ECONOMIC REPORT ON NORTH KOREA

(24th of the series)

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ECONOMIC REPORT ON NORTH KOREA

This report is based on the following North Korean periodicals:

Ch'eesin (Communications), Nos 9, 10; September, October 1959
Chollyok (Electric Power), No 12, December 1959
Cho'on Imop (Korean Forestry), No 12, December 1959
Inmin Ch'olto (People's Railways), No 12, December 1959
Kulloja (Workers), No 12, December 1959
Kyongje Konsol (Economic Construction), Nos 11, 12; November, December 1959
Sokt'an Konsop (Coal Industry), No 10, November 1959

All comments by the researchers have been enclosed in brackets.
### UNITs OF MEASUREMENTS

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I. GENERAL ECONOMIC DEVELOPMENT

1960 Adjustment Period

[The following are extensive extracts from an article by Han Tae-yong, "Adjustment Period in the Development of Our National Economy," Kukchon, No 12, December 1959, pages 8-14.]

The recent December Expanded Plenary Session of the Party Central Committee has discussed the new platform for the struggle to be carried out by our people during the adjustment period, and has delineated the central tasks of the 1960 economic development plan.

At present, an adjustment period has been established in our country in order to further consolidate the achievements made in the course of implementing the First Five-Year Plan, and to make thorough preparations for accelerating the completion of socialist construction during the Second Five-Year Plan period.

During the First Five-Year Plan period, a qualitative leap forward was realized in socialist construction, which the people carried out at a high speed and with an upsurge of revolutionary zeal.

This year [1959], industrial production in our country will reach about six times the 1949 level and 6.5 times the 1944 level.

The systematic relations between the output of means of production and the output of consumer goods, which constitute an essential prerequisite to the assurance of socialist expanded reproduction in our country, have been strictly maintained during this period [under the First Five-Year Plan period].

One of the most important equilibria in the development of the people's economy is that between industry and agriculture. In view of the urgent needs to raise agriculture to the level of industry, which has been developing at a high rate, our Party has made it clear that since the
socialist integration of the various economic forms has been completed, the basic key to a rapid increase in agricultural production lies in technological improvement; it has devoted enormous effort to the realization of this goal. Our Party has rendered a huge amount of State aid to decisively facilitate technological improvements in the rural economy. This is abundantly clear from the ever-increasing proportion of funds disbursed to agriculture to total State capital construction funds; this proportion increased from 5.1 percent in 1957 to 8.7 percent in 1958 and to 10.5 percent in 1959.

Thanks to the measures taken by the Party to bring about the rapid development of the rural economy, agricultural production in our country has increased rapidly and at present supplies greater qualities of industrial raw materials and foods, thus ensuring the rapid growth of industrial production.

In developing the people's economy at a high speed and on a planned basis and in rapidly raising the living standard of the people, our Party has attached great importance to the accurate distribution of national income between accumulation and consumption and their [economic] use.

By strictly maintaining the priority of accumulation [over consumption] and by constantly increasing it, the Party has carried out capital construction on a vast scale; at the same time it has improved the life of the workers by systematically increasing consumption funds. As a result, the level of real wages of the workers and office workers to be attained under the First Five-Year Plan in 1961 has already been exceeded in 1959. The net income of farmers has also increased considerably.

Our Party has thus acted firmly to ensure an over-all equilibrium in the people's economy by maintaining the comprehensive relationships between the output of means of production and of consumer goods, between industry and agriculture, and between accumulation and consumption. Only under these circumstances could our productive forces have developed at a tempo unprecedented in our history.

In the course of implementing the First Five-Year Plan, the problem of maximizing the economic efficiency of capital construction investment became extremely important in the area of economic development. At the same time
that the First Five-Year Plan envisaged economic construction on a vast scale in order to establish the foundation necessary for the technological improvement and socialist industrialization of the people's economy, there were not any "surplus" [sufficiently] financial, material, and labor resources available.

In view of these circumstances, which obtained during the First Five-Year Plan period, the tasks of correctly determining the direction of investment and of systematically utilizing materials, funds, and labor of necessity became extremely important in ensuring planned construction work and in continuously maintaining a high rate of increase in industrial production.

Our Party has constantly maintained correct reciprocal relations between the various sectors of the people's economy. This was accomplished by eliminating the fluctuations in production which had been caused by spreading out construction too thinly—the result of an incorrect grasp of the direction of investment by some of the leading workers in individual sectors—by solving the problems caused by shortages in material supply in some sectors, and by making historic improvements in production in those sectors.

During the last few years, our people have achieved great results in socialist construction. But while the people's economy has developed at a very rapid rate, certain shortcomings have become manifest in some sectors; these are mainly due to the failure of the leading workers to measure up to the upsurge of zeal and creativity of the masses in their organizational and political work.

These shortcomings are, of course, an effect of the rapid, gale-like speed with which socialist construction has been carried out; their main cause, however, lies in the failure of the leading workers to understand changed situations and new circumstances.

Some leading workers do not correctly understand that the people's economy, which is currently undergoing rapid development, is strictly based on the law of planned and balanced economic development and on other socialist economic laws; they tend to be satisfied with the achievements thus far made and to neglect to exercise the necessary control over the implementation of the economic plan in a responsible manner.
Moreover, instead of grasping the central key to the implementation of their tasks in the order of priority, and concentrating their entire efforts thereon, some leading workers, without analyzing the existing conditions and possibilities scientifically, have been fettered by their subjective ambitions and have spread out [too many] construction projects; the result has been that, in spite of a considerable amount of consumption of labor and supplies, productivity has not increased accordingly.

Some sectors, e.g., the metal industry, have not only failed to increase the economic efficiency of capital construction investment, but have also failed to carry out satisfactorily the task of increasing both the utility rate of existing production facilities and labor productivity. The consequence of these failures was a certain tension and imbalance in iron and steel.

The failure of the leading workers to exercise adequate control over the implementation of the economic plan is also manifest in the fact that the rate of growth in agricultural production could not match the corresponding rate in industrial production.

In addition, there remains the task of ensuring that what was accumulated by our people during the First Five-Year Plan period, in spite of all difficulties, will "fully bloom" in all areas of the people's life, thus preparing them to enter into a new stage of struggle with greater revolutionary zeal and hope. We cannot pass [into the next stage] without solving these problems.

As Comrade Kim Il-song has stated, we "must enter into the new struggle, i.e., the Second Five-Year Plan, after having reorganized .... forces and after having made all the necessary preparations."

Therefore, the establishment of an adjustment period for the transition from the First to the Second Five-Year Plan periods affords a concrete and model instance of a creative application of the Marxist-Leninist theory of the balanced development of the Socialist economy to the concrete realities in our country.

The central task posed in the adjustment period is "to eliminate the tension created in some economic sectors in the past and, particularly in the course of implementing
the 1959 plan, to strengthen weak links and to further improve the life of the people."

In order to adequately execute the central task for the adjustment period, the Party will concentrate its efforts on the solution of the following basic problems: first, the mechanization of farming; second, improvement of the daily life of the people; third, growth in production by means of increasing both labor productivity and the utility rate of facilities; and fourth, the mobilization of all available sources of foreign exchange and the minimization of foreign-exchange consumption.

These problems must be successfully solved if we are to consolidate the achievements made during the First Five-Year Plan period and if we are to achieve a new increase in socialist construction during the Second Five-Year Plan period.

Our Party has proposed that efforts be concentrated on the mechanization of farming, and it is taking measures to realize a rapid increase in the agricultural productive force by supplying large quantities of modern farm machinery, including tractors and trucks, as well as various other farm implements, and by expanding and improving the work of the machine-tractor station network (nonggigye chakopsa) [previously called "nonggigye imgyongso", but the same English translation is used here. For probable significance in the change of the name, see an article by Hong Talson in agricultural section of present report]; the latter is the center entrusted with the task of technological revolution in the rural areas.

These measures will bring about historic improvements in farm technology and rapid increases in agricultural production. The enhanced role assigned to the machine tractor stations is of particular significance in that it will increase the utility rate of farm machinery—to the production of which our machine industry is devoting its entire effort—extend farm technology, and strengthen the training of technical cadres in mechanization.

On the basis of the productive forces already developed and the achievements thus far made in our country, the Party has also proposed the improvement of the daily life of the people as an important task for the adjustment period; this goal is to be attained by increasing the output
of consumer goods in every possible way and by construct-
ing dwellings and cultural and welfare facilities for the-
workers on a large scale. The workers will thus be able
to recognize more clearly the superiority of the socialist
system and will make greater efforts toward high socialist
goals.

Furthermore, in order to realize the motto, "Let Us
Produce More with Currently Available Labor and Facilities,"
during the adjustment period, the Party will also increase
labor productivity, wage a struggle against the practice
of wasting labor and materials, strengthen the economiza-
tion movement, and reduce the original cost of industrial
products.

During the First Five-Year Plan period, a huge amount
of State funds was expended to establish large industrial-
enterprises equipped with modern technology, and a large
number of modern production facilities were built. But
their operation rate has not been satisfactory, and the
efficiency of machine facilities has not been fully
exploited.

As Comrade Kim Il-song has pointed out, there are im-
portant potentialities for solving these problems in
raising the technical level of the workers and in en-
hancing their [ideological-political] consciousness.
This is required in view of the fact that important sect-
ors of the people's economy have been reinforced with a
new labor force. A considerable portion of the workers
now engaged in important sectors of the people's economy,
including industry, transportation and construction, has
been reinforced with new workers in the period from the
beginning of 1953 through September 1959.

In view of these circumstances, improvement of the
technical skill level of the workers and enhancement
of their consciousness would not only ensure a growth of
production with currently available labor force and exist-
ing facilities, but would also create a powerful force
effecting decisive progress toward industrialization in
our country during the Second Five-Year Plan period.

The problem of foreign exchange is also very important
in assuring the maintenance of a high rate of growth in
socialist construction and in effecting rapid improvements
in the life of the people. Since a self-sufficient
foundation for the people's economy has been firmly established, our Party is currently stressing the need to maximize the acquisition of foreign exchange and to minimize its consumption; this is required for further acceleration of expanded reproduction and for further consolidation of the socialist economic foundation.

The reorganization of potentialities (yoknyang) in all the sectors of the people's economy would thus establish an over-all equilibrium capable of bringing about a new leap forward in the development of productivity in our country and would create resources capable of ensuring the successful implementation of construction on a vast scale.

In the light of the above-mentioned needs, the December Expanded Plenary Session of the Party Central Committee has delineated the tasks for the adjustment period of 1960, which are to be carried out by the individual sectors of the people's economy.

While continuously adhering to the basic policy of economic construction, and while stressing the need to place greater emphasis upon the development of farm machinery construction, fisheries, and the mining and chemical fiber industries, the Plenary Session proposed an increase of 12.5 percent in the gross value of industrial production for 1960, in which that of central industry and local industry will be increased by 11.8 percent and 14 percent respectively. It is envisaged that the output of means of production, in terms of the gross value of industrial production, will increase by 15.1 percent and that of consumer goods will increase by 9.6 percent.

In 1960, the output of farm machinery will increase by 256 percent and that of the mining industry, by 31.4 percent. Output of principal industrial products, such as electricity, coal, pig iron, granulated iron, steel, rolled steel materials, chemical fertilizers, and fabrics will increase considerably over 1959.

While the agricultural sector will be primarily engaged in the production of food grains, it will also expand the production of vegetables, accelerate the development of the livestock industry, and further develop the cultivation of oil crops and industrial crops, pomiculture and sericulture. The output of more than 220,000 tons of meat...
and 2,664,000 tons of vegetables is also envisaged.

In order to accelerate the mechanization of farming, one quarter of the total estimated output of steel materials in 1960 will be consumed for the production of farm machinery.

The following items will be produced in 1960 and supplied to the agricultural sector: 4,000 tractors, 3,000 trucks, 15,000 trailers, 9,100 ground levelers (chongjig1), 166,000 weeding machines, 4,600 harvesters, more than 10,000 threshers, and more than 1,000 fodder crushers. In addition, more than 110,000 ox carts will be supplied, and this will adequately meet the ox-cart requirements.

The responsibility assumed by the machine industry in accelerating the mechanization of farming is indeed very great; it will undertake to produce farm machinery, as well as mining equipment and various other machine facilities and parts. The machine industry should undertake the production of more motorized farm machinery and animal-drawn farm machinery which are of good quality and suitable to the actual conditions in our country; in 1960, it should produce 3,000 tractors and 3,000 trucks.

In addition to the machine industry, all the other sectors of the people's economy must also produce modern farm machinery and animal-drawn farm machinery in large numbers by full mobilizing the production facilities under their command; moreover, a nation-wide campaign must be conducted for the design and use of farm machinery.

The problem of enhancing the role and activities of the machine tractor stations is also important in accelerating the mechanization of farming.

The machine tractor stations should fully assume their duties as the center for the mechanization of farming and should further expand the scope of mechanization in field and transport work. At the same time, they should play the role of an advance guard in carrying out the technological revolution in the rural areas.

In connection with raising the living standard of the people, it is, first of all, necessary to increase the production of food grains, vegetables, and meat in every possible way. To this end, land management should be
improved and the land utility rate should be increased. The 1960 plan envisages expansion of the arable land area by more than 100,000 ch'ongbo; this is to be effected by rehabilitating and cultivating waste arable land (p'egyongji), idle arable land (hyugyongji) and washed-out land (yusilmamolji). The plan also envisages an increase of 70 per cent in the utility rate of dry fields.

In order to effect a decisive improvement in the supplementary foodstuff supply, it is necessary to act firmly to develop the fishing industry by means of various sea fishings, natural sea (ch'onhae) breeding, and fresh water and pond breeding; it is also necessary to effect a basic transformation in the production of livestock—particularly in the production of hogs and rabbits—by correctly combining joint husbandry with private husbandry.

To this end, agricultural cooperatives should turn out one to two head of hog per ch'ongbo of arable land [joint husbandry?] per year, and each cooperative member family should turn out two head [private husbandry?]. Accordingly, a sound fodder base should be built.

In view of current conditions in our country, the decisive key to a rapid increase in the production of meat is to raise rabbits on a wide scale. Rabbits should be raised not only by agricultural cooperatives through joint raising, but also by every cooperative member family and rural school.

In order to rapidly raise the living standard of the people, it is also important to increase the output of consumer goods and to improve their quality.

To this end, light industry should establish a sound raw materials base. Moreover, it should increase the output of textiles by adequately utilizing raw cotton and staple fibers and by widely mobilizing the various fibers (masomyu).

At the same time, knitted goods, such as underwear and socks, will be produced in greater quantities, and the output of high-quality fabrics, such as suit- and dress-making fabrics, is expected to increase in proportion.
Furthermore, by mobilizing all the available local resources, such as vegetables, marine products, meat, and farm produce, local industries will produce more of the supplementary foodstuffs which are currently in great demand by the workers; they will also produce more consumer goods in increased varieties, and the quality of these goods will be decisively improved.

In 1960, the gross value of retail commodity circulation will increase by more than 10.4 percent (at comparable prices) over 1959. The supply of important products will increase as follows: vegetables - 110 percent, meat - 110 percent, fishery products - 64 percent, fabrics - 10 percent, stockings - 90 percent; underwear - 40 percent. Moreover, the supply of such cultural goods as radio and sewing machines will also increase considerably.

In order to adequately solve the workers' housing problem, more than 81,500 dwelling units are to be built in cities and in workers' districts during 1960. State capital construction investment will be concentrated on the mechanization of farming, fisheries, and the chemical fiber and mining industries; special emphasis will be placed on the construction of houses, schools, hospitals, and service and cultural facilities, as well as on the maintenance and repair of existing facilities.

The scope of housing construction to be carried out in 1960 with State investment will more than double that of 1959. The scope of school construction will also increase to 3.5 times the corresponding investment level in 1959 and for hospitals and theatres, movie houses, and clubs, it will increase 3.6 times and eight times respectively. In cities and workers' districts alone, kindergartens with 25,000 seats, creches with 23,000 seats, as well as bath houses, laundries, and dining places, will be built.

In order to achieve increased production, all the sectors of the people's economy should, first of all, combat the mistaken tendency to rely on an absolute increase in the labor force; instead, all the potentialities for increasing labor productivity should be mobilized.

To this end, it is important to adequately organize both the labor force and production, to enhance the technical and skill levels of the workers, to raise the mechanization and automation levels of operation, and to both keep...
existing machine facilities in normal operation and to raise their utility rate by supplying machine parts, raw materials, and supplies in time. Given the present circumstances of our country, the attainment of increased production through the adequate mobilization of all the resources for increasing labor productivity primarily depends upon the skillful organizational abilities of the leading workers.

The acquisition of a greater amount of foreign exchange calls for exploitation of its sources by concentrating on mines. At the same time, all the other sectors of the people's economy should also mobilize the sources of foreign exchange. The mining sector should radically increase the output of various useful ores by mobilizing the latent production capacities in every mine to the utmost extent.

The continuous development of foreign trade calls for a positive exploration of export sources by all the sectors of the people's economy; in this way, the production of export goods will be increased. At the same time, the leading workers entrusted with this task should enhance their sense of responsibility toward the State.

In response to the call of the Party, the workers are at present full of determination to offer all of their knowledge and ability for the complete victory of the revolution. But certain problems arise in the task of skillfully organizing and mobilizing the creative wisdom and revolutionary zeal of these workers for the end of implementing the plan.

In view of these circumstances, the Party has placed special emphasis on the fact that the successful realization of the tasks envisaged for the adjustment period calls for an enhancement of the leadership and ability of the workers leading the economy. It has proposed that these leading workers undertake the tasks of gaining a thorough knowledge of the laws concerning social development and economic management and of arising at a complete understanding of the Marxist-Leninist method of management.

This measure is of great significance in further strengthening the leadership so that it will be capable of managing every aspect of the people's economy more satisfactorily and according to plan at a time when its scope is expanding at a strikingly rapid pace.
In particular, a radical improvement in the role of local government organs in their organizing and mobilizing capacity, is very important both for the reorganization of resources (yoknyang) and the realization of the tasks envisaged for the adjustment period. For, above and beyond agricultural production, local industries are to account for 54 percent of the total estimated output of consumer goods during the adjustment period, and the adequate management and utilization of local industries are at present of decisive importance in facilitating socialist construction in our country.

Therefore, the leading workers of the Party, the State, and economic organs should fully realize that study is an inherently revolutionary task; they should study Party policies and economic theories industriously; thus they will enhance the level of their practical work and the art of leadership, as well as further improving their economic management. (Kulloja, No 12, December 1959, pp 8-14)

Industry and Agricultural Relationship

(The following is a partial translation of an article by Yi Chun-o, "On Balanced Development of Industry and Agriculture in Our Country," Kyongje Konsol, No 12, December 1959, pages 11-14.)

The problem of the balanced development of industry and agriculture has assumed greater importance in view of the fact that we are now to carry out the tasks of 1960, tasks of the adjustment period.

The adjustment period of 1960 constitutes a concrete reflection of the lawful requirements arising from the development of the people's economy. These requirements arise from the [orderly] transition from the First Five-Year Plan, which was fulfilled in two and a half years in terms of the gross value of industrial production, to the implementation of the Second Five-Year Plan, which is of decisive importance to socialist construction in our country.

The adjustment period of 1960 is determined by the requirements of the fundamental economic laws and of the laws...
of a planned and balanced development of the people's economy, both operating in our country.

The Party has proposed the advancement of the material and cultural life of the people as an important task to be carried out in the adjustment period of 1960. It has also proposed, for 1960, that at the same time that the advanced sectors of the people's economy continue to be developed, some of the backward sectors be improved. Based on these needs, the important tasks as proposed are to substantially raise the living standard of the people by rapidly developing agriculture, the livestock industry, and fisheries, and by expanding housing construction and service facilities. The purpose of the adjustment period is to prepare for the transition to a new equilibrium in the development of the people's economy.

In connection with the implementation of the tasks farming envisaged for the adjustment period of the 1960, the mechanization of farming constitutes a central problem bearing on the development of the people's economy. The purpose of mechanization is to continuously increase the output of food grains, and to rapidly increase the output of staple crops, oil crops, and other industrial crops, as well as the output of livestock products.

In this way the requirements of the people's economy and the needs of the people will be met most satisfactorily. In addition, the mechanization of farming is one of the central prerequisites for effecting technological revolution of the rural economy and the balanced development of industry and agriculture.

It is well known that the socialist form of economy has now become the only economic form existing in our country. Consequently, the principle of a planned and balanced economic development is now applied in greater depth and its scope of application has become enlarged. It is now applied to all aspects of the agricultural sector, i.e., production, distribution, exchange, consumption, and accumulation, as well as to central and local industries.

In view of the fact that the establishment of the local industrial control system requires further enhancement of the planning level of local economic development, the State industrial control system has been reorganized with a view to increasing both the power of local governments.
and the role which they are to play.

On the other hand, the merger of agricultural cooperatives on the basis of the ri as a unit has transformed them as the basic administrative unit. The role of the agricultural cooperative as an economic organizer has been greatly extended; it now includes commerce, culture, and public health, as well as agriculture, and covers most aspects of life in the rural areas.

The size of agricultural cooperatives thus enlarged necessarily calls for an enhancement of the planning level in cooperative management. In order to effect a balanced development of industry and agriculture, this change in the people's economy, comprising central and local industries as well as agriculture and industry, requires that greater efforts be made by local governments, as well as by the State, and that planning by local governments be improved. To this end, Premier Kim Il-song has given instructions that the work of the planning commissions be improved and strengthened to meet the requirements arising from these changes and new circumstances.

Both the tasks that have been proposed for the current period and the changes that have taken place in the people's economy in the past necessitate consideration of the following points in dealing with the balanced development of contemporary industry and agriculture:

The problem of striking a balance between industry and agriculture should be analyzed, first of all, on the basis of the present levels of our industry and agriculture.

At present, our industry has its own sound bases of both heavy industry and light industry and has established the self-sufficient foundation which is required for the technological improvement of the people's economy. However, our industry has developed to such an extent that it has brought about considerable quantitative and qualitative changes in its demand on agriculture, thus stimulating the further development of agriculture.

This reciprocal relation between industry and agriculture is also manifest in the effect of the current level of agricultural development upon industry. The cooperativization of agriculture has already been completed and technological improvements in agriculture are being successfully carried
out; thus, a rapid increase in agricultural production has been effected.

But the increased demand of the people's economy for agricultural produce not only requires a continuous increase in the output of food grains, but also calls for a rapid increase in the output of livestock products and industrial crops. This task can be satisfactorily carried out only if the mechanization of farming is realized within the shortest possible period of time. This problem in turn gives rise to a new task for industry.

Only if these problems are correctly considered, will it be possible to ensure the balanced development of industry and agriculture, and the successful implementation of the tasks for the adjustment period of 1960.

The problem of an equilibrium between current industry and agriculture should also be considered in relation to the local economy (chibang kyongje).

One of the current tasks in the development of the local economy is that of the maximal mobilization and utilization of internal resources. One of the important problems in this area is to ensure a more systematic mobilization and utilization of local resources. But this cannot be considered apart from the problem of the further development of local industries.

The development of local industries not only calls for the planned creation and systematic mobilization and utilization of local resources, which are the prerequisites, but it also requires a systematic and variegated development of agricultural production. It follows that, to a certain extent, the further development of agriculture is required for the development of local industries.

On the other hand, the development of agriculture cannot be considered apart from the development of local industries. For local industries, together with central industries, not only produce and supply to agriculture the means of production, but they are also the source of daily necessities and processed foods. The effect of the development of local industries upon the development of agriculture within the local economy lies in the influence that increases in the varieties of local industrial products and improvements in their quality will have on the many-sided development.
of agriculture. This factor will have both a quantitative and a qualitative effect.

Increases in the varieties of local industrial products and improvements in their quality will meet local needs, principally those of the rural areas. But a considerable portion of the raw materials and supplies required by local industries is supplied by the rural economy (nongch'on kyongni).

In view of these facts, increases in the varieties of local industrial products and improvements in their quality will effect an expansion in agricultural production and a reorganization in the composition of the various individual sectors within agriculture [meaning probably a proportional change among the various sectors of agricultural production, e.g., changes in the ratio of food grain, tuber, industrial crop, etc., cultivation.]

The leading role of industry over agriculture is thus also reflected in the local economy. The balanced development of industry and agriculture within the local economy will be ensured mainly by increases in the varieties of local industrial products and by improvements in their quality. Local industrial, thus improved and variegated, will further stimulate the enhancement of the role of the commodity circulation sector, including the role of procurement.

The equilibrium between industry and agriculture mentioned above calls for an improvement in the management of local industries and agricultural cooperatives. The planned guidance and operation of industry and agriculture are the basic tenets of the socialist method of management.

Planned guidance over the local economy is based on the systematic mobilization and economic utilization of supplies, funds, and labor, and it ensures a balanced development of industry and agriculture. Economization of labor, strengthening of the independent account system, and rectification of the principle of distribution according to labor are all important aspects of the planned guidance of the local economy.

The question of the balanced development of industry and agriculture is also related to the following problems: the overall balanced development of the entire people's
economy based on a balanced development of its two greatest sectors [industry and agriculture]; the establishment of a technological foundation for agriculture; and the advancement of the people's life based on the development of the social productive forces of our country.

At the same time, it is also related to enhancement of leading role of the working class; to the further consolidation of the workers-peasants' alliance; and to the consolidation of the link between cities and rural areas, as well as to the gradual elimination of the differences between the two. Consequently, problem of the balanced development of industry and agriculture is related to the consolidation and expansion of the socialist relations of production in our country.

Therefore, at present, the realization of an equilibrium between industry and agriculture in our country would have great significance for the task of further facilitating socialist construction and, in particular, for the successful implementation of the basic tasks envisaged for the adjustment period of 1960. (Kyongje Konsol, No 12, December 1959, pp 11-14)

Provincial Progress

[The following is a summary of an article "New Stage in Overall Development of Provincial Economy" by So Ho-won, Kyongje Konsol, No 11, November 1959, pages 19-23.]

At the expanded session (hwaktae hoeui) of the Standing Committee of the Party Central Committee called in mid-August 1959, a historical decision was adopted at the proposal of Comrade Kim Il-song calling for reorganization of the control system of industry to suit the changed realities of our country and for the establishment of a local industry system along with the central industry system.

Moreover, at the recent All-Nation Conference of Activists in Local Industry and Product Cooperatives (Chongguk Chibang Sanop mit Saengsan Hyoppong Chohap Yolsingja Taehoe) the significant achievements in the struggle for establishing
local industry were reviewed and the tasks for the further
development of local industry were discussed.

These measures taken by the Party are aimed at a great change in all sectors of the economy and represent a turning point in overall development of productivity in all parts of the land. During the First Five-Year Plan period, much has been accomplished, including the setting up of a unified control system for productive activities, expansion of local industry as well as central industry, changed geographical distribution of production scope and productive capacities.

These achievements have demanded the substitution of new forms to control capable of meeting the needs of the developing economy. As pointed out by Comrade Kim Il-sang in the old industrial control system the central organs were extremely expanded, leaving the whole system top heavy with its legs too feeble to support the body.

Thus, the changed situation calls for the new approach of bringing economic control and guidance closer to the various localities where actual production is conducted, with control and guidance conducted on the basis of unified State plans.

Therefore, the Party has merged ministries and bureaus so as to send officials and technical cadres (kisul kanbu) to the local areas with a view to raising the roles and power of the various provinces. As a result of the reorganized control systems of industry and the establishment of local industry, the influences of labor federations, youth leagues and women's federations, as well as the power of local Party and Government organs over the work of enterprises, have been strengthened; the working people have been enabled to actively display their creative faculties.

Our Party has taken measures for building small and medium heavy industry bases and for transferring the control of a number of central factories (chungang kongjang) to provincial or local organs. These steps were aimed at a more thorough exercise of democratic centralization in the control of the economy by combining central industry and local industry so as to suit the changed situation of our country.
Thus, our provinces now have their own local industry systems along the agricultural economy and are in a position to conduct small and medium industry and local construction on their own instead of entirely depending upon central industry.

Prior to the liberation, the provinces of Korea were nothing but regional units set up for the sole purpose of oppression and exploitation of the people without taking into consideration development of the people's economy. At present, our provinces represent both administrative centers and economic units actively participating in the overall development of the people's economy and are constituent elements of the growing economy.

Under capitalism, where means of production are private possessions, the state does not control the economy of the nation as whole; and so it is impossible to combine administrative units and economic units. On the other hand, in our country, not only political power but also basic means of production are owned by the working people and the people's regime is entrusted with the control of the people's economy so as to promote its growth.

Since the liberation, our Party has rearranged a number of administrative regions to assure effective control by the State over the people's economy. By rearranging administrative regions several times, the State has strengthened its planned guidance of economic construction by accelerating expansion of the economy in underdeveloped regions and setting up new strong economic centers so as to make it possible for industry and agriculture to effectively cooperate with each other.

The latest measure by the Party has made it possible for the provinces to include heavy industry in their local industry. Thus, the part to be played by the provinces as administrative and economic regions is to be raised. It is true that our provinces have taken on much greater importance than before as administrative and economic regions.

However, this does not mean that the provinces of Korea are in a position to play the same role as the administrative and economic regions of the Soviet Union where these regions constitute people's economic soviets (inmin kyongje soviet) that control almost all sectors of the people's economy, including large-scale industry.
Even though the province does not constitute a large region, it has characteristic resources and various natural conditions, and is capable of developing in a coordinated manner the secondary as well as primary production sectors. This capability is evident from the spectacular expansion of local industry in the brief time since the June plenary session of the Party Central Committee. Up to the plenary session, our local industry was anything but impressive. However, at present, there is an average of eleven factories in each and every city or kun.

Therefore, it behooves the provinces in the northern half of the Republic to take measures for further expansion of specialized sectors in the best interests of the nation as a whole and for overall development of the provinces themselves. In economic development, specialization is determined by natural and economic conditions as well as by historical traditions.

For instance, the specialization in Chagang-do will be the machine industry, forestry and wood processing, mining metal ores and non-metal ores, the developing electric industry, and the livestock industry. In P'yongan-namdo the specialization will be the extraction of anthracite coal, the chemical building material industry, metal and metal processing industry, production of food grains and industrial crops including cotton, tobacco and peanuts.

If such specializations in these areas are not successfully developed, it will be impossible for other economic regions to be developed or their development will be seriously hampered.

Under capitalism, specialization keeps each area isolated; but under socialism, specialization in an area is connected with the overall development of that area. Overall development in an economic unit means the development of the sectors that serve the specialized sectors of production, development of the sectors that are technologically connected with the serving sectors and of the sectors that guarantee to the maximum the maintenance of the local economy and the meeting of the inhabitants' needs.

Therefore, the provinces should do all in their power to utilize their local resources to develop not only their specialized sectors but also the sectors that serve to further expand the specialized sectors and the sectors which supplement the serving sectors.
The following purposes will be served by such overall development: (1) most effective use of the province's natural and economic resources; (2) expansion of the productive relations of the specialized sectors that constitute the basic core of the province's economy; (3) development of small and medium industry which will bring production activities closer to raw material sources and consumption centers, resulting in the alleviation of pressure on transportation facilities; and (4) most effective use of labor. Thus, appropriate specialization and overall development will serve to quicken the pace of the State's expanded reproduction through promotion of the provincial economy.

At this time, promotion of local economy in the provinces is very essential to overall development of the economy. First, the proper combination in our country of the central economy and local economy is directly connected with the proper combination in the provinces of specialization and overall development. At present, central industry in our country corresponds to the specialized sectors in the provinces and local industries constitute the very core of the sectors that participate in the overall development of the people's economy.

Moreover, the provinces have their own heavy industry which is laying the material and productive foundations capable of promoting provincial self-sustenance and all-roundness (chonghap), for provincial heavy industry produces the iron materials, cement, machine tools, coal and construction materials that are essential to the further development of local industry and local construction.

Thus, further development of local industry will contribute to the overall development of the province and cause an epoch-making change in the overall development of the province by accelerating provincial construction through development of productive ties with the specialized sectors of the provinces concerned. Also, by setting up a local industry system, local needs for iron materials, construction materials, fuel and other items will be met by the efforts of the province itself, with the result that the pace of central industry development will be quickened.

Thus, it is the Party policy to develop concurrently the small, medium and large-scale industries in light industry and develop on that basis small and medium local
industry in an epoch making manner. Comrade Kim Il-song declared that this principle with regard to the light industry should be maintained even when Communism has been achieved in Korea. The combination of small, medium and large-scale industries in light industry is not of a temporary nature and local industry is not of a supplementary character as in heavy industry but has charge of a considerable part of consumer goods production.

In the overall development of the economy, the most important factor is the creation of local raw material sources and fuel-power bases and the expansion of the sectors connected with the coordinated utilization of local raw materials, semi-processed goods and waste products.

As emphasized again by Comrade Kim Il-song in the conclusion of his statement before the All-Nation Conference of Activists in Local Industry and Producers Cooperatives, the planned creation of stable raw material bases takes on primary significance in the new epoch-making development of local industry.

Our country is abundantly blessed not only with underground resources and water-power resources essential to the development of heavy industry but also with raw material sources for local industry such as wild fibers, wild oil-bearing plants, wild fruits, wild vegetables, wild [raw materials for] perfume, wild paper pulp resources, wild animals, mineral water and stone materials as well as fishery resources in the seas.

By creation of stable raw material bases is meant searching for natural resources, making efforts to protect them and increasing such resources. If we fail to create raw material resources in a planned fashion, we can hardly expect steady increases in output, expansion in varieties of products and mobilization and utilization of local potentialities to the maximum.

Measures have been taken recently by the State to devote 100 to 200 chongbo of arable land in each city and kum to the creation of raw material bases for local industry. Cities and kum should raise industrial crops that are suited to local conditions and build up economic forests through rational use of land resources in the light of the limited arable area.
Creation of economic forests is one of the most important approaches to building up raw material bases for local industry and overall development of the local economy. Economic forests are essential to the expansion of natural fiber raw material bases (helping to solve the problem of feeding, clothing, and sheltering the people) and to expansion of the foodstuff processing industry, the paper manufacturing industry, and the production of vegetable oils.

In view of the topography and climate of our country, and because of the need for maintenance of equilibrium among various sectors of agriculture, there is a limitation on the possibility of expanding the land area suited to the cultivation of cotton and the area for the nutrition pot seedling raising method. Therefore, the increasing need for natural fiber should be met by planting "paekyang" trees, "hwangch'ol" trees, poplars and "nobaknonch'ul" not only in mountainous areas but also on plains, swamps and along seashores.

To create stable raw material bases, it is necessary to effectively use natural conditions and natural resources. It is typical of socialism to deliberately create natural conditions and natural resources and use them in a coordinated manner while it is inevitable that capitalism uses them exclusively for predatory purposes. Therefore, in a socialist society, economic forests, even when their primary purpose is for assuring ample raw materials, should be so created as to shield seashores from strong winds, prevent erosion, protect arable land from flood or drought, and preserve water.

The proposal made by the Party that stable raw material bases should be created with a view to advancing to a new stage of development and effecting an overall development of the provincial economy is essential not only to the search for and the use of natural raw material sources but also to the creation of new raw material bases on an extensive basis and recreating nature. Therefore, in the creation of raw material bases, not only workers of local industry but agricultural cooperatives, factories, enterprises, agencies or organs, schools, and especially democratic youth units should be induced to participate.

Creation of stable raw material bases is not only one of the most important prerequisites for the setting up of
a local industry system, but it also accelerates overall development of the provincial economy by rearranging geographical distribution of productive capacities.

Rational distribution of raw material bases and productive capacities will obviate irrational transportation, lower costs of products and play an important role in satisfying the needs of local inhabitants for necessities. Moreover, rational distribution of raw material bases and productive capacities will contribute to further strengthening economic ties between cities and the countryside as well as between industry and agriculture by helping to set up industrial centers in farming and fishing areas, wooded regions, and mining areas. Thus, distinctions between rural and urban areas will be diminished by degrees. All this will accelerate overall development of the provincial economy and meet the demands for socialist distribution of production to a greater extent.

Modernization of production and high level of techniques must be assured before resources can be effectively utilized in industrial production. Outdated handicraft methods should be done away with by using both hand and machinery at first so as to proceed to higher and higher degrees of mechanization. To achieve such results, machine-tool reproduction campaigns should be continued and all-purpose machine shops should be set up and expanded.

In this way, iron foundries producing 10,000 to 20,000 tons a year and cement mills producing 30,000 to 50,000 tons per year will be set up; and this local industry will proceed to be further mechanized and automated. (Kyongje Nongsol, No 11, November 1959, pp 19-23)
II. TRANSPORTATION

Plans and Problems

[The following are excerpts from the editorial, "Let Us Thoroughly Implement the Decision of the December 1959 Expanded Plenary Session in the Sector of Transportation," Inmin Ch'olto, No 12, December 1959, pages 1-4.]

The First Five-Year Plan, which was the first of its kind in our history, has been fulfilled two and a half years ahead of schedule in terms of the gross value of industrial production, and it is expected to be fulfilled by 113.2 percent by the end of 1959.

In agriculture, irrigation has been basically completed, and this year the per-ch'ongbo output of food grains is expected to increase by 17.6 percent over 1958.

By the end of June 1959, our transport workers had fulfilled the First Five-Year Plan by 105 percent in rail-borne cargo transport, by 125.9 percent in vehicle cargo transport, and by 103.6 percent in terms of the gross value of industrial production (kongop ch'ong-saengsanaek) [the term used here is the same as the one meaning the "national" gross value of industrial production. While it is not clear whether the term refers to the "national" level, the context appears to mean the "gross value of industrial production" by the sector of transportation].

One of the major achievements made this year lies in the experience gained through the struggle to increase the utility rate of transport facilities.

This year, the number of days per freight car turn-around has been reduced by 0.6 day (a 24-hour day) from that in 1958; this is equivalent to an increase of 1,715 freight cars a day. In the area of track maintenance, the Wolla Line, the Kyongui Line, and other trunk lines have been strengthened by introducing the step-by-step concentrated maintenance method (kyedansik chipjung posu pangbop).
As a result of the machine-tool reproduction movement, more than 3,500 machines were produced, including more than 1,000 machine tools, thus strengthening the material and technological foundations of transportation.

On the other hand, there have been numerous shortcomings. Not only was the February [1959] Plenum decision not satisfactorily carried out, but the 1959 Plan has not been well implemented, and fluctuations have occurred in the course of implementing this plan. As a result, there has been a failure to meet the transportation requirements of the national economy.

The leading workers failed to grasp the basic key to the successful implementation of the economic plan. As for the requirement to increase labor productivity, they tended to rely exclusively upon absolute increases in the labor force, with the result that a considerable amount of labor was wasted.

The essential prerequisites for implementing the decision of the December 1959 Expanded Plenary Session of the Party Central Committee consist in maximizing the utility rate of transport facilities and in increasing labor productivity by all available means, so that the increased transport requirements can be adequately met.

The strains in rail transport expected in 1960 essentially derive from the problem of the freight-car shortage; its solution calls for a decisive reduction in the number of days required per freight-car turn-around.

If the present utility rate of freight cars is not improved in 1960, the shortage of freight cars will reach a figure of several thousand. Approximately 80 percent of the shortage of freight cars should be solved by means of increasing their utility rate.

In this connection, it is very important to reduce the time required for loading and unloading operations as well as the time required for operations at technical stations. In 1960, the mechanization level of cargo handling in the rail transport sector must be raised decisively; it is even more important for the handling of important materials and products at private sidings to be completely mechanized. By adopting these measures, cargo operations should be reduced to less than four hours at stations and six hours at private sidings.
At the same time, the proportion of loading and unloading operations immediately preceded by waiting periods should be further increased, the maintenance of existing freight cars should be strengthened, and advanced loading methods should be introduced.

As for increasing labor productivity—in view of the fact that the implementation of the 1960 plan is to be effected without an absolute increase in the labor force—it is essential that mechanization be further expanded to include a large number of operations. Furthermore, the rate of attendance [report-in] of transport workers should also be increased. If this rate is increased by one percent, an increase of more than 1,000 workers a day would result.

For 1960, the Party has earmarked an amount double the 1959 expenditure for the construction of dwelling units, and construction organs should do their utmost in constructing these dwelling units, as well as other welfare and cultural facilities. Moreover, in connection with increasing the supplementary food supply, rabbits and hogs should be widely raised.

We must also deal with the problem of economizing foreign exchange. The transport sector currently consumes many imported products, including gasoline. In order to strengthen the economization program, all the transportation sectors should ensure the most effective and economic use of supplies, funds, and labor, and should systematically reduce their consumption norm.

In order to economize on gasoline, existing vehicles, as well as boats, should be reconstructed, so that they can use domestic fuels. Moreover, consumption of coal by locomotives should also be systematically reduced.

In addition, the payment of fees for the use of foreign freight cars should be positively kept within limits through the comprehensive organization of freight-car movements. To this end, the stay of foreign freight cars in our country should be reduced to the shortest possible period of time, and, by balancing outbound and inbound freight cars, the use of freight cars for continuous carriage (yonwun hwach'a) should be kept within limits. [This would appear to be applicable to only one "international line" of which the P'yongui (P'yongyang-Sinuiju) Line]
is a part. *Inmin Ch'olto*, No 12, December 1959, p 25).

In connection with the Party's proposal for the afforestation of economic forests, transport workers should do their share by planting trees along railroad lines, in station compounds, and around their houses. At the same time, both the farm machinery required for the mechanization of agricultural operations and the saplings needed for the afforestation of economic forests should be satisfactorily transported by transport workers. (*Inmin Ch'olto*, No 12, December 1959, pp 1-4)

[The following are excerpts from an article by Cho Tae-hyong, "Let Us Decisively Increase the Utility Rate of Existing Facilities," *Inmin Ch'olto*, No 12, December 1959, pp 5-7.]

An increase in the utility rate of existing facilities constitutes an important tool for building socialism in our country.

An important key to ameliorating the present strains in transportation, and particularly in rail transport, is to increase the utility rate of all existing rolling stock by every possible means.

The strains now encountered in rail transport are indeed very severe.

Transport plans have been constantly underfulfilled; in October 1959, they were fulfilled by only 88.5 percent and in November, by only 88.3 percent.

As a result, other sectors of the people's economy were greatly hampered in their efforts to fulfill production plans.

The basic cause of the inability to fulfill the transport plan lies in the failure to meet the shortage in freight-car capacity. Conversely, the basic key to the solution of this problem is to ensure the number of days required per freight-car turn-around as planned, since it is a comprehensive technical index of freight-car movement.

During the postwar period, the turn-around days index and other technical indices have steadily approached an
advanced level. For example, the number of days per freight car turn-around has been reduced from 6.7 in 1949 to 5.7 in 1956, 4.4 in 1957, and 3.7 in 1958. This number is expected to further decrease in 1959.

This reduction, of course, constitutes a great achievement. Nevertheless, we are still unable to achieve the target number of days envisaged in the 1959 plan.

Reduction in the number of turn-around days depends on reducing the time required for loading and unloading operations, the time during which trains are in operation (wun-haengjung sigan), and the time taken by work at technical stations.

To save time, loading and unloading operations should be mechanized. The February [1959] Plenum proposed that, by the end of 1959, mechanization be extended to include up to 80 percent of total loading and unloading operations. But this proposal for mechanization has not been carried out satisfactorily, nor has loading and unloading machinery been effectively utilized. For example, the current utility rate of this machinery is only 32 percent and in a considerable number of cases the machinery is operated only five to six hours a day.

The basic cause of this situation lies in the inadequate organization of operations and in the inadequate distribution of loading and unloading machinery. In the future, this machinery should be distributed only after the amount of work to be done by the machinery has been carefully computed.

As for reducing the time required for work at technical stations, it is essential that advanced technical operational procedures be introduced. In most cases, work at technical stations is done by rule of thumb, and the combined brigade system is not widely adopted. Even where combined brigades have been established, the over-all coordination of work has not been satisfactory, with the result that each shop tends to work only for its own interests. This attitude is of course, very harmful and damaging to the whole purpose and work of the combined brigades.

To reduce the time of trains in operation, it is necessary to operate trains on schedule, and to carry out work at stations, engine depots, and inspection depots as planned.
More than 60 percent of the work accidents (chakop sago) in rail transport during the recent past have been due to locomotives. These accidents have not only hindered train operations, but have also hampered efforts to reduce the number of turnaround days. Therefore, all accidents, locomotive or otherwise, should be completely eliminated.

Furthermore, the efficiency of locomotives should be increased; the average daily running distance of locomotives should be ensured, and traction capacity should be maintained according to plan.

In addition, the load capacity of freight cars should be increased, particularly by reconstructing (pogang) the existing 30-ton cars and converting them into 37-ton to 40-ton class cars.

In the past, the fixed weight of loads was increased without satisfactory prior maintenance and reconstruction of freight cars. Consequently, the technical condition of freight cars became worse and, as a result, a considerable number of freight cars became obsolete and the loading of freight cars had to be controlled during the third quarter.

The February [1959] Plenum proposed that the average traction of trains be increased above 1,000 tons. But the current technical condition of locomotives renders it very difficult to achieve this goal.

The poor technical condition of locomotives is the result of inadequate repair work. In turn, this is the consequence of the fact that engine depots have failed to ensure medium repair work qualitatively and that railroad plants have neglected the repair of rolling stock. Adequate repair work depends on an adequate supply of spare parts.

The supply of basic parts should be ensured by the railroad plants. Lately, the railroad plants have been concentrating on the repair of rolling stock and on the production of spare parts. But these railroad plant operations have not been regularized, and it is urgent that this be accomplished.
This is also true of engine depots. Some spare parts should be produced by engine depots, since, as a result of the machine-tool reproduction movement, they now possess this capacity. Qualitative repair work at engine depots should be preceded by the production of spare parts.

Repair regulations should be strictly observed throughout the course of repair work. When completed, the work should be carefully inspected; to this end, the role of depot chiefs, chief engineers, and assistant station masters should be further strengthened.

In the past, the plans for repair work on locomotives and freight cars have not been carried out by railroad plants, and the quality of their work has been very low. Worse still, during the first half of 1959, some important parts were not supplied at all, while the supply of plate springs, coil springs, rings, piston packings, etc., was exceedingly scarce.

As a result, some locomotives which were unfit to operate, according to the standards of technical operational regulations, were kept in operation, and more than half of the freight cars in operation had technically defective points.

While carrying on large-scale repair work on locomotives, the railroad plants should also produce spare parts as a matter of priority; this is the primary requirement for improving the technical condition of locomotives.

But the utility rate of facilities of railroad plants has been very low in the past. Even at such modern plants as the So-P'yongyang Railroad Plant and the Wonsan Railroad Plant, the tasks referred to above were not well implemented. If the facilities of these plants had been well utilized, more work could have been accomplished.

This year, the utility rate of facilities at railroad plants was only 60.5 percent in the first quarter, 57.8 percent in the second quarter, and 54 percent in the third quarter.

Moreover, the utility rate of certain special equipment, e.g., grinders, was only 30 to 40 percent.
The main cause of the low utility rate for machine tools lies in the lack of strict discipline and order and in the absence of a comprehensive technical management system in railroad plants.

A low output of products during a given unit of time has resulted from this low utility rate. For example, although there are four gripping stands (inmuldae) per planer (p'yongsak' an), only one stand is being used. This means that the planer is being operated at one quarter of its designed capacity. Furthermore, the struggle to reduce metal scrap has not been actively carried out. For example, 49 kg of material are used for producing a 28-kg locomotive "gross hetshu", 170 kg of material for a 62-kg "Migaha"-type shaft connector, and 21 kg of material for a 7-kg elbow pin.

The current low utility rate of facilities is also related to the skill levels of the workers. With the increased volume of work in 1959, the number of workers has also increased. But the corresponding requirement for training the new workers has not been satisfactorily met.

It is high time that the utility rate of facilities be increased to the utmost extent; this is necessary not only to implement the 1959 transport plan, but also to meet the strenuous transport requirements expected in 1960. (Inmin Ch'olto, No 12, December 1959, pp 5-7)

Turn-Around Time

[The following are excerpts and summarization of a suggestion offered by the Bureau of Transportation (Ministry of Transportation), "Means to Strengthen Local Operations," Inmin Ch'olto, No 12, December 1959, pages 15-17.]

At present, nearly 80 percent of the total time required per freight car turn-around is consumed in local operations and in operations within the compounds of technical stations. In particular, approximately 35.6 percent of the total time consumed by local operations is expended in loading and unloading operations.
It is therefore clear that one of the most important keys to the reduction of the turn-around time consists in decisively strengthening local operations. At present, the time of stay at stations, in the course of local operations, consumed by the individual segments of local operations is as follows:

1) 20 percent from the time of the arrival of the trains to the movement of the cars into appropriate places in stations (ch'ip);

2) 35.6 percent for loading and unloading operations on cargos in circulation;

3) 44.4 percent for completing the necessary rearrangements (chongbi) and for redispaching cars.

In view of the fact that (1) and (3), which are non-productive operations, account for a considerable portion of time, it is very important to reduce the time required for such operations.

To this end [summary follows]:

(1) Local cars should be brought [on schedule?] to where loading and unloading operations take place;

(2) The time for bringing the cars to the location of loading and unloading operations (ch'ip) and the time for taking the cars out for redispach should be reduced to the utmost extent;

(3) Operations at private sidings should be decisively improved and strengthened.

At present, about 50 percent of the total loading and unloading operations are performed on private sidings. This mean that reduction of the time expended in such operations on private sidings is very important for an over-all reduction in freight-car turn-around time.

More specifically, in these loading and unloading operations on private sidings, about 52 percent of the time is consumed between the arrival of the cars at the operating point and the actual initiation of operations and 9 percent is consumed between the completion of loading and unloading operations and the taking out of cars for redispach;
thus only 39 percent of the time remains for actual loading and unloading operations.

For this reason, it is important

(a) To introduce and to implement a uniform technical procedure (kusul kongjong) between stations and private sidings;

(b) To organize and to operate combined brigades between stations and private sidings; and

(c) To organize loading and unloading operations on private sidings so that they will be immediately preceded by a waiting period.

(4) To eliminate fluctuations in transport.

(Inmin Ch'olto, No 12, December 1959, pp 15-17)
III. POWER INDUSTRY

Planning

(The following are extracts from the editorial, "For the Successful Implementation of the 1960 Economic Plan in the Power Sector," Chollyok, No 12, December 1959, pp 1-3)

The Expanded Plenary Session of the Party Central Committee, held 1-4 December 1959, has determined that the basic direction of the tasks for the adjustment period of 1960 lies in ameliorating the strains in the weak limbs of the national economy and in strengthening them to ensure the balanced development of the national economy.

It is important to have a correct understanding of the shortcomings that existed in the past and of the weak links that exist in the national economy today.

The main shortcoming of the power industry has been the tendency to spread out effort thinly over many areas, without discriminating between priorities in the order of their importance, and to rely on an absolute increase of the labor force for the fulfillment of plans.

Even though a great amount of labor has been invested, this tendency has resulted in the failure to complete the rehabilitation of power facilities, in the unsafe conditions under which existing facilities are operated, and in a low utility rate.

As a result, there have been generator-coil accidents and a series of other electrical accidents at the Pujongang Power Division and at some other power plants; moreover, some power transmission and distribution divisions have not been able to prevent power failures due to lighting, simply because adequate measures were not taken against lightning.

In the construction of power plants, the failure to give precedence to the skeleton erection and the tendency to spread out effort have slowed down construction.
In view of these deficiencies, the basic tasks of the power industry for the adjustment period of 1960 are as follows: to complete more qualitatively the rehabilitation of existing power facilities and to increase the utility rate of these facilities, to act decisively to prevent electrical accidents, and to regularize the production and supply of electricity.

The complete rehabilitation of power facilities and the thorough technical management of these facilities would not only increase the output of electricity, but would also overcome electrical accidents. The electricity that could be economized through the prevention of accidents alone would run to a huge amount. For even a momentary power failure constitutes a great hindrance to the metal and chemical industries and to many other sectors of the economy.

For example, if a one-minute power failure occurred, it would take enterprises many minutes, or even several hours, to bring blast furnaces and other facilities back into normal operation. Furthermore, a change of a few percentage points in electric pressures or frequencies would not only result in the production of defective goods, but would also considerably reduce production efficiency. All of these imply a relative waste of electricity.

Both the rehabilitation of power facilities and their maintenance after rehabilitation call for many machine parts and machine facilities. These requirements should be met mainly by the maintenance-power shops (kongmu tongnyok chikjang).

It is important to observe standard operational procedures and other technical rules in technical management. In particular, it is important to strengthen the individual responsibility assumed for each piece of machine equipment.

In addition to the above tasks, the economization of electricity should be further promoted in 1960.

As for the construction of power plants, no additional construction projects should be envisaged. Instead, efforts should be concentrated on projects currently under construction: the Kanggye, Wunbong Power Plant, the No 5 Power Plant of the Changjin-gang [Power Division] and a number of other projects.
In carrying out the construction of power plants, it is important that both excavation and the erection of the skeleton take precedence over other work. It is of particular importance that radical innovations be made in the excavation of waterways in connection with the construction of the Kanggye Youth Power Plant, which requires the excavation of several hundred thousand tons of earth. This, in turn, requires the further mechanization of excavation operations and the introduction of advanced technologies. In order that the generation of power may commence with the completion of the dikes, efforts should be concentrated on the construction of the first waterway.

The successful implementation of the tasks envisaged for the adjustment period of 1960 also calls for enhancement of the skill levels of the workers. Both workers and technicians should improve their skills through further training, so that Socialist construction can be raised to an advanced level. (Chollyok, No 12, December 1959, pp 1-3)

Power Consumption

[The following are excerpts from a criticism made by YI Sun-bong, Inspector, Transmission and Distribution Division, Hangyong-namdo, "Why is the Electricity Consumption Norm per Product Unit Continuously Rising?" Chollyok, No 9, September 1959, pages 45-47.]

The failure of the Pongung Chemical Plant to improve the supply of raw materials for the production of carbide and the operation of electric furnaces resulted in a waste of 3.67 million KWH during the first five months of 1959.

In July 1959, the electricity consumption at the Plant was 3.4 percent and 5.7 percent higher than that in June for the production of carbide and alundum, respectively. But this consumption level is 32.9 percent above the State consumption norm for the production of both carbide and alundum. As a result, in the production of these two products alone, in July 1959, the Plant wasted 2.73-million KWH.
At the Songjin Steel Works, the electricity consumption per ton of steel ingot exceeded the State consumption norm [unspecified] by 471 KWH in January 1959, 345 KWH in February, 422 KWH in March, 394 KWH in April, 428 KWH in May, 556 KWH in June, and 527 KWH in July.

As Premier Kim Il-song pointed out at the beginning of March 1959, the electricity consumption per ton of steel ingot should be kept below 1,000 KWH. (Chollyok, No 9, September 1959, pp 45-47)

[The following is an excerpt from an unsigned critical note, "Why is the Per Ton Electricity Consumption Not Reduced in the Production of Coal," Chollyok, No 12, December 1959, page 43.]

While other coal mines have reduced the per ton electricity consumption for the production of coal by 15-20 KWH, the Kogonwon Coal Mine, Hamgyong-pukto, in September 1959 continued to consume 45.6 KWH per ton of coal output, as against the consumption norm of 32 KWH per ton. (Chollyok, No 12, December 1959, p 43)
IV. POSTS AND TELECOMMUNICATIONS

Quality of Services

[The following is a translation of the editorial "Let Us Further Intensify Our Struggle to Improve the Quality of Communications," Ch'eson, No 9, September 1959, pages 1-2.]

The construction of socialism in our country is steadily advancing today. The working masses have already fulfilled the total industrial output as envisaged in the historic First Five-Year Plan two years ahead of the schedule, and are continuing their march toward the high summit of socialism.

Under the leadership of our Party, the sectors of the people's economy have been advancing and the living standards of the people have been steadily improving. As a result the demand for the communication services has been increasing, especially the demand for quality improvements.

In the past, the working masses in the communications fields, in support of the decision adopted at the 1959 February Plenary Session of the Party Central Committee, have achieved important results in the struggle for improving the quality of their services by displaying creative power. They have organized and conducted, with competent technicians participating, the measuring of basic technical value (kisul kijun ch' i) of machinery and wires—an important task in improving the quality of communications service.

In the adoption of advanced techniques and original devices, communications workers have adopted or devised automatic public telephones, semi-automation of telephone service between P'Youngyang and Hamhung, and the semi-automatic indicator magnet-type exchanger (chasoksik kyo'hwang'gi ui Panjadong p'yo'si'gi).

However, our communications service has been impeded by various types of hindrances and troubles; the service between kun and ri is especially subject to serious defects. Since rural areas began to be served with wire broadcasting
and telephones, wires and machines have not been always kept in repair, with the result that telephones are often out of order and, due to the faulty induction of wires broadcasting, it is hard to hear telephone messages clearly. Wire broadcasting is also often affected by wires that are out of order and by magnifiers of poor quality.

The situation is not any better in the mail delivery service for the ri. Due to the lack of cooperation between ri people's councils and communications divisions (ch'esanbu), mail and printed matter remain stranded for days in the offices of ri people's councils. Sometimes, messages in private letters are disclosed to third parties.

This state of affairs has been caused mainly by the fact that some enterprises try to improve the quality of postal service by taking routine measures and conducting temporary campaigns, when political work should be done among workers on a regular and continual basis. The struggle for quality improvement in communications should be accompanied by the battle between old and new, and between progressive and conservative.

Therefore, even though we improve the technical equipment of communication, adopt advanced techniques, raise the technical level of the workers, and conduct strict supervision over communication work, unless the workers who are in charge regard their work as an honor and have sense of responsibility and are led to devote themselves to rapid and accurate communication, the quality of communication will never be improved. For this reason, Premier KIM II-song stated it is most important that workers take a communist attitude toward their work and labor in improving the quality of products.

Therefore the leading workers of all communications enterprises should, in order to decisively improve the quality of communication, continue to explain to workers the decision of the February 1959 Plenary Session of the Party Central Committee and familiarize them with the decision. This political work should be conducted continually so that the workers are led to assume the communist attitude toward labor.

To prevent accidents and hindrances, it is important that machinery and equipment are repaired and inspected
on a regular basis and that stipulated basic technical values [norms?] are correctly established.

However, at the P'ongyang Central Wire Broadcasting Station (P'ongyang Chungang Yuson Pangeongguk), magnifiers or microphones (kwaksonggi) were installed carelessly, subscribers were allowed to do what they wanted with equipment, and soldering was done very carelessly. As a result wire broadcasting was suspended or failed to be transmitted clearly and complaints were made by many listeners. Nevertheless, some leading workers there regard all this as something quite normal and will not do anything about it.

The telephone circuits between Kangwon-do and P'ongyang have been subject to interference for some time, but the Provincial Communications Control Office (Ch'esin Kwanrich'o) has made little effort to remedy the situation on the plea that no locator (ch'ukohonggi) is available.

Communications divisions (ch'esinbu) of some kun have been giving to field workers (ch'osogong) assignments other than regular inspection and repair of wires on the ground that there is too much work to do. In Hamgyong-pukto and Chagang-do, main wires (kanson) have not been inspected for months. As a result, the number of hindrances has been partially increasing and repair work has been done more slowly than planned.

As to postal service, even though the Ministry has warned several times, mail and printed matters have [still] been delayed in delivery. But the responsible workers will do nothing about it on the ground that there is too much mail and printed matter to deal with.

All accidents and hindrances which constitute serious obstacles to the improvement of quality of communication should be thoroughly eliminated. The provincial communications control bureaus should organize repair groups so as to finish repairing equipment and wires before the end of 1959. Efforts should be concentrated on the enterprises where work is relatively unsatisfactory. In particular, indoor installations and protection devices (poan changch'i) connected with wire broadcasting should be repaired in accordance with regulations.
In improving the quality of communication, it is important to adopt advanced techniques on an extensive basis, encourage original devices, and intensify inspection. However, in the past, adoption of advanced techniques and application of original devices have been very unsatisfactory. Many devices already proposed have not been applied to production in time.

During the first half of 1959, fewer original devices were adopted than during the corresponding period of 1958. Automatic public telephones were adopted by the Hamhung Telegraph and Telephone Bureau (Hamhung Chonsin Chonhwa Guk), but the P'yongyang Telephone Bureau is taking no measures but wait for the arrival of imports from abroad.

Some leading workers continue to assume bureaucratic attitude toward the original devices proposed by subordinates when they should provide assistance and encouragement. Provincial telegraph and telephone bureaus will not use available instruments by repairing them but leave them unused, and divert assigned inspectors to other work. Thus, inspection is done quite perfunctorily.

All communications enterprises should adopt advanced techniques extensively, encourage all workers to participate in working out original devices, and provide technical and practical assistance; and responsible workers should review this work each quarter of the year without fail.

All communications workers should keep it in mind that improving the quality of communication, especially improving the communication between kun and ri, is an urgent matter in the communications field, and do their part in implementing the decision adopted by the Party Central Committee at its February Plenary Session of 1959 (Ch'esin, No 9, Sep 59, pp 1-2)

Postal Savings

[The following are excerpts from an information item presented by the Bureau of Postal Communications, Ministry of Communications, "Posting Interest on Postal Savings Accounts," Ch'esin, No 10, October 1959, pages 22-23.]
As the number of depositors have increased, there has been some confusion in posting the correct amount of interest on postal savings accounts.

There are three kinds of postal savings accounts: (1) ordinary savings (with annual interest of three percent), (2) periodic savings (four percent interest) and (3) livelihood improvement savings (three percent interest). Interest on these savings is computed daily on the amount of the balance left every day beginning with 1 October through 30 September of the following year. Final interest on the account is settled on 30 September of each year.

Interest can be computed in two ways. It can be computed and paid out by the Bureau of Savings of the Central Bank, or directly by the city or kun communications divisions and the ri post offices.

In the first case, interest is computed and paid out only when there is still a balance on 30 September; in the second case, this is done only when the entire amount (chonaek) [principal plus interest?] is paid out.

The lowest monetary unit upon which interest is given is the won (at least one won). Interest is figured out by means of a constant factor, which is 120 (360 days divided by 3%) when the annual interest rate is three percent and 90 when the annual interest rate is four percent.

**Example One**

When the annual interest rate is 4 percent [sic. 3 percent] and the final balance is 3,000 won, the interest on it for 30 days is:

\[3,000 \text{ won (final balance)} \times 30 \text{ days} \div 100 \text{ (number applicable to interest rate)} = 900 \text{ won (amount upon which interest is to be granted)}\]

\[900 \text{ won} \div 120 \text{ (constant)} = 7.50 \text{ won (amount of interest)}\]

**Example Two**

When the annual interest rate is 4 percent, the amount of interest on the final balance for 90 days is:

43
3,000 won x 90 days $\div$ 100 = 2,700 won

2,700 won $\div$ 90 (constant) = 30 chon [sic. 30 won]

The constant can be also found out when the annual interest rate is 4.5 percent [which is 80].

Because of non-observance of the above computation procedure, much confusion has been created, and in some cases depositors were either short-changed, or interest not even paid at all.

The number of days during which money was deposited and the constant number mentioned above should be correctly applied.

At present, much confusion is caused by the failure of the lower echelon offices to figure out the amount of interest before they forward deposit ledgers to the Bureau of Savings; as a result, these ledgers are claimed only when depositors ask for the payment of interest.

For livelihood improvement savings accounts and periodic savings accounts, an annual interest rate of four percent is applied to the balance deposited beyond the prescribed time limit and a rate of three percent rate is applied to that withdrawn before the time limit.

**Example One**

When a depositor requests the payment of interest on 20 December on a balance of 1,000 won which was deposited for a period of three months between 1 August and 31 October, the amount of interest payable is as follows:

(a) For 90 days ........... 10.00 won

(b) For 49 days* beyond the time limit.... 5.44 won

*Number of days counted up to the day preceding the date at which interest is paid.
Example Two

When a depositor requests payment on 10 August and he has deposited 1,000 won in a periodic savings account for a period of six months between 1 May through the end of October, the three percent interest rate is applied for 99 days, and the amount of interest is 8.25 won.

Now, when a depositor who promised to deposit 100 won a month regularly for 12 months failed to do so, interest is computed as follows:

<table>
<thead>
<tr>
<th>Month</th>
<th>Deposit</th>
<th>Period for which interest is paid</th>
<th>Amount of Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>100 won</td>
<td>12 months</td>
<td>4.00 won</td>
</tr>
<tr>
<td>Feb</td>
<td>100</td>
<td>11</td>
<td>3.67</td>
</tr>
<tr>
<td>Mar</td>
<td>100</td>
<td>10</td>
<td>3.33</td>
</tr>
<tr>
<td>Apr</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>200</td>
<td>8</td>
<td>5.33</td>
</tr>
<tr>
<td>Jun</td>
<td>100</td>
<td>7</td>
<td>2.33</td>
</tr>
<tr>
<td>Jul</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep</td>
<td>300</td>
<td>4</td>
<td>4.00</td>
</tr>
<tr>
<td>Oct</td>
<td>100</td>
<td>3</td>
<td>1.00</td>
</tr>
<tr>
<td>Nov</td>
<td>100</td>
<td>2</td>
<td>0.67</td>
</tr>
<tr>
<td>Dec</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total ........................................... 24.33

(Ch'esin, No 10, October 1959, pp 22-23)
V. AGRICULTURE

Mechanization

[The following are excerpts from an article by Hong Tal-son, "Mechanization of Farming is the Central Task for the Technological Revolution in Rural Areas," Kulloja, No 12, December 1959, pages 15-20.]

The December 1959 Expanded Plenum of the Party Central Committee has proposed the mechanization of farming as a central task and has call for decisive acceleration in this area during the adjustment period of 1960.

In view of the natural and economic conditions of our country and the peculiarities of our agricultural production, the Party has concentrated an essential part of its effort on the establishment of a water conservation system, a basic key to the technological revolution in the rural areas. As a result, the great, historic task of water conservation was basically completed by the spring of 1959.

Decisive progress was also made in our country in the area of rural electrification. But the technological foundation of our present socialist management of agriculture is not yet based on a powerful, modern machine technology, and mechanization is still in its initial stage.

The present situation in the rural areas is such that, without mechanizing of farming, it is impossible to further introduce either "collective" (chipyak) farming, which has proven its superiority, or the two-crop planting system proposed for the establishment of a strong fodder base; moreover, it is impossible to carry out in time many other tasks which call for a great amount of labor, such as field leveling (p'ojon chongni), irrigation, cultivation of economic forests, and cultural development of rural areas.

It has now become impossible to meet the ever increasing demand for farm produce and the demand of light industry for raw materials, such as food grains, vegetables, meat, and industrial crops, without effecting a decisive increase in labor productivity and in the agricultural
productive force through the mechanization of farming.
In the future, further increase in the agricultural produc-
tive force and, in turn, further development of rural areas
will depend entirely upon the mechanization of farming.

The socialist relations of production, which have won
a victory in the rural areas, do not have the material
and productive bases that are required by socialist methods
of production.

The mechanization of farming is also necessary in order
to raise agricultural management to the level to which
industry has developed; this is required to ensure a
balanced development of industry and agriculture.

This year our industry, which has developed at an
average annual rate of 42 percent during the five years
after the Korean War, is expected to increase by another
50 percent. The gross value of industrial production will
reach six times the 1949 level and 6.5 times the pre-
Liberation 1944 level.

Socialist industry in our country has thus developed
very rapidly. As a result, the nonagricultural popula-
tion—workers, office workers, and their dependents—has
increased; moreover with the increase in the income of the
workers, demand for foodstuffs and supplementary foodstuffs
has also undergone a rapid increase.

The rapid development of light industry and local in-
dustry has increased the demand for farm produce, i.e.,
raw materials for the production of foodstuffs, fibers, oil,
fat and paper.

It is clear that without an historic increase in the
output of food grains, vegetables, meat, and industrial
crops, neither the raw material requirements of the rapidly
expanding light industry and local industry nor the in-
creased demand of the people for foodstuffs and supplemen-
tary foodstuffs can be satisfactorily met.

A planned socialist economy, by its very nature,
requires a balanced development and in particular, it
requires an equilibrium between industry and agriculture,
the two key sectors of the people's economy.
At the same time that the agricultural economy of our country will be primarily engaged in the production of food grains, it will also carry out the Party's agricultural policies on the many-sided development of agriculture; it will be engaged in the cultivation of vegetables, oil, and industrial crops, as well as in the livestock industry, and in pomiculture and sericulture.

As these individual sectors of the rural economy are distributed and become specialized on the basis of the natural and economic conditions obtaining in particular regions, the crop proportions between the individual regions will also become quite different.

For these crops, advanced farming methods are to be applied in the areas where the cultivation of particular crops has proven its superiority, as suitable to particular climatic and geographic conditions, including both the characteristics of the soil and tilling conditions.

As a result, the overall quality (ch'ongnyang) of the various working groups (chakopkun) in individual areas will vary as will their composition.

The mechanization of farming will mechanize operations of this nature, i.e., the above-mentioned operations are the proper goals of mechanization.

In addition, as mentioned earlier, field leveling, cultivation of economic forests, irrigation, and cultural development of rural areas constitute other goals of mechanization.

On the other hand, for the task of mechanizing all these operations, approximately 7,000 tractors (average 15 HP per tractor) are available, as well as trucks, various other large and small farm implements and facilities, and technical cadres to operate the machinery and implements.

As compared with the vast scope of the task of mechanization, our present capacity for mechanization is small. In other words, there is a real disparity between the available numbers of farm machinery and farm implements and the amount of work load that the machinery and implements are to perform. Even in Hwanghae-namdo, where the mechanization of farming has been carried out most.
extensively, 16 machine tractor stations (nonggigye chakopse), with about 900 tractors, have mechanized only 58 percent of the total arable area of 286,000 chongbo.

We have now begun to grapple in earnest with the problem of the mechanization of farming and we intend to solve it within the shortest possible period of time.

It was this requirement that gave rise to our Party’s decision to mobilize all available resources to effect mechanization, i.e., by carrying out mechanization simultaneously by means of motorized machinery, animal-drawn machinery, and large, medium, and small farm implements.

To spread out the resources so mobilized over a large area does not constitute the method of work which is characteristic of our Party. It is necessary to concentrate these resources on those areas that are capable of producing the greatest results and then to gradually extend them to other areas.

Thus the basic direction, as determined by the Party, is to first mechanize those operations which require a greater amount of labor, such as transport, initial tilling, sowing, weeding, harvesting, and threshing, and then to move gradually toward over-all mechanization.

The same holds true for the Party’s proposal that mechanization should begin with an area which can produce relatively rapid results and should then proceed to other areas. It should begin with a plain region characterized by the following: high yields, good climate, absence of flood damage, water conservation that has been carried out well, large farm machinery which has been introduced in considerable quantity, and existing machinery that can be used immediately without readjustment; mechanization should then proceed to mountain regions.

This policy is expressed in the Party’s measures to complete the mechanization of P’yongan-namdo and Hwanghae-namdo, the provinces which are representative of the plain region, within the next one to two years. In 1960 these provinces will be supplied with 4,000 tractors and 3,000 trucks, together with the necessary accessory trailers and connecting machinery (yongyolggi). Field operations in these provinces will then be mechanized up to 80-85 percent within the next one to two years, and the remaining
15-20 percent of operations will be performed by animal-drawn machinery, thus basically completing the mechanization of farming.

Moreover, it is possible for other provinces to complete the mechanization of farming within the next three to four years if they correctly implement the Party's measures.

Positive acceleration in the mechanization of farming calls for close coordination between the production and operation of farm machinery. For, at present, farm machinery is not produced by those who are to operate the machinery, but by a sector specializing in its production.

After modern farm machinery has been produced and supplied enabling the assignment of mechanized operations, the machine tractor stations are set the task of the concrete realization of mechanized operations. These stations own the overwhelming majority of modern farm machinery and implements and are provided with an advanced working class capable of operating the machinery and implements.

The machine tractor stations constitute the only working class group existing in the rural areas and are the stronghold for executing the technological revolution in these areas.

It is well known that the machine tractor stations (nonggiye imgyongso), which were the predecessors of the present machine tractor stations (nonggiye chakopso), were originally established by the State as an important means of accelerating cooperativization and of strengthening the influence of the working class in rural areas. To this end, they rendered technical assistance and labor services to private farmers, who thus personally experienced the advantages of mechanized farming.

After these stations were established, their number was increased to more than 80, together with increasing numbers of modern farm machinery and livestock machinery and facilities. Thus, quite appropriately, the machine tractor station played leading role in facilitating agricultural cooperativization and in increasing agricultural production.
But the new situations that have arisen in the rural areas, are entirely different from those that existed when the original machine tractor stations were established.

For example, the private farmers who constituted the primary goal of the functions of the original machine tractor stations have now disappeared as a result of cooperativization.

In the past, the machine tractor stations played a certain coordinating role by accelerating the integration of petty farmers' enterprises, with socialist enterprises by virtue of its link with them. But today both the machine tractor stations and the agricultural cooperatives have become equally integrated into a single socialist economic sector, and they implement the socialist economic plan through joint endeavor.

Secondly, the variety and scope of the operations of the machine tractor stations have expanded, partaking to a greater extent in agricultural production. Whereas, in the past, the stations were mainly engaged in initial tilling, their mechanized operations now comprise, sowing, intermediary tilling, weeding, transport, and field leveling, as well as initial tilling.

Whereas the machine tractor stations previously performed their work under contracts with private farmers and did not assume final responsibility for the results of agricultural production, today they participate in agricultural production jointly with the agricultural cooperatives and assume final responsibility for the results of agricultural production. As a result, the functions of the machine tractor stations (nonggigye imgyongso) have changed from a mere "ad hoc tilling (imgycng) to organized cooperative production.

It is precisely for this reason that the Party has reorganized the [old] machine tractor stations into the new machine tractor stations (nonggigye chakopso) [Lit., farm machinery operating stations].

Our Party intends to gradually expand the machine tractor station network with a view to ultimately establishing one station in every kun, and this method constitutes the most accurate way of achieving the mechanization of farming within the shortest period.
At present, our agricultural management lacks adequate experience in mechanized farming and there are not enough cadres familiar with the required mechanical technology; moreover, the individual agricultural cooperatives do not have the economic foundation which would enable them to purchase large, modern farm machinery and to constantly improving it. Furthermore, our machine building industry, which in 1960 will produce 3,000 tractors, 3,000 trucks, and thousands or tens of thousands of various farm implements, will thereafter double its annual production. It will thus become feasible to establish a machine tractor station in every kun.

Today, the tasks to be performed by the machine tractor stations are indeed very important.

Within the not-too-distant future, these machine tractor stations will perform approximately 80 to 85 percent of the principal farming operations; consequently, they will assume greater responsibility in agricultural production than that assumed by the agricultural cooperatives.

The machine tractor stations should therefore assist the agricultural cooperatives and, together with them, the stations should increase agricultural production, by guiding the cooperatives in all areas of farming activity; these include adequate land leveling and land utilization, the accurate distribution of crops in planting, the organization of many-sided farming (while principally engaged in the production of food grains), the introduction of advanced technologies, and the systematic organization and use of labor.

The machine tractor stations should also play the role of promoting the cultural revolution in the rural areas through their civilized features which represent the advanced working class [of which the machine tractor stations are a part, as distinguished from the agrarian class or peasants]. They should strengthen the political and ideological influence of the working class upon the farmers, thus further consolidating the workers-peasants' alliance.

Satisfactory implementation of these tasks calls for radical improvements in the management of the machine tractor stations; in particular, it calls for the enhancement of the skill levels of farm machinery operators,
as well as for the maximization of the utility rate of farm machinery facilities. These measures will lead to an increase in the output of food grains, vegetables, meat, etc. Moreover, the workers in the stations and especially the machinery operators should eliminate the tendency, sporadically shown in the past, to work as though they were merely tenant farmers [without a sense of responsibility or pride.]

Since it is impossible for any single industrial sector to meet these enormous farm machinery requirements, it is essential that all plants and enterprises in all sectors of the people's economy should mobilize their resources for the production of farm machinery. In addition, machine parts and other supplies required for the repair and maintenance of existing farm machinery should also be adequately produced and supplied in time.

In connection with the mechanization of farming, it is also necessary for those agricultural cooperatives which receive the services of mechanized farming to reorganize their work to conform to new circumstances.

In order to ensure the adequate implementation of mechanized farming, the cooperatives should strengthen their economic and organizational links with the machine tractor stations. Thus it is necessary in regard to both field leveling and the construction of roads and bridges, but it is also required for adequate coordination between the tractor operating team [of machine tractor stations] and the cooperative work team.

Furthermore, agricultural cooperatives should not lean too heavily upon the services of machine tractor stations. Rather, they should strive to increase the utility rate of farm implements currently in their possession and to eliminate the tendency to expect large-scale farm-machinery services while they themselves do not strive to repair these implements and to put them into use. It is equally important that they mobilize cooperative members to design implements employing internally available resources. (Kulloja, No 12, December 1959, pp 15-20)
Reorganizing Crop Ratios

[Agricultural is made up of various sectors, each sector having its own means of production, technical processes, methods of production, types of final products and economic significance—factors that differentiate one sector from the others. These sectors stand for the production of food grains, industrial crops, vegetables and potatoes, fruits, as well as livestock, sericulture and others. However, the classification of these sectors of agricultural will not remain unchanged: the more agriculture is developed, the more the industry will be divided into a greater number of sectors and subsectors.

To keep the different sectors in agriculture in harmony with each other, it is important to bring them into appropriate mutual relationship and proper combination. Only the proper combination of different sectors in agriculture makes it possible to utilize land and production means more productively and more effectively, to put to work personnel and equipment throughout the year, and to have one sector effectively utilize by-products and waste from another sector.

For instance, straw, husks, stems and other parts of various crops will make good fodder for livestock; by using these by-products and waste provided by crops, livestock will produce meat, milk, wool, eggs, etc. In its turn, livestock will provide excellent manure to be used in crop-raising. Also, by keeping various sectors of agriculture in proper relationship to each other, labor will be employed more effectively all year round, cash income will be obtained more evenly throughout the year and the turnover of funds invested in production will be quickened.

The equilibrium among various sectors of agriculture should be maintained with a view to satisfying the needs of industry which constitutes the leading sector of the people’s economy. Agriculture supplies raw materials to light industry and the foodstuff industry.]
Systematic and well-balanced growth of agriculture is an important characteristic of a socialist society. Under Japanese rule, Korea was intended as a source of food and raw materials for Japan with the result that industry was not developed. Korean agriculture was not linked, in those days, with the industry of Korea but with that of Japan. At that time, farm crops accounted for as much as 90.6 percent of the total output of agricultural products, with the output of livestock accounting for 5.3 percent and sericulture for 2 percent. The output of rice, staple food of the Japanese, represented 54.8 percent of the total output of farm crops; on the other hand, crops other than rice, or i.e., dry field crops, were discouraged in favor of rice. Raw cotton and "crops of special use" (t'ukyong jakmul) constituted only a little more than two percent each, and although the cultivation of these crops was encouraged, they totaled only 4.6 percent.

Livestock presented a much worse picture. Ruthlessly exploited by Japanese rulers, few Korean farmers had sufficient funds to purchase and keep livestock; even those who could barely afford to raise livestock had little interest in that industry, for they knew too well that all their hard work would only serve to satisfy the boundless greed of their foreign conquerors.

As a consequence, livestock was raised only by well-to-do farmers who could afford to consume part of their livestock products. In addition to pigs and chickens, cows were raised on a small scale mainly as draft animals. Such productive animals as dairy cows and sheep were raised by very few people, if any.

Since the liberation, the Party and Government have been taking a variety of measures to remedy this state of affairs in Korean agriculture. It has been the policy not only to increase the output of agricultural products, but also to have agricultural products produced in localities where the soil or climate are suited to the products or where they are in great demand.

During the first years after the liberation, emphasis was placed upon increasing the output of food grain, the basis for expanding agricultural production as a whole. As a result, the total output of food grains in 1948 was so successful as to exceed by 10.4 percent the highest output prior to the liberation. Thus, North Korea ceased to suffer
food grain shortages and began to have surplus food grain.

Because of such encouraging results, in drawing up the Two-year Plan for the people's economy covering 1948 and 1949, emphasis was placed upon eliminating the one-sided features of Korean agriculture caused by expanding those sectors of agriculture that satisfied the demands of Japan and neglecting those sectors which would satisfy the needs of Koreans. Thus, Korean agriculture began to be reorganized to meet the growing demands of the State-operated industries. These policies of the Party and Government were reflected in the Two-year Plan as follows (in percent):

<table>
<thead>
<tr>
<th></th>
<th>1948</th>
<th>1949</th>
<th>1950</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sown Area</td>
<td>100</td>
<td>100.3</td>
<td>101.9</td>
</tr>
<tr>
<td>Industrial Crop Area</td>
<td>100</td>
<td>143.4</td>
<td>152.6</td>
</tr>
<tr>
<td>Total Output of Food Grain</td>
<td>100</td>
<td>101.8</td>
<td>107.9</td>
</tr>
<tr>
<td>Cows</td>
<td>100</td>
<td>117.1</td>
<td>141.4</td>
</tr>
<tr>
<td>Pigs</td>
<td>100</td>
<td>143.3</td>
<td>184.8</td>
</tr>
</tbody>
</table>

Thus, during the prewar peaceful construction period, reorganization of Korean agriculture was put underway in terms of its various sectors by continuing to increase the output of food grains and concurrently expanding the production of industrial crops and livestock at a rapid pace.

However, during the [Korean] war, the inter-relationship of various sectors of Korean agriculture, as well as agriculture as a whole, was severely impaired. At that time, it was necessary to concentrate our energy mainly upon the production of food grains. Moreover, on account of the depredation and destruction by the enemy, the number of livestock was decreased considerably. As a result, the proportion of industrial crops and livestock in the total output of agriculture was deplorably diminished. As compared with 1949, the area under industrial crops was reduced to 50.4 percent in 1953; the number of Korean cattle to 64.1 percent; and the number of pigs to 82.3 percent.

When the war ended, it was important to maintain the equilibrium between agriculture and rapidly growing industry.
During the first years after the war, it was the Party policy to give priority to the production of food grains and to expand other sectors of agriculture by degrees. Due to the correct policy and prudent guidance provided by the Party, decisive victories were won during the Three-Year Plan period in agricultural cooperativization and in the solution of the food grain shortage problem.

With the December plenary session as a turning point, Socialist construction of Korea began to reach the climax. The phenomenal advance in industry was accompanied by that in agriculture. As a result, the total grain output went up to 2,870,000 tons in 1956, 3,200,000 tons in 1957 and 3,700,000 tons in 1958. Thus, the grain output of 1958 represented a 28 percent increase over 1956, when the pre-war level of grain output was attained; the problem of serious food grain shortages in the post-war period was successfully solved.

This increase in grain output was accompanied by a rapid increase in the output of other farm products: as compared with 1956, the output of raw cotton increased more than ten times in 1958; meat, more than three times; milk, over three times. The output of various farm products has been increasing as follows in percentages:

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<tr>
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</thead>
<tbody>
<tr>
<td>Food Grains</td>
<td>100</td>
<td>111</td>
<td>128</td>
<td>179</td>
</tr>
<tr>
<td>Raw Cotton</td>
<td>100</td>
<td>129</td>
<td>1,032</td>
<td>3,043</td>
</tr>
<tr>
<td>Meat</td>
<td>100</td>
<td>167</td>
<td>334</td>
<td>671</td>
</tr>
<tr>
<td>Milk</td>
<td>100</td>
<td>270</td>
<td>728</td>
<td>11,356</td>
</tr>
<tr>
<td>Cocoons</td>
<td>100</td>
<td>144</td>
<td>221</td>
<td>1,127</td>
</tr>
<tr>
<td>Fruits</td>
<td>100</td>
<td>270</td>
<td>315</td>
<td>-</td>
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*Note:* The figures for 1961 have been worked out on the basis of goals to be attained within two or three years.
It is evident from the table that beginning with 1957, the output of farm products has been growing at a rapid pace. It is expected that within two or three years from 1959, the increase in output will advance at a pace twice as rapid or more as during the corresponding periods heretofore.

It is also indicated in the table that the output of products other than food grains has been increasing at a high speed without exception, especially the output of livestock, sericulture, industrial crops and fruits. (In the case of fruits, it should be noted that the area under fruit trees has also been expanded on an extensive scale). Actually, the output of these products has been increasing at a higher speed than food grains. Thus, various sectors in our agriculture have been growing in such a way as to meet the growing demands of society for different farm products—a decisive departure from the agricultural structure under Japanese regime.

These achievements in reorganization of various sectors of agriculture have made it possible for us to develop the administration or management of our rural areas into higher status. Our present task is to expand agricultural production at a more rapid pace and reorganize various sectors of agriculture into a more advanced and rational structure. Rapid expansion of productivity caused by the production relationship of triumphant socialism and the rapidly rising living standards of the people have brought about a remarkable change in demands for agricultural products both quantitatively and qualitatively. Particularly the demand for high grade foodstuffs such as meat, milk, [edible] oil, and eggs as well as for daily necessaries is steadily growing.

Light industry has also been continually expanding, especially local industry which has been steadily growing on a new basis since the June plenary session of 1958. Light industry looks primarily to agriculture for its raw materials, making it all the more necessary for agriculture to rapidly increase its output and rationally reorganize the structure of its various sectors.

Reorganization of agricultural structure in various sectors is also of great importance for further development of agriculture itself. As already discussed, the appropriate
inter-relationship of different sectors and their rational combination will be greatly conducive to more effective use of land and other production means, to raising labor productivity and to increasing the output of farm products to the maximum at the minimum cost.

Since the onset of the "winged horse" movement, highly intensive methods have been used in all sectors of our agriculture, and the operation of agriculture has been conducted on a diversified basis by developing, in addition to food grains, all sectors and crops.

Thus, our agricultural structure has improved greatly during recent years in terms of the various sectors, yet much more remains to be done. For instance, in 1957, the ration between farm products and livestock products in total agricultural output was 83.9 to 14.4. It is true that the proportion for livestock products increased almost by one hundred percent over 1946, but it is still very far from the situation in the highly developed agriculture of advanced nations. (In the Soviet Union, the ratio between farm products and livestock products in the total agricultural output was 50.7 to 49.3 percent in 1956).

The picture is not any better in the relative size of areas under different types of crops. In 1957, the areas of land under grain crops, industrial crops and fodder crops stood in the ratio of 88.3, 2.1, and 0.4 in the total sown area. (In the Soviet Union, the corresponding ratio was 85.9, 6.8, and 21.4 in 1956.)

Certainly, our agricultural structure in terms of various sectors should not be compared mechanically with that of other lands. However, the comparisons we have made of Korean agricultural structure with that of the Soviet Union serve to disclose the extent to which our agriculture still suffers from the vestiges of Japanese rule and the losses incurred during the war at the hands of U.S. imperialists. It behooves us to continue to reorganize the structure of our agriculture in its various sectors so as to more satisfactorily meet the steadily growing needs of the people for agricultural products.

Conditions have already been created in Korea that are favorable to reorganizing our agricultural structure into a more advanced one. For one thing, agriculture has been entirely converted along socialist lines. If agriculture
is operated by individuals on a small scale, it will be impossible, even with the assistance of the State, to expand agricultural output by plan, to produce a large variety of commercial agricultural products on a mass production basis, and, in particular, to provide sufficient commercial agricultural products to urban areas.

It is only by large-scale socialistic operation that agricultural productivity can be maintained at a high level, that agricultural operation can be diversified and all sectors of agriculture can be developed by plan so as to maintain equilibrium. For socialistic large-scale collective operation is capable of using vast land resources and highly developed techniques and skills so as to develop diversified operation and guarantee high productivity in all sectors by properly combining basic sectors and supplementary sectors in such a way as to suit natural economic condition.

Such advantages of large-scale socialistic collective operation has been further strengthened since the merger of agricultural cooperatives. Expansion of the scale of management and organizational and economic strengthening of agricultural cooperatives have created conditions favorable to diversifying agricultural production and rational reorganization of agricultural structure in terms of its integral sectors.

In the second place, the technological and cultural revolution is at present successfully underway in the countryside. This important factor makes for rapid increases in agricultural production and rational reorganization of agricultural structure, which cannot be effected without technological innovations such as irrigation, mechanization, electrification and adoption of intensive farming methods.

Because of the extremely limited area of arable land in Korea, reorganization of agricultural structure to maintain an equilibrium between different branches of agriculture will not be realized without raising by far the output per unit of land, without overcoming natural disasters and without rationally allotting needed farm crops. And, to achieve these ends, irrigation and intensive farming methods should be adopted including deep plowing, dense planting and generous use of fertilizer and manure.
Now, such intensive farming methods require increased use of labor, when little surplus labor supply is available. Therefore, mechanization and electrification of agricultural production is extremely essential to further increases in agricultural output and rational reorganization of agricultural structure in its integral sectors.

Moreover, mechanization and electrification should be completed as soon as possible in view of their great economic effect on agriculture. As a matter of fact, irrigation has been basically completed, electrification is expected to be completed before the end of 1960 and much progress has been made in mechanization. A series of measures taken by the Party, including the decisions adopted at the June plenary session and the machine tool reproduction movement, have proved very conducive to mechanization of agriculture.

In his report before the National Conference of Agricultural Cooperatives, Comrade Kim Il-sung stated, "In the past, our agriculture concentrated itself upon the production of food grains, and yet the results were not too satisfactory. We should get rid of such deficiencies in our agriculture and diversify its operation." On the reorganization of agricultural structure the Premier said, "The Party policy of giving priority to food grain production and concurrently expanding other sectors of agriculture such as industrial crops, livestock, sericulture, pomiculture, and freshwater fish cultivation should be continuously and thoroughly implemented. Thus, our countryside should be built up into a strong raw material base as well as a strong food base."

In accordance with this direction of development indicated by the Party, it behooves us to carry out the tremendous task of increasing in the near future the output of food grains to 7,000,000 tons, raw cotton to 200,000 tons, meat to 400,000 tons, milk to 460,000 tons, silkworm cocoons to 60,000 to 70,000 tons and fruits to 250,000 tons (cf. the table given above on the increase of various main farm products.)

The most important task for our agricultural is the production of food grains. Therefore, emphasis has been placed by the Party upon increasing food grains output. Measures have been taken to adjust the structure of food grain production through encouraging cultivation of high-yielding
grain crops on the principle of right crop on right soil. In adjusting food grain production structure, measures have been taken to raise the output of rice and, as for dry field crops, that of wheat, so as to meet the demand of the people for their favorite food grains. In the near future, the area of land under wheat will be over 400,000 ch'ongbo.

In the past, stress was laid on supplying the quantity of food grains needed by the people, but now the policy is to guarantee an ample amount of good-quality grains preferred by the consumers. Thus, in the near future, the people will be assured of an ample supply of rice and wheat flour as "major food grains".

Generally speaking, solution of the food grain problem is conducive to development of the other sectors of agriculture, especially that of the livestock industry. Therefore, in Korea, production of food grain is related not only to the food problem but also to the development of the livestock industry as well as to the production of various crops, including industrial crops.

Due to the colonialistic agricultural policy of Japan in Korea, our livestock industry was one of the sectors of agriculture which lagged behind the other sectors of agriculture; and during the Fatherland liberation war, the livestock industry was among those agricultural sectors which suffered the greatest loss.

Therefore, during the post-war period and particularly since 1957, the Party has continued to attach great importance to the development of the livestock industry. As a consequence, much progress has been made in this industry. Nevertheless, the steadily growing demand for livestock products remains to be satisfactorily met. To remedy the situation, it was decided at the June Plenary Session of 1959 that the material and technological bases of livestock should be strengthened and that the purchasing and supply programs of livestock products should be improved so as to raise the output of meat to 400,000 tons in the next few years, that of milk to 450,000 tons, eggs to 1,500,000,000 and wool to 700 tons.

One of the characteristics in our livestock industry is that Korean cattle—formerly worked as draft animals—have been converted into dairy cows on a large scale due to
the progress in mechanization of agriculture. Also, productive livestock has been remarkably expanding such as pigs, dairy cows, sheep and poultry.

Development of livestock has been accompanied by the tremendous increase in the area of land under fodder crops. Prior to the liberation, such things as devoting land to fodder crops were not known to Korean farmers. Even since the liberation, the area of land devoted to this purpose was not sufficient to promote the livestock industry. The ratio of land under fodder crops to the total sown area in 1949 was only 0.1 percent, 0.2 percent in 1953 and 0.4 percent in 1957.

It was proposed at the June Plenary Session of 1959 that the land under fodder crops should be greatly expanded. As pointed out by Comrade Kim Il-song, the best way to solve this problem will be, in view of the limited area of arable land and that of natural pastures, the adoption of two-crop farming methods on an extensive scale so as to increase the output of fodder crops by planting them before, after or along with main crops in such a way as not to decrease the output of the latter.

Measures should be taken to increase the area of land under fodder crops by double-crop farming methods to 350,000-400,000 chonbo in 1960, and to 500,000-600,000 chonbo in three to four years. At the June Plenary Session it was proposed that electrification and mechanization of agriculture be promoted so as to provide the additional labor required by adoption of double-crop farming methods.

It is also expected that the output of industrial crops will be increased in a brief period of time. Included in industrial crops are fiber crops such as raw cotton and flax, various oil-bearing crops as well as sugar-beets, tobacco, ginseng, and hops. As for fiber crops, cotton raising should be encouraged in localities suited to it; in northern mountainous regions, including Yanggang-do, the raising of flax--known as the cotton of the north--should be encouraged.

In addition, hemp and other fiber crops should be raised extensively. Oil-bearing crops such as sunflowers, peanuts, rapeseed, sesame, etc., should be raised on a large scale so that the annual output of edible oils can be increased to 100,000 tons in the next few years. Tobacco, ginseng and
hops also should be raised on a large scale so as to obtain foreign exchange as well as to meet domestic demands.

Thus, the output of industrial crops will rapidly increase so that its ratio to the total agricultural output will be raised; and the structure of industrial crops [probably the proportion of various crops in industrial crops as a whole] will be altered and new industrial crops will be raised so that the manifold demands of society for industrial crops will be satisfactorily met.

It is also expected that sericulture will be further developed. On the basis of the accomplishments of the past few years in the raising of tussah-worms and castor-bean worms as well as silk-worms, it is anticipated that sericulture will achieve still further development. It behooves us to increase the output of cocoons to 60,000-70,000 tons in the next few years, a 130 percent increase over the goal set in the Five-Year Plan and a 700 percent gain over 1958.

It is also our task to achieve a phenomenal increase in the output of fruits: the area under fruit trees should be increased in the next two or three years to 100,000 ch'ongbo and the output of fruits to over 250,000 tons; and the total area under fruit trees should be expanded to 200,000 ch'ongbo within ten years.

In addition, agricultural cooperatives should expand shallow-sea cultivation (ch' onhae yangsik) and fresh-water fish raising on an extensive scale so as to produce 300,000-400,000 tons of aquatic products per year by these methods. Subsidiary industries including apiculture also should be expanded to a great degree.

Thus, in the past few years, emphasis has continued to be on the production of food grains while remarkable expansion has been achieved in the other sectors of Korean agriculture; especially phenomenal has been the development of industrial crops, fodder crops, livestock, and sericulture. As a consequence, both the agricultural structure in terms of its integral sectors and the structure of individual sectors in terms of crops and products have undergone considerable changes.

Indeed, our agriculture has been experiencing rapid changes. The structure of agriculture is being rationally
reorganized in its integral sectors; equilibrium between various sectors is being maintained, and on this basis means of production, including land, has been effectively utilized and the output per unit of land has also been increased while expending less labor per unit of product.

In the meantime, agriculture as a whole has been operated by further intensive methods and agricultural productivity has been raised. Moreover, agricultural products have improved in their commercial value and lucraviveness. By meeting the rapidly growing demands of industry for agricultural products more effectively, the productive ties between industry and agriculture have been strengthened more firmly and in many directions on a new foundation, and rapid improvement of the people's living standards has been assured. (Kyonje Konsol, No 11, Nov 59, pp 7-13)
VI. FORESTRY

Plan Fulfillment

(The following is a translation of the editorial "Achievements of 1959 in the Forestry Field and Our Task," Choson Im'oe, No 12, December 1959, pages 1-4.)

During the Expanded Plenary Session of the Party Central Committee which met for four days beginning 1 December 1959, important problems faced by the Party were discussed, including those concerning the development plans for the people's economy. At the plenary session, the gigantic achievements of the people of Korea in carrying out the people's economic plans for 1959 were reviewed. The industrial output of 1959 is expected to show a 50 percent increase over 1958. It is also expected that the First Five-Year Plan will be overfulfilled 113.2 percent by the end of 1959.

Thus, the colonialistic one-sidedness of our industry has been completely eliminated and a solid foundation has been laid for industrialization along the lines of socialism. A great change has taken place in agriculture as well, raising the level of material and cultural livelihood of the people considerably higher than before.

As in the other sectors of the economy, great achievements have been made in forestry. In 1959, the output of wood and lumber has continued to increase, basically meeting the demand for wood and lumber by various sectors of the economy.

In addition, great advances have been made in improving technical equipment and in raising the level of mechanization in forestry. In 1959, a variety of technical equipment (kisul kijajae) has been provided to the forestry industry by the Party and Government, with the result that the number of tractors has increased to 1,050 percent compared with 1958, and that of auto-vehicles to over 200 percent.

As a consequence, the amount of trees felled by mechanized processes in 1959 is expected to rise to 161.6 percent as
compared with 1958, and intermediate transportation by mechanized means is anticipated to rise to 128.3 percent of 1958; also a variety of difficult and time-consuming work, including loading freight cars, has been mechanized to a great degree. In addition, a great number of original devices worked out by laborers has been adopted in rationalizing work. As a result, it is expected that the output of wood per capita will go up to 111.9 percent as compared with 1958.

The machine tool reproduction movement has been carried out on an extensive scale with the result that the capacity of the engineering departments of enterprises has been considerably expanded, and all factories and enterprises now have their own engineering shops (kongmu chikchang).

In the production of lumber and in wood processing, advances have been made. The production of plywood (happ'an) has been normalized, and its quality has been improved, making it possible to manufacture various types of high-grade furniture. The Musan Sont'opki Mill with modern equipment has been established, the first mill of this kind [Musan is probably the name of the city, but "sont'opki" is difficult to identify.]

Advances have been made in the struggle to save wood and lumber and to use them in a coordinated manner. As a result, it is expected that the output of wood-tar will be increased to 380 percent compared with 1958, the output of "songt'anyu" to 150 percent. Many wood handicraft articles have been produced with small pieces of wood as raw materials.

The living standards of laborers in the forestry industry have been considerably raised, with average per capita wages increasing to 144.3 percent compared with 1958. A great many dwelling houses as well as cultural and welfare facilities have been set up for them.

These gains made in the course of carrying out the people's economic plans are another evidence of the appropriate economic policy and the prudent guidance of the Party. Nevertheless, along with these important gains many a shortcoming has been detected in the process of implementing people's economic plans.
For one thing, responsible workers of the Ministry of Forestry, factories and enterprises have been so content with past achievements that they failed to guide and control implementation of plans as they should: construction and production projects were continually expanded when concentration should have been on priority projects.

For instance, in 1959, the Ministry planned construction projects for the Wyion Sawmill (Chijae Kongjang), Husan Sawmill, Kilchu Sawmill, the Forestry College (Imop Taehat) and the Central Cadre Training School (Chungang Kanbu Yangsong So), without first taking into consideration the available labor supply, materials and other resources.

The picture is not any better in enterprises. The Poch'on Forestry Enterprise (Poch'on Imsan Saoeso) has undertaken twelve construction projects, including seven forestry railroads, but none of them has been completed.

The situation in regard to production is quite similar to that of construction. The Yongnim Forestry Enterprise has been dissipating its energy by having its lumber jacks scattered over one hundred sites with the result that productivity has deteriorated and much labor and material have been wasted.

Another obstacle to the implementation of economic plans has been caused by some responsible workers in the Ministry, mills and enterprises who failed to carry out the Party line demanding that everything should be preceded by political work; these workers also failed to make arrangements to carry on production on a normal basis. Necessary technical measures were not appropriately taken and other preparations were not properly made.

For instance, in 1958, preparations were not adequately made for the work to be done during the winter with the result that the transportation of wood in the winter time failed to be carried out as scheduled, and the plans for water transportation were not fulfilled by a great margin due to lack of "p'yont'o chaeba" and failure to keep waterways in good repair. Such failures did affect the fulfillment of annual plans.

Especially the forestry enterprises of Yongnim, Pujon, P'ungso and Yugok carried out the 1959 plans very
unsatisfactorily because of very cursory preparations for winter work and perfunctory repairs on water channels.

Some enterprises have not secured necessary parts for machines and have failed to keep equipment in repair. Some factories and enterprises were interested only in manufacturing new machines and neglected to keep existing equipment in repair, and thus failed to maintain a proper utility rate. These are all indications that many establishments are not being properly operated.

During the nine-month period from January 1959 to the end of the third quarter, the locomotives under the Ministry of Forestry (Imojeong) lost a total of 69,441 hours due to various hindrances, and 81,634 hours were lost by sawing machines. If these losses had been reduced by 50 percent, the output of wood would have been increased by 173,000 m³ and that of lumber goods by 24,000 m³. Due to failures to properly utilize existing equipment, production plans and particularly mechanization plans have not been fulfilled at many forestry enterprises, including those of Nangnim and Changjin.

A third obstacle to the implementation of economic plans was caused by some leading workers with the Ministry, factories and enterprises who so neglected labor management that little or no control was exercised by them over labor management. These people attempted to assure the required output by increasing the absolute number of laborers.

As a consequence, much labor has been wasted and labor productivity was kept from rising as it should. Many enterprises have hired a great number of unregistered personnel and have assigned them to unproductive and indirect sectors. Thus, even though more labor was used than planned production plans were still not fulfilled.

At the Nang'o Sawmill (Chejae Kongjang), 270 unregistered laborers were hired when the unregistered labor fund provided for only 30 persons. These supplementary personnel were hired by the field supervisor (hyonjang chidowon) on his own authority. What an anarchic attitude! As a result of such deficiencies, labor productivity in the third quarter of 1959, at the Yonam Forestry Enterprise was lowered to 90 percent of 1958, but the wage fund was over-consumed 103.4 percent; and at the Changjin Forestry Enterprise, labor productivity was lowered to 80 percent, but
the fund was overconsumed 113.7 percent. Organization of wages (im'gum chojik) is one of the important factors in raising labor productivity, but this organization of wages and the setting of labor norms were not done properly.

A fourth obstacle to the implementation of economic plans was caused by failures to observe the demand of the Party that costs should be lowered and output raised. Thus, much labor and material were wasted. The economizing campaign was most unsatisfactorily conducted in the sawing sector. In 1959, up to the end of the third quarter, the lumber production plan was not fulfilled and over 51,000 m³ of wood were wasted. In the first half of 1959, at the Manp'o Sawmill 590 m of precious "taegoji" was wasted; and at the Wiyon Sawmill 445 m of "taegoji" was wasted.

Certainly these sufficiencies are incidental to our great economic development and it is in our power to overcome them. However, as emphasized at the plenary session we should examine these deficiencies so as to improve our work from now on. At the plenary session, the achievements in implementation of the 1959 people's economic plan were reviewed, and the basic direction and central tasks of 1960 plan were disclosed. At the suggestion of Comrade Kim Il-song, 1960 has been designated as a period of adjustment. At the recent plenary session, the central task of this period was classified again. It was declared in that classification that the central task will be to ease the tensions created in the past, particularly in the course of implementing the 1959 plans, in some economic sectors, to strengthen weaker links and to further raise the living standards of the people.

In specific terms, it was proposed at the plenary session that the central task for 1960 should be that efforts should be concentrated on mechanization of agriculture; every effort should be made to raise the output of food grain, subsidiary foods and necessaries for the masses; and to set up dwelling houses and cultural and welfare facilities for the working masses.

In this connection, the assignment was given to the forestry field in 1960 to produce in time the lumber required to carry out these tasks. To attain this end, mechanization should be steadily continued so as to promote technological innovation in the forestry industry.
Mechanization of forestry should be started with such work that can be performed by forestry enterprises themselves, including loading, freight trains and transportation to and from sawmills. At the same time efforts should be made to rationalize various types of works.

It is also important to raise the utility rate of equipment by making careful arrangements. Existing equipment including locomotives require innovation in repairing methods. To achieve this end, it is necessary to continue the machine-tool reproduction campaigns, to further expand the capacities of engineering shops (kongmu chikchang) and to secure sufficient amounts of reserve parts.

During this adjustment period, it is of the greatest importance to raise labor productivity by promoting mechanization, rationalizing organization of labor and improving wage scales and work norms.

The most important basic task for the forestry industry set by the Party is economization and effective use of lumber. To fulfill this task, it is necessary to develop the lumber chemical industry at a rapid pace and use by-products of the lumber industry in manufacturing various wood goods for daily use. It is also important to further expand the production of plywood (happ'an) and improve its quality.

To successfully carry out the 1960 plans, the workers in the forestry industry should thoroughly implement the Party slogan that available labor and available facilities be used in increasing output by improving labor productivity and economizing materials.

The leading workers in factories and enterprises should ensure the fulfillment of the tasks set for the forestry industry in the adjustment period of 1960 by having all work preceded by political work and improving organization and guidance to fit the changed situation, familiarizing the working masses with the significance and basic tasks of the adjustment period, and strengthening and developing socialist competition. (Choson Ilbo, No 12, Dec 59, pp 1-4)
Economic Forests

[The following are excerpts from an article by Ch'oe Ch'ang-op, "Several Problems Arising from the Task of Afforesting Economic Forests," Kyongje Konsol, No 12, December 1959, pages 24-25.]

With a view to the rapid development of the people's economy, the recent December 1959 Expanded Plenum of the Party Central Committee has proposed the challenging task of organizing and carrying out a nation-wide movement for the afforestation of economic forests.

The task of afforesting various economic forests has arisen from practical requirements created by the rapid development of the people's economy in the present stage of socialist construction.

The transition to a new stage of economic development and, in particular, the development of heavy industry and of such sectors of light industry as the fiber, paper, and food-processing industries, call for the exploitation of all available resources and the building of a strong raw materials base commensurate with the development of the people's economy.

Among these requirements, that of the large-scale and variegated afforestation and cultivation of forest resources occupies a very important rank.

While forestry is the least developed of all the economic sectors, the development of economic forests is not only important for further consolidating the socialist industrial base, but is also closely related to the advancement of the material and cultural life of the people.

For this reason, as pointed out by Comrade Kim Il-song, it is very important to afforest large-scale economic forests within the next five to six years.

Immediately after the national Liberation and following the Korean War, the Party and the State carried out a large-scale afforestation program. During the postwar period alone, 500,000 chonbo of mountains were afforested; furthermore, forest fires and clandestine timber felling were basically eliminated.
However, the per-chongbo volume of trees in our forests is very small. For example, the average volume per chongbo in our nation is less than 30 cubic meters; this is only about 30 percent of the corresponding level in advanced countries. In addition, there is a severe imbalance in geographic distribution and composition between the different regions. For example, about 70 percent of the total volume of trees is concentrated in three provinces (Yanggang-do, Chagang-do and Hangyong-pukto); on the other hand, the Hwanghae-namdo, Hwanghae-pukto, Kangwon-do, and Kaesong districts account for only 6.8 percent of the total forest volume.

Moreover, in terms of the age of trees, more than 70 percent of the total number of trees are young trees, 20 to 40 years of age, and only about 7 percent of the trees can be felled.

Fibers, paