Premier Hua Guofeng and Vice Premier Teng Hsiao-ping the prevailing view in 1977 and 1978 was that China's economic difficulties were caused by problems that required major policy changes and not just surface changes. The main architect of the new plans was Teng who had worked closely with Chou En-lai prior to Chou's death in 1976.<sup>53</sup>

China's leaders at this time showed more willingness than any past leaders to openly acknowledge inherent weaknesses and post-Mao leaders were convinced that major changes were necessary in not only economic policies, but also the country's economic structure.<sup>54</sup>

The Party authorities felt it would be more difficult, if not impossible to keep attempting to realize large production increases by primarily adding labor and capital. Therefore, one of the top priorities was to raise productivity through policy changes affecting incentive programs, management practices and the economic system as a whole. Few innovations for more efficient production techniques had been implemented since the 1950's. In addition, the new leadership needed to restore a sense of order to the economy and in the polity. It was deemed necessary to prevent any recurring factional arguments, political conflicts, and social instabilities because it was these things that



played a significant role in the crippling of China's economy during Mao's last days.<sup>55</sup>

In February, 1978 Hua presented his "Report of the Work of the Government." According to A. Doak Barnett in China's Economy in Global Perspective, it was the most important and specific statement concerning long-term development goals and policies made since the 1950's. It presented guidelines for growth from 1978 to the end of the century.<sup>56</sup>

Initially, investment in capital construction was to be stepped up substantially during the 1978-1985 period. Total investment for this period was to equal the total spent during the previous 28 years. A goal of 4.5 percent per annum growth in total agricultural output along with the intended objective of industrial growth in excess of 10.0 percent per annum was set. These gains were to lead to an average annual increase in total GNP of approximately 8.0-9.0 percent.<sup>57</sup>

The major share of State investment was given to industry in order to promote expansion of the basic industries and to develop the transportation systems. Top priority was given to steel in the industrial sector and to grain in the agrarian sector. Emphasis on the development of light industry was necessary also in order to raise the living standards of peasants and workers as promised. Finally, the new policies included a plan to dramatically reduce the population growth rate. Within three years it was hoped that this rate would be under 1.0 percent per year.<sup>58</sup>

Within the industrial sector there was a movement towards the establishment of large scale specialized companies in the petroleum and the agricultural machine industries. This reflected the recognized need

for greater specialization throughout the economy in order to raise technical levels and improve operational efficiency. The new "specialized" firms seemed to be modeled after existing large-scale plants in the West. The Chinese today have become more open to the experiences of many other countries and are tending to take advantage of the knowledge of these more developed countries.<sup>59</sup>

Within the agricultural sector changes were made such that authority was more decentralized by placing a larger degree of power in the hands of production teams. This allowed the teams to "run their own affairs" and allowed for more democracy in decision-making.<sup>60</sup>

Two other important changes should be noted. The Communist Party authorities felt there was a need for improved financial control over, and direction of, the economy, and a need for a more comprehensive and effective judicial system to handle economic transactions and disputes that resulted from policy changes. This led to a new role for the banking system which was then expected to use credit and loan policies to supervise transactions in the economy. This included monitoring performance instead of just supplying wage and capital construction funds as requested.<sup>61</sup> The role was similar to the Soviet banking system's role in planning.

Economic growth had been inhibited due to insufficient numbers of qualified scientists and technicians. This led to policy shifts that reinstated intellectuals and experts that had been purged during the Cultural Revolution. Since 1977 and 1978 the status of these individuals has risen dramatically. Changes in the educational system led to more quality training so that labor was better able to meet man-

power requirements necessary to achieve modernization goals. Priority was given to higher education rather than primary and secondary education. The educational administration was centralized and the administration designed a more complex curricula and longer training courses at all levels. The goal is to achieve a universal ten-year primary and secondary education in urban areas and a universal eight-year education program in rural areas by 1985.<sup>62</sup>

The leaders realized it would take time to feel the effects of these policies, but as Hua declared in 1978,

"To catch up quickly with the dramatic changes in modern science and technology and rapidly transform our backwardness in these fields are important and indispensable steps for speedy development of our economy and the strengthening of our national defense. This is a matter to which our whole Party, army, and nation must give close attention."<sup>63</sup>

Barnett states that, in retrospect, the new policies had a tendency to cause development that was too rapid. This illustrated that the political authorities had again failed to completely sort out the country's problems and set the right priorities. The leaders had set the highest goals in almost all areas without correctly assessing the resources and skills required to attain the objectives.<sup>64</sup>

China had transformed its economy to one with more flexible and decentralized control. There was a transition from extensiveness to intensiveness in production methods. In addition, there was a move towards a consumption-oriented economy where personal desires were allowed a larger role. The market was given a new role and the economy moved towards "market socialism."<sup>65</sup>

According to Barnett, to the extent the new policies

"...increase the link between economic decision making and market

forces; result in more realistic pricing; create new incentives for managers, workers, and peasants; introduce new elements of economic competition...;...broaden financial instead of bureaucratic controls...;...increase the importance of cost accounting, quality control, and profit making; generally strengthen the role of law in economic affairs; promote increased specialization; and encourage more "scientific" management..."<sup>66</sup>

then China will be the beneficiary of increased efficiency and productivity, thus experiencing advances in the country's development. All of this hinges upon the ability of the leaders to more effectively manage the economy than in the past.<sup>67</sup>

#### READJUSTMENT (1979-1981)

Towards the end of 1978 the Chinese economy was in an overheated state and was suffering from numerous bottlenecks and shortages. Despite the fact that the economy recovered during the immediate post-Mao period the growth had apparently occurred too rapidly. The leadership openly recognized the unrealistic goals set forth in the 1978 plan and modifications were made which reduced emphasis on long-run objectives and concentrated on the immediate future. The general consensus concerning the 1979 NPC statements was that they were much more realistic and were more appropriate for the long-run development of the economy.<sup>68</sup>

The fundamental problem in the Chinese economy at this time was that agricultural expansion could not keep up with demands made by industry and the growing population. Further problems included poor quality and insufficient quantities of light industrial goods and consumer products. The weak links in industry (coal, petroleum, electric power, transportation, and communication) still lagged behind requirements for growth. There was a lack of coordination in the industrial

arena which inhibited growth. Priorities set were often inefficient because capital construction was undertaken in too many projects, many of which would not be used for years. Finally, there were problems in the infrastructure which reduced the incentive for workers and staff to make better use of labor, equipment, and financial resources.<sup>69</sup>

In order to solve these shortcomings the State Council set forth five general objectives for the 1979-1981 period:

- "1) To achieve a relative correspondence between the growth of grain production and other farm and sideline production on the one hand and that of population and of industry on the other.
- 2) To achieve a growth rate for the light and textile industries equal to or slightly greater than that of the heavy industry...
- 3) To alleviate the current tense situation in the fuel and power industries and the transport and communications services by increasing production and practicing economy.
- 4) To resolutely narrow the scope of capital construction, concentrate our forces on major projects, improve their quality, reduce costs and shorten construction projects.
- 5) To bring about, on the basis of rising production, a further increase in the average income of all peasants from the collectives, and in the average wage of all non-agricultural workers and staff."<sup>70</sup>

The new plans reduced investment in capital construction projects in the heavy industrial sector and increased investment in the agricultural and light industry sectors. According to Barnett, fewer funds were needed for these two sectors, but they produced more rapid results and better met the needs of the people. Barnett also stated that these new plans reflected a more accurate analysis of the quantity of available resources to be used for development purposes. Priorities were shifted such that agriculture was first, light industry second, and heavy industry last.<sup>71</sup>

Despite the priority given to agriculture the new policies called for slowing down the rate of mechanization in agriculture. It was felt that rapid introduction of machinery would only create more problems in the development of the sector. In addition, agricultural prices were raised in order to provide more income for peasants. This policy, it was believed, would hurt very few urban workers and staff, if any. This increased the incentive for peasants to raise production. Incentives were also promoted by the decentralization of commune decision-making power. These policies were aided by increased scientific research in the agriculture area.<sup>72</sup>

Emphasis in the heavy industrial area was also reevaluated and stress was placed on those factors which were the weakest links in the development of industrial production. It was decided that this would help eliminate bottlenecks and shortages. Investment in steel was reduced and priority was shifted to building materials, transportation, coal and electric power. Plans now promoted development in projects that used more advanced technology, provided investment funds, produced quick results, reaped more profits and foreign exchange funds, and those which would compete more effectively in the international market. It was believed that if these policies were followed then past shortages that precluded full utilization of existing plants would be eliminated. In addition, infrastructure would be strengthened, a better base for future development would be built and more funds to finance import plans would be provided.<sup>73</sup>

Again efforts were focused upon eliminating illiteracy and providing better primary, secondary, and post-secondary educations. This

was to be accomplished by channeling increased funds to the education arena.<sup>74</sup>

In 1979 Beijing felt that the economy was showing signs of responding to the 1978 plan. The results of the new economic policies were slower growth than in 1977 and 1978, but even then, development remained fairly rapid. In nominal terms national income rose 7.0 percent. This was below both 1977 and 1978 increases, however. Gross industrial output increased 8.5 percent in 1979 while the agriculture sector achieved an 8.6 percent rise in gross output.<sup>72</sup> Both were above planned targets for the year, but fell below 1978 increases. However, the growth in the agricultural sector may not be real significant if a five-year average were used due to the fact that weather plays a major role in the agricultural sector.

Available statistics indicate that the revisions produced results, although not all those that were desired. For example, grain output registered a 9.0 percent increase (greater even than 1978). Oil-bearing crops output rose a substantial 23.3 percent. The large and medium-sized tractor stock grew by 20 percent, and hand tractors by 18 percent. Nevertheless, other crops did not fare quite so well. Cotton output growth was so low (1.8%) that it necessitated raw cotton imports. Sugar production increased a mere 1.9 percent.<sup>76</sup>

Progress was also made with respect to incentive systems and better responsiveness to consumer desires in both rural and urban areas. In the farming sector one indication of this was the increase in state purchase prices of farm products. This was accompanied by increased output in meat production and larger stocks of animals in the animal



husbandry industry. In industry response towards better incentive systems and satisfying consumer desires resulted in large increases in light industrial output. The most marked example of gains was in the consumer durables sector which was the most rapidly growing industrial sector in 1979. Output of durables such as bicycles, radios, sewing machines, and televisions registered increases of 18.1%, 18.2%, 20.8%, and 157.1%, respectively. This illustrated the movement towards a "consumer society" since there was increased output of those goods desired by the people. However, because output was so low previously, there was still room for substantial growth.<sup>77</sup>

Heavy industry grew at a slower rate as planned. The fuel and energy sector sustained the greatest slowdown (crude oil, 2.0%; coal, 2.8%; natural gas, 5.7%). Electric power grew more substantially—at a rate of 9.9%. This created a tight energy situation. Performance in other industries varied. Some machinery and equipment, chemicals, plastics, and chemical fertilizers grew relatively rapidly (10.0% to 20.0%) while other industries experienced negative growth rates. Growth can be attributed in part to new capacity that had been created during 1979, as well as to improved incentive systems.<sup>78</sup>

In late 1979 and early 1980 Chinese planners felt that readjustment was going to last more than the original target of three years. In 1980 the Party was still trying to design a plan for long-term economic development. A final blueprint was inhibited by confusion in the bureaucracy and differences of opinion between authorities.<sup>79</sup>

An important step for the Chinese economy was its opening to the world. The Chinese leadership recognized the importance of inter-



national cooperation in the process of modernization. Successful development has several key elements: an appropriate investment policy, and emphasis on civilian rather than military goals, adequately trained workers and staff, raising efficiency and productivity, and encouraging innovation.<sup>80</sup>

In 1980 the Chinese still faced many problems and difficulties which may require many revisions in policies over time. The leadership has the job of "setting realistic priorities, evolving sound policies, and accomodating conflicting interests; ...overcoming deep-rooting inertia and some inevitable opposition..." and serious shortages of capital, skills, and managerial experience. Over time, however, China's new pragmatic approach should facilitate development considerably.<sup>81</sup>

#### BLUEPRINT FOR MODERNIZATION

In 1982 the modernization of China was identified as the foremost priority at the present time. In September 1982 the 12th National Party Congress had met and discussed plans for socialist modernization. Once again the leadership believed the new policies were designed around a correct assessment of past mistakes, present conditions in the economy, and realistic expectations for the future.<sup>82</sup>

In the past the Chinese had attempted to follow many development designs which failed because the plans did not integrate all segments of the economy. Instead of overall progress the result was lopsided growth. It must be kept in mind that the national economy is an integrated whole. Consequently, the development of any national economy must coordinate targets of individual sectoral plans so that resources

meet needs. In addition, the overall scheme must ensure the mutual compatibility of individual targets so that an overall balance between resources and needs exists. The following modernization goals were set forth in 1982 while attempting to comply with the above conditions.<sup>83</sup>

#### The Central Task

The main goal set forth involves "the quadrupling of China's gross agricultural and industrial output value by the end of the century."<sup>84</sup> This ambitious goal necessitates an average annual increase in gross output value of 7.2 percent. The decade of the 1980's is to be used for the development of a solid framework for even more accelerated growth in the 1990's. The Chinese hope to make significant improvements in agriculture, transport and communication, and the energy industry. In addition, the plans call for a reorganization of industries, upgrading productivity and efficiency. These will be accompanied by the encouragement of increasing levels of science, technology, and education. The leadership feels that there are two important factors affecting the ability to achieve the economic objectives. The first involves the successful limitation of population growth and the second requires the building of a socialist spirit in the Chinese people.<sup>85</sup>

The authorities believe the successful achievement of goals will result in the movement of China into the front ranks of the world. Furthermore, individual incomes and living standards will increase, significantly improving the well-being of the population.<sup>86</sup>

#### The Socialist Ideology

Of crucial importance to the modernization of a Chinese socialist

society is building a solid socialist spiritual civilization. According to Maoist ideology the object was to ingrain communist ideas, ethics, and discipline upon the minds of the Chinese people. A fundamental characteristic of this Chinese approach was the preference for disregarding the use of markets. A market-oriented economy may be accompanied by a high degree of income inequality and often declining real incomes for the poorest individuals. Consequently, the Chinese adopted the philosophy that sustained economic development was not likely to occur without the simultaneous rise in income for all members of the society. It was believed by the government that this goal would be reached most effectively through a planned economic system. The ideology limited income disparities between the rural and urban sectors. It also minimized wage differentials in the urban sector and attempted to alleviate interregional inequalities.<sup>87</sup>

The Maoist value of equality of status was a matter of attitude, which means that, with a few exceptions, people are not to be judged as more or less worthy or valuable to society because they come from one region or another or because they engage in one occupation or another. The Maoist belief also states that the pursuit of common goals is only possible in the absence of serious social cleavages. Individualism is suppressed and the benefit of the public becomes very important. Each person's duty is to serve the people.

Up until Mao's death it was believed that this socialist ideology would aid in the achievement of Chinese modernization goals. People would feel the incentive to pull their weight in the modernization process because they could see that they would actually benefit, just

as everyone would.

During Mao's reign this ideology produced some positive effects, as seen by the regime. (These positive effects may be viewed as negative from the peasant's point of view due to the harshness of the policies and the masses that were killed as a result.) An example of a positive effect involves land reform. Without the selfless attitude of the people and a commitment to Maoism then it is doubtful that land reforms and campaigns against the bourgeoisie in the 1949-1952 period would have been carried out as easily. In addition, the Chinese achieved a great uniformity and an obedience to authority that allowed mass mobilization whenever the Party deemed it necessary for economic development. For example, this unity and commitment made it easier for the government to freeze wages for nearly twenty years, thus maintaining price stability and a high rate of capital formation.<sup>88</sup>

Mao's emphasis upon this socialist dogma also had negative effects. The Great Leap Forward and the Cultural Revolution, for instance, damaged the Chinese economy and nearly caused its collapse. The weakness in Maoist belief was its reliance upon revolutionary practices to achieve a more modernized state, according to Chu-Yuan Cheng in China's Economic Development: Growth and Structural Change.<sup>89</sup>

The death of Mao in 1976 ended the era of the Maoist ideology. The new approach to development was more pragmatic. Material incentives were revived. In the industrial arena greater efficiency, increased productivity and profits were promoted. Educational reforms were made which reinstated intellectuals as the importance of better training and scientific advances was recognized.<sup>90</sup>

Towards the end of 1980 campaigns to defame Maoism peaked. As people saw that a faith they had believed in, fought for, and made sacrifices for negated, the country fell into a "crisis of faith." A lack of respect for authority developed and people lowered their image of the Party. The leadership realized that complete demolition of Maoism would hurt the country more than if criticism subsided.<sup>91</sup> As a result, Cheng states, the Maoist ideology will never completely disappear and egalitarianism will remain ideal.<sup>92</sup> However, at the present time, with a movement towards market socialism some inequality may exist in order to improve the state of the economy.

#### Population Growth Policies

As is the case in most developing countries, China has a history of rapid population growth. Estimates are that China's present population is approximately 1.008 billion, constituting 22 percent of the world population.<sup>93</sup>

In 1949 the birth rate in China was estimated to have been 36.0 per thousand and the natural increase was 16.0 per thousand. The rate of natural increase rose constantly until 1965 when it reached 28.5 per thousand (Table 2). This occurred in large part as a result of the transfer of Western medicinal practices which substantially reduced the death rate. Other contributing factors were better nutrition, increased production, and improved transport and communication systems. World population growth rates had gathered worldwide attention and concern. China, in particular, received attention due to the magnitude of its initial population. Population policy has therefore become a strategic portion of China's overall development program.<sup>94</sup>

Table 2: Population Growth in China, selected years, 1949-1981

YEAR	TOTAL POPULATION (million)	BIRTH RATE (per 1000)	MORTALITY RATE (per 1000)	NATURAL GROWTH RATE (per 1000)
1949	541.67	36.0	20.0	16.0
1957	646.53	34.0	10.8	23.2
1965	725.38	38.1	9.6	28.5
1970	NA	33.6	7.6	26.0
1975	919.70	23.1	7.3	15.8
1979	970.92	17.9	6.2	11.7
1981	996.22	20.9	6.4	14.5

SOURCE: Ren Tao and Yue Bing. Beijing Review, "Population and Employment." March 28, 1983, p. 19.

There was interest in decreasing birth rates in the early 1950's, but it was politically a controversial subject and received a great deal of criticism. The issue was dropped for a few years. Then in the early 1960's efforts began again and have continued henceforth with only brief setbacks during the Cultural Revolution and in the immediate post-Mao period.<sup>95</sup>

The Chinese finally realized that, given the magnitude of their population growth rates, it would be impossible to achieve any degree of modernization without fertility limitations. The regime recognized that if rapid growth rates continued there would be grave implications for the economy unless population growth rates were slowed. The importance of this was magnified by the fact that the baby boom of the late 1950's and 1960's had resulted in an average of 13 million couples per year reaching marriageable age. (This explains part of the natural

increase that occurred from 1979-1981 in Table 2.) It was becoming more and more difficult to feed and employ the population as it became larger. Furthermore, if more food was required then a larger quantity of resources would be necessary to increase agricultural output. This would draw from potential growth in other sectors. Therefore, it can be seen that a continuation of rapid growth in the population would undermine the entire modernization blueprint.<sup>96</sup>

The Chinese are hoping to restrict population growth so that by the year 2000 China's population will be only 1.2 billion. They have developed their fertility program around this goal and it has, thus far been very effective, according to Chinese authorities.

The general program involves the advocacy of one child per family, controlling second births, and the elimination of further births for the next 20-30 years. In addition, the Chinese are making great attempts to reduce birth defects, use more scientific nursing methods, encourage later marriages, and encourage later child-bearing.<sup>97</sup>

The Chinese authorities feel that their family planning program has been successful so far and state that it is being accepted more and more as time passes. Most of the difficulty encountered in promoting the program is in rural areas, as reported by Ren Tao and Yue Bing in "Population and Employment" (Beijing Review, March 28, 1983). Tao and Bing say the reason for this is that the peasants have "outdated" ideas concerning the desire for many children. The people are now being taught that giving birth to fewer, healthier babies is important for the country's economic and social development and for the well-being of future generations.<sup>98</sup>

Questions can be raised regarding the "success" of the family planning program. The biggest argument that is raised in opposition to the reported success involves reports of female infanticide. The Chinese authorities tend to ignore this issue or act as if the reports are exaggerated.

Education on family planning is supplemented by economic penalties for multiple births. For a second birth wages are decreased by 10% for fourteen years and for each additional birth there is another 5% decrease. In addition, families can be denied extra housing space, be required to pay higher prices for food, lose wage bonuses, and have to pay for all medical services.<sup>99</sup>

On the other hand substantial benefits arise if a family has only one child. In some areas a subsidy of five yuan a month is provided for fourteen years or one may get fourteen years of free health services and free education from nursery school through secondary school, plus other benefits.<sup>100</sup>

Different practices are used to influence one-child families. Examples are double-contracting and the system of five guarantees. Double-contracting requires the worker to sign a contract guaranteeing his productivity rate and also his agreement to restrict his family to one child. The other system provides childless families, one-child families, and infirm older persons with food, fuel, schooling, clothing, and funeral expenses, all of free charge. This has relieved fears among the people and aided in the "success" of China's family planning program.<sup>101</sup>

The leaders attribute the "success" of China's program to the



meticulous and systematic guidance given to the people by the authorities and by peers. The program includes full-scale publicity campaigns to help encourage the people to follow the plan. Promotion is often seen on billboards that line the streets of Chinese cities. Fertility reduction is also promoted by the press and media, as it is by professional and amateur actors.

After examining both the socialist ideology and the population limitation policies it can be seen why the success of the modernization design is dependent upon the success of these two spheres. For without the achievement of targets in these areas, not only will progress in economic development merely be slowed, it could become severely handicapped.

#### Foreign Trade

Another important factor in economic development is foreign trade. China has traditionally been opposed to foreign trade because for centuries the people felt they had managed very well without it. China covers a large geographical area and is endowed with almost every resource necessary to sustain life. Therefore, a belief in self-sufficiency became a way of life.<sup>102</sup> However, by the 1950's the Chinese recognized that their country was not progressing compared to other foreign powers. They also realized that they were facing a major crisis involving population growth versus the ability to feed the population. In 1949 the economy was characterized by a labor-intensive technology, reductions in agricultural and industrial output, destruction of their transportation and distribution system, low per

capita income, and inflation. Leaders began to see that in order to spur growth of the kind desired they needed to take advantage of advances already made in other more modern countries--the division of labor and specialization across boundaries and by the transfer of more modern technologies into China.

In late 1950 trade relations with the United States declined as a result of the Korean War. The United States also embargoed U.S. exports to China. For more than twenty years Sino-American trade relations were virtually non-existent. China had to look elsewhere for aid.<sup>103</sup>

The leadership decided to follow the Soviet model for several reasons. It was readily available and had been tested in practice. In addition, the Chinese socialist economy precluded the adoption of the capitalist Japanese development model. Furthermore, China's leaders anticipated Soviet aid which led to the "lean-to-one-side" foreign policy prevalent in the 1950's.<sup>104</sup>

China, therefore, began trading with Russia under a tightly-knit Sino-Soviet alliance and according to a rather ambitious industrialization program. China imported, on a large scale, capital goods and military materials from the Soviets. They also received aid in the form of Russian technicians who came and helped to build up industry with Soviet knowledge. At this time there was no great opposition to trade.<sup>105</sup>

Capital goods and technical knowledge importation succeeded in stimulating significant gains in Chinese industry. However, as mentioned previously, in 1955 Mao altered the modernization process such

that the agricultural sector received more emphasis than industry. Mao felt that the Soviet growth plan was not very appropriate for China, given its massive population and backwardness; therefore, the approach to growth changed. By 1958 and 1959 disputes heightened due to ideological disagreements about economic development and there was a major split between the two powers. By 1960, during an agricultural crisis, the Russians withdrew all assistance.<sup>106</sup>

Following this split China turned inward and promoted "self-reliance." This meant that the Chinese would develop their economy with their own resources--human, material, and financial. Instead of 55 percent of its trade being with the Soviet Union, as in 1959, total foreign trade with the Russians fell to 2 percent in 1969. By the mid-1960's the Chinese began planning for an expansion in foreign trade. This was to take place with Japan and Western Europe except for grain imports which also came from Canada and Australia.<sup>107</sup>

During the Cultural Revolution the self-reliance practices reached their peak. Trade relations were strained due to the radicals in power. Domestic problems in 1967 caused China's failure to meet export contract demands.<sup>108</sup>

A change came in the early 1970's when Chou En-Lai, aided by other leaders in the Party, began to move forward in an attempt to expand China's foreign economic relations. However, these moves were stunted by top radicals. Then, in 1974, Teng Hsiao-Ping began to initiate subtle changes in policy. Teng maintained that self-reliance did not mean total rejection of foreign aid. Strong opposition again arose. Anonymous authorities declared that "we have firm faith in the strength of the masses of the people, and we are convinced that by maintaining

independence, keeping the initiative in our own hands and relying on our own efforts, we shall be able to rapidly develop our science and technology and change China's outlook."<sup>109</sup>

Ignoring the opposition, Teng began to formulate changes, recognizing that rapid modernization of the kind China desired would necessitate expansion in trade such that they would import Western machinery, equipment, technology and management knowledge from the advanced capitalist nations.<sup>110</sup> The radicals in power in 1976 rejected Teng's foreign trade policies and subsequent attacks on him resulted in his removal from office in April 1976. Total foreign trade then dropped.<sup>111</sup>

Following Mao's death Hua reinstated Teng and with the adoption of the country's "open door" policy foreign trade again picked up and produced immediate results. During 1977 many Chinese were sent abroad to learn more advanced techniques and also to investigate potential suppliers of imports. Simultaneously, Westerners were invited to China to brief businessmen on their products and services. Looking back, it appeared that 1977 only laid the foundation for the future.

In 1978 the Chinese activity in the international market boomed. Overall trade increased by 40 percent from approximately \$15 billion in 1977 to \$21 billion. Imports increased 56 percent and exports rose 26 percent.<sup>112</sup> This expansion also resulted in the largest trade deficit in China's history. The 1978 plan had caused development that was too rapid and the subsequent revisions led to a slowdown in trade.<sup>113</sup>

China intends to continue to increase imports of technology and equipment in the future in order to meet the needs of development. Most imports will be of a technical type while consumer goods importation will be reduced. At the same time China plans on increasing its

volume of exports. The country is aware that it can supply only a limited variety of products. Therefore, there are attempts to change the mix of exported commodities, to develop new varieties, and to enter new markets. The Chinese planners feel encouraged that China can accomplish the increase in exports due to the rising demand for consumer goods on the world market. The ability to expand exports is very important for China, since greater exports allow more possibilities for importing a larger volume of equipment and materials as needed to support the socialist modernization program.

Regardless of the fact that China has a low ratio of foreign trade to gross national product, foreign trade has unquestionably been, and will continue to be, an important factor in China's economic growth.

### Education, Science, and Technology

#### Education

In 1982, the 12th National Congress determined that education was the weakest link in the modernization program because of changes incurred during the Cultural Revolution. The Cultural Revolution was a rebellion against education which emphasized technical expertise and professionalism rather than politics. Mao opposed the class differentiation that this bred and therefore, many secondary, technical, and workers training schools were closed, along with agricultural middle schools and vocational schools during this period. This led to lower labor productivity and a less knowledgeable population despite the fact class differentiation was minimized. Raising the level of the population's education in China is a necessary step in the modernization process. Therefore, educational reform is concerned with in-

creasing the volume of scientific and technical university graduates and with tailoring the education of non-university-bound students to reflect their needs.<sup>114</sup>

The problems in education that exist were carefully studied by the government and as a result various measures to improve the educational system were developed. The overall design contains five areas of concern. First, the Chinese are attempting to accelerate higher education at several levels and in altered forms. Enrollments in colleges for professional training, regular universities, and post-graduate institutes are expected to rise. In addition, enrollments in different forms of education such as evening colleges, and correspondence, radios and TV universities are expected to increase. Overall enrollment in these institutions is expected to more than triple while the number of students will nearly quadruple (from 640,000 in 1982 to 2.37 million in 1987).<sup>115</sup>

Secondly, the structural form of secondary education must be altered. The ratio of academic middle schools to secondary vocational and technical schools is inappropriate. In order to meet the needs of the economy some of the senior middle schools are being converted into secondary vocational schools. The goal is to restrict the enrollment of academic schools to less than 60% of total senior middle school enrollment by 1987.<sup>116</sup>

The third area of concern involves raising the educational level of those individuals already in the workforce. This will be accomplished through the workplace by 1985. Those laborers who had not received a diploma from junior middle school will be given the equivalent education. One third of those who attained a junior middle school

education will be able to reach the senior middle school level of education. Finally, those with senior middle school status are being encouraged to obtain a college degree.<sup>117</sup>

Fourth, improvements need to be made in the countryside. Eighty percent of China's population resides in rural areas and therefore the failure to raise their level of education will have adverse effects upon modernization. There are two areas to be emphasized. One is to adjust primary education to the needs of the particular area. For example, some schools will teach the courses designated by the Ministry of Education while others will only teach Chinese, math, and the socialist ideology. The quality of teachers in this area must also be ensured. This requires that incentives be offered. At the same time, higher learning institutions are attempting to enroll more students from rural areas and are sending them back home upon graduation. The other area of attention involves increasing the number of students in vocational and technical schools to meet the development needs in agriculture, forestry, livestock breeding, sideline occupations, and fisheries.<sup>118</sup>

Finally, it is important to increase educational allocations in the State Budget. As of 1982 only 10% of the Budget was allocated to education. This is not enough given China's illiterate population. It is also too low to educate the number of high-level specialists needed in all areas of socialist construction. There will be a gradual increase on an annual basis, but the various localities are also encouraged to supplement those funds.<sup>119</sup>

The ability to improve the Chinese education system will have major effects upon the future growth of the country. Raising the total

population's educational level most likely will lead to increases in productivity through more appropriate and efficient use of resources. In addition, a more skilled labor force and a more knowledgeable scientific workforce will play an important role during the next two decades of modernization.

### Science and Technology

Since 1977-1978 there has been a significant change in policies involving science and technology. It has been difficult for the Chinese to accept, but now the people are facing up to their backwardness in these two areas and are recognizing that in the modern world science and technology are extremely important. Modernization of science and technology must necessarily precede a high degree of economic development. As a result, steps have been taken to rehabilitate research and training facilities which had been closed during the Cultural Revolution and scientists began to regain their lost status and were treated much better than in the previous decade.<sup>120</sup>

According to the Chinese the object of modernizing science and technology is to shift the entire economy to a more advanced technological state. The task is a difficult one due to the relative backwardness of the economy and its technology. This underdevelopment resulted from the lack of attention given to science, technology, and intellectuals. The key to modernization of science and technology will be largely influenced by the degree to which policies allow the people's intelligence and wisdom to come into play. The State has adopted six specific policies to be used in improving the role of science and technology. These include:



1) "Drawing up a long term plan for a balanced development of the economy and society on one hand, and of science and technology on the other."<sup>121</sup> This plan will allow science to provide a base from which China's economic development can occur. It will also provide guidelines for structural reform, deployment of the labor force, alterations in consumption, rational utilization of resources, and determination of technological policies.

2) "Organizing forces to tackle key problems in scientific and technical research."<sup>122</sup> This involves the organization of scientific and technical personnel from all fields in the hopes that they will work cooperatively in the solving of key problems. Due to the socialist nature of the economy, Hu Ji states, this will be relatively easy to accomplish. Areas of emphasis include agriculture, consumer goods industry, energy resources, transportation and communication, and any other areas deemed to be of key importance in producing beneficial results.

3) "Emphasizing applied techniques and (research and) development studies."<sup>123</sup> This area of study is comparatively weaker than the basic sciences due to the theoretical emphasis in research institutes. Therefore, China is attempting to place more emphasis on the study of applied techniques in order to solve production problems. It also believed that more material and financial resources should be devoted to this end so that an increase in the technical level in production will stimulate the economy.

4) "Selecting rational technological structure."<sup>124</sup> This is an attempt to design a technological structure most advantageous to the

country. This involves one in which techniques used minimize the funds, energy, and raw materials used while maximizing the use of the labor force and advanced knowledge, yet still produce significant economic results.

5) "Publicizing the results of scientific and technical results."<sup>123</sup>

In the last few years many organizations have set up their own research institutes. This has resulted in the solving of many technical problems that arise during production. Ultimately, this leads to increases in industrial output. In addition, several policies have been adopted with the object of encouraging existing businesses to upgrade their enterprises. These policies include popularizing new techniques, and eliminating obsolete products and inefficient techniques; providing more money for technological exploration; providing funds to encourage the trial production of new products; and introducing a policy that fixes high prices for quality goods and imposes penalties on low quality and outmoded products.

6) "Attaching importance to importing, digesting, and absorbing techniques."<sup>126</sup> Since 1978 China has shifted its import emphasis to that of single techniques rather than importing larger complete sets of equipment. This involves importing individual techniques in the production process rather than the entire production process. There has also been a shift towards upgrading existing enterprises instead of building new enterprises. These types of imports cost relatively little and yield quick results. In conjunction with this, scientific personnel must study these techniques in order to increase China's ability to develop more efficient techniques through their own efforts.<sup>127</sup>

This altered emphasis on scientific and technological development

will affect all spheres of the economy. The leadership feels that this will contribute significantly to the regime's efforts to accelerate economic development.

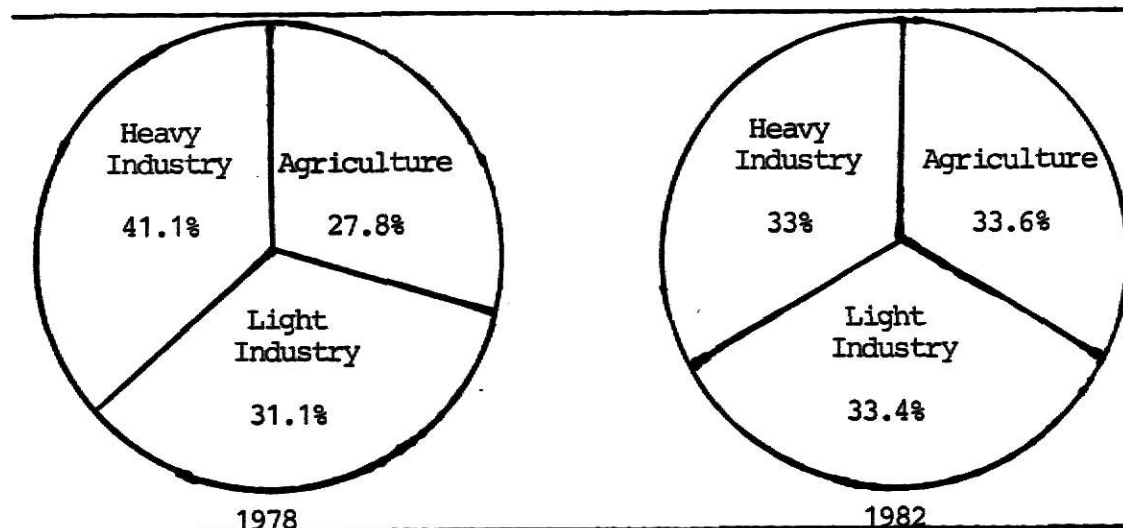
### Agricultural and Industrial Growth

As was mentioned earlier, China has set forth the goal of quadrupling its gross agricultural and industrial output value by the end of the century. This is going to require careful organization of the agricultural and industrial sectors in order to achieve this objective. Eighty percent of China's population reside in rural areas. Due to the size of the peasant population agriculture has always played a vital role in the country's political stability and economic development. Agriculture is the foundation of the national economy and will remain so throughout modernization. Therefore, the new plans first emphasized

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Figure 1: Portion of Agriculture, Light Industry and Heavy Industry in the Total Industrial and Agricultural Output Value

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SOURCE: Beijing Review, "Economic Achievements in 1978-1982," July 11, 1983, p. 23.

agriculture, followed by light industry, then heavy industry. This is exemplified in Figure 1 which illustrates a shift in proportions of gross output value provided by these three sectors.

#### Agricultural Growth

Approximately one fourth of the world's population resides in China and obtains its food from only 7 percent of the world's cultivated land. Therefore, it can be seen that the population density relative to cultivated land is extremely high in China. This puts a high degree of pressure on farmland. To produce the amount of food necessary to feed such a large population requires a highly intensive agriculture, with heavy applications of labor and material inputs and high yields per acre. The necessity for large amounts of labor stem from the traditional technology used in the agrarian sector.<sup>128</sup>

During the 1950's attempts were made to stimulate agricultural growth through socialist ideology and reorganization. It was hoped that the restructuring of the agrarian sector, into collectives, would result in economies of scale due to more efficient utilization of resources. By 1960 it was apparent that this approach was not going to be good enough.

Therefore, in the 1960's the self-sufficiency ideology was relaxed and China became a major importer of grain. Even this left a continuing pressure on the peasants to accelerate growth. This growth was achieved through rural electrification and rapidly increasing applications of chemical fertilizers. In addition, mechanization increased slightly in the industry. At the same time farm incentives improved through the process of raising farm product prices and relieving the

tax burden. This initiated growth throughout the 1960's and 1970's although progress remained slow.<sup>129</sup>

China's agricultural output never accelerated significantly after the People's Communes were developed in 1958. This sluggish growth, coupled with rapid population growth led to infinitesimally small increases in the peasants per capita income. Obviously, the situation could not be allowed to continue. It was imperative that a new agricultural policy be designed. In 1979, the following measures were adopted:

- Private plots were to be restored and enlarged for the peasants. Household sideline occupations and rural trade fairs were to be encouraged;
- Agricultural product prices were raised in an attempt to increase rural incomes;
- Import 10 million tons of grain per annum in order to relieve some of the burden on the peasants and enable them to lead a better life;
- Peasants were encouraged to diversify their production, opening more doors for their income; and
- Establish the production responsibility system designed for rural conditions.<sup>130</sup>

The household contract system of responsibility has turned into the primary method of rural management. It is a system of rewarding laborers for decision-making. This has proved to be an improvement over the previous system which allocated pay equally among workers, regardless of their contributions.

Gross agricultural output has made significant increases each year of the 1978-1982 period (Table 3). Grain output in 1982 was 335 million tons; cotton, 3.3 million tons; and oil-bearing crops, 14.19 million tons. Compared to 1978 level these represent 9.9, 52.3, and 171.8 per-

Table 3: Recent Agricultural Growth Rates

	1978	1979	1980	1981	1982
% Increase of Total Agricultural Output Value Over the Previous Year	9.0	8.6	2.7	5.7	7.0
Of Which: % Increase of Output Value of Forestry, Animal Husbandry, Sideline Occupations, Fishery	8.0	11.5	10.5	6.3	NA

SOURCE: Ren Tao and Pang Yongjie, *Beijing Review*, "Can the Goal for 2000 Be Reached?", February 28, 1983, p. 15.

cent increases. The program has also aided in improving the level of per capita income. In 1981 it was 223.4 yuan per year which was a 66.7% increase over that received in 1978. This was accompanied by improvements in the quality of food, clothing and housing in most rural areas.<sup>131</sup> By January 1984 China had realized its fifth good harvest in a row despite dry weather and flooding. Grain was up 4.7 percent; cotton, 11.16 percent; and sugar cane, 3.2 percent. The results can be attributed, in general, to the responsibility system in agriculture, improved incentive programs, specialization of crops, and government assistance.<sup>132</sup>

Thus far, the program has been successful, but much work remains to be done. The Chinese goal is to develop a modern agricultural system. This includes farming, forestry, livestock breeding, sideline occupations, and fishery, comprehensive management of agriculture, and integration of agriculture with industry. In this manner they will be able to build an integrated socialist system, rich and civilized.<sup>133</sup>

### Industrial Growth

The industrial sector has made exceptional gains since 1949. The path of progress, however, has been very unstable due to political and economic influences. The Chinese have now formed new plans based upon a careful analysis of the past.

During the 1952-1959 period growth in industry was impressive. As mentioned previously this can be attributed to more intensive usage of existing plants, greater intensity of workforce efforts, and Soviet assistance. At this time industrial gains were greater than those in agriculture. This happened because of prevailing attitudes towards the importance of industrial growth at that time. These were such that industry was considered the key to growth. By 1955 Mao realized mistakes were being made and emphasis was shifted to the agrarian sector. Consequently, growth rates in industrial output declined significantly in 1961. A slower growth pattern evolved and continued throughout the 1960's (Table 1).<sup>134</sup>

In the 1970's China increased its volume of foreign trade. The objective was to import technologies from abroad in an attempt to upgrade Chinese industry. Chinese individuals were also sent overseas to be briefed on foreign techniques of production and also to investigate potential imports. This illustrated the regime's decision to take advantage of Western ideas and technology. In 1977 and 1978, about 2000 Chinese technicians and officials traveled to these areas to learn about Western industrial processes and to obtain more modern equipment. By 1980 approximately 5000 individuals were studying in the United States, Japan, and Western Europe. Furthermore, many

Western technicians and firms were invited to the People's Republic to conduct seminars on industrial topics. These provided a great deal of information on more modern industrial techniques. During the first six months of 1978 alone more than 250 seminars were conducted.<sup>135</sup>

Major achievements have been made since 1979 as a result of a newly adopted policy of readjustment, restructuring, consolidation, and improvement. The objective was to avoid a lopsided type of development. In light industry priority was given to the production of energy and raw materials, increasing productivity, capital construction projects, foreign exchange and import of new techniques, bank loans, and transportation and communications. This brought about a rapid rate of growth from 1978-1981. The average annual increase hit 14 percent. In addition, the reorganization led to the development of 5000 new light industrial products and more than 70,000 new varieties and patterns. This increased the supply of commodities on the market.<sup>136</sup>

In heavy industry reorganization was guided towards producing for agriculture, light industry, the market, export, and technical transformations. By 1981 the machine-building industry had expanded production such that service for agriculture, the food industry, the consumer goods industry, the textile industry, commerce, environmental protection and packaging improved. Exports of machinery were 2.4 times the 1980 volume and production has been altered in order to meet demand.<sup>137</sup>

By 1982 the new policies had effected a 7.4 percent increase in industrial output over 1981. Heavy industry was up 9.3 percent and light industry increased 5.6 percent. Also, planned output goals were met for 90 of the 100 major products covered by State planning.<sup>138</sup> In



1983 light industry increased only 2.5 percent and heavy grew 11.7 percent. Total industrial output increased 10.7 percent.<sup>139</sup>

The future plans for industrial growth, both light and heavy, are primarily geared towards aiding the agricultural sector, increasing exports, and meeting market demand. The objective is to bring about overall development through a plan that integrates all spheres of the economic system.

In order to achieve the goal for the year 2000 substantial yearly increases in output are required. The methods of attaining the objective involve the use of foreign trade, educational reform, and reemphasis in the scientific and technological field. The successes achieved in these areas will have a positive effect upon industrial output growth through the use of more skilled labor and more efficient utilization of resources.

It can be seen that development in each sector of the economy is dependent upon progress in other sectors. Therefore, if desired targets are met in each sphere, the overall target should be attainable.

#### CONCLUSION

China's economic policies during the previous thirty-five years have been quite erratic. The policy changes are illustrated in Table 4. During this time Chinese planners have been looking for a model appropriate for the long-run development of the Chinese economy. However, no overall strategy has lasted for any long period of time.

The regime now feels they have found a model that will facilitate the long-term development of the economy. Leaders have carefully analyzed the past patterns of growth and attempted to determine where mis-

Table 4: Evolution of China's Developmental Strategies, 1953-1981

PERIOD	SECTORAL PRIORITIES	CHOICE OF TECHNIQUE	SOURCE OF SUPPORT	INCENTIVE SYSTEM
FFYP (1953-1957)	1. Heavy Industry 2. Light Industry 3. Agriculture	Capital-intensive	Massive Soviet aid	Material incentives
Great Leap Forward (1958-1960)	1. Heavy Industry 2. Light Industry 3. Agriculture	Labor-intensive	Soviet aid stopped in 1960	Nonmaterial incentives
Readjustment (1961-1965)	1. Agriculture 2. Light Industry 3. Heavy Industry	Capital- and Labor-intensive	Self-reliance	Material incentives
Cultural Revolution (1966-1970)	1. Heavy Industry 2. Agriculture 3. Light Industry	Labor-intensive	Self-reliance	Nonmaterial incentives
Adjustment (1971-1975)	1. Heavy Industry 2. Agriculture 3. Light Industry	Labor-technology intensive	Resuming import of foreign equipment	Nonmaterial incentives
The Gang of Four (1975-1976)	1. Heavy Industry 2. Agriculture 3. Light Industry	Labor-intensive	Self-reliance	Nonmaterial incentives
Four Modernizations (1976-1985)	1. Heavy Industry 2. Agriculture 3. Light Industry	Technology-intensive	Outward-looking	Material incentives
a) Original plan 1978	1. Heavy Industry 2. Agriculture 3. Light Industry	Technology- and capital-intensive	Outward-looking	Material incentives
b) Adjustment (1979-1981)	1. Agriculture 2. Light Industry 3. Heavy Industry	Technology- and labor-intensive	Outward-looking	Material incentives

SOURCE: Cheng, Chu-Yuan. China's Economic Development: Growth and Structural Change. (Boulder, Colorado: Westview Press), 1982, p. 282.

takes were made. The present plan appears to be more realistic than those of the past since it takes into consideration actual conditions in the country and integrates all spheres of the economy.<sup>140</sup>

At the present time more stability and unity exists in the country than has existed for many years. The focus of modernization is based upon the socialist ideology of Mao supplemented with improved incentive programs.<sup>141</sup>

The sectoral priorities between heavy industry, light industry, and agriculture have vacillated over time. Past experience has led to the conclusion that the Soviet model of excessive emphasis on heavy industry is inappropriate for a backward agrarian economy. Therefore, the present plan states that agriculture is to receive first priority since it is the basis of the economy. Now there is emphasis upon increased mechanization and chemical fertilizers rather than mass mobilization of labor in agriculture. In addition, accumulation and capital construction were overemphasized previously causing consumer goods and services shortages. This led to fairly rapid expansion in the industrial sector, but resulted in low economic returns and aggravated unemployment. The latest plan recognizes not only the abundance of labor, but also the need to integrate new technologies and thus promotes technology and labor intensive production techniques in the industrial sector.

With regard to the source of support in modernization the new leadership has recognized the advantages that can accrue to the Chinese economy with an "open-door" policy. The self-reliance doctrine prevalent through 1976 only widened the technology gap.<sup>143</sup>

Concerning the type of incentive system in effect the policymakers realized that the years in which China experienced fairly steady growth were those in which material incentives prevailed. For this reason this factor exists in the latest plan for development.<sup>144</sup>

Given these changes and progress made since 1978 it appears that the Chinese may have finally found an appropriate strategy for development of the economy.

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<sup>9</sup>Alfred K. Ho, Developing the Economy Of The People's Republic Of China (New York: Praeger Publishers, 1982), p. 22.

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<sup>11</sup>Cheng, p. 61-62.

<sup>12</sup>Cheng, p. 63-64.

<sup>13</sup>Cheng, p. 67-69.

<sup>14</sup>Howe, p. xxii. Christopher Howe established the names for the first two and the last period of development. The third and fourth are widely used names.

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<sup>16</sup>Chun-Tu Hsueh, China's Foreign Relations: New Perspectives (New York: Praeger Publishers, 1982), p. 17.

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- <sup>28</sup>Cheng, p. 318.
- <sup>29</sup>Cheng, p. 319.
- <sup>30</sup>Mackerras, p. 104.
- <sup>31</sup>Mackerras, p. 104.
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- <sup>33</sup>Mackerras, p. 104.
- <sup>34</sup>Mackerras, p. 104.
- <sup>35</sup>Howe, p. xxx-xxxi.
- <sup>36</sup>Eckstein, China's Economic Revolution, p. 204.
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- <sup>38</sup>Ho, p. 27.
- <sup>39</sup>Ho, p. 27.
- <sup>40</sup>Eckstein, China's Economic Revolution, p. 204-05.
- <sup>41</sup>Eckstein, China's Economic Revolution, p. 205.
- <sup>42</sup>Eckstein, China's Economic Revolution, p. 205-06.
- <sup>43</sup>Cheng, p. 300-01.
- <sup>44</sup>A. Doak Barnett, China's Economy in Global Perspective, (Washington D.C.: The Brookings Institute, 1981), p. 17-18.
- <sup>45</sup>Cheng, p. 28, 30.

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- <sup>47</sup>Cheng, p. 31-32.
- <sup>48</sup>Howe, p. xxxiii.
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- <sup>54</sup>Barnett, p. 33.
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CHINESE DEVELOPMENT STRATEGIES AFTER MAO  
in Historical Perspective

by

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AN ABSTRACT OF A MASTER'S REPORT

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This study deals with China's post-Mao development strategies in historical perspective. After exploring the various modernization strategies since 1949 we can draw conclusions concerning the appropriateness of China's latest blueprint for modernization.

Before delineating China's latest modernization plan the paper discusses development strategies practiced from 1949 to 1976. This provides a background with which to compare the latest blueprint.

During the period 1949 to 1976 the political faction in power, led by Mao Tse-tung, guided economic policies, giving priority to ideology and social transformations that would lead to egalitarianism. There were four major aspects of development strategies from which the earlier plans were designed. These are sectoral priorities, choice of production techniques, source of support, and the type of incentive system used.

Sectoral priorities have vacillated over time, but more often than not heavy industry received first priority. However, this resulted in bottlenecks and shortages, so that this was finally determined to be inappropriate for China's backward economy. Production techniques adopted sometimes failed to consider the abundant labor force and, therefore, emphasized capital or technology intensive production strategies rather than labor intensive methods. This, too, has proven to be wrong for such a densely populated country with an unskilled labor force.

Another mistake made was the self-reliance ideology that prevailed, since that excluded China from advantages already realized by more modern countries, thus inhibiting economic development. In addition, Mao's political faction believed that nonmaterial incentives were more suitable for the development of an egalitarian economy.

After Mao's death in 1976 the new, more pragmatic, leadership shifted policies such that energies were directed in a more productive manner. Attention was focused upon the immediate situation, but more importantly, upon the country's apparent inability to find solutions to basic, long-term, structural economic problems. The new campaign was an attempt to reorient the nation to new goals, to new methods of production, and to new ways of thinking.

The new policies, which called for dramatic changes in modern science and technology, agriculture, the financial system, education, and incentive programs are discussed in the paper. There were benefits from these changes—such as more flexible and decentralized control, a shift towards a more consumer-oriented society, and a shift from extensiveness to intensiveness in production methods. However, the changes caused development that was too rapid. Again, changes were necessary because the authorities had not completely sorted out the country's problems nor set the right priorities.

After this a period of readjustment took place. This period of changes is examined next in the paper, followed by the latest plan for socialist modernization. The new policies, set forth in 1982, are designed around past mistakes, present economic conditions, and what the leadership feels are realistic expectations for the future.

In the past the Chinese had attempted to follow many development designs which failed because the plans did not integrate all segments of the economy. Instead of overall progress the result was lopsided growth. It must be kept in mind that the national economy is an integrated whole. Consequently, the development of any national economy must coordinate targets of individual sectoral plans so that resources



meet needs. In addition, the overall scheme must ensure the mutual compatibility of individual targets so that an overall balance between resources and needs exists. The latest blueprint for modernization has been formulated in consideration of these factors. The policies set forth in this scheme are examined in the next section of the paper.

Finally, we can draw conclusions regarding the appropriateness of the latest design for modernization. The conclusion made in this paper is that, given changes that have been made and the progress that has been made since 1978, it seems as if the Chinese have finally developed a plan for modernization best suited for their economy.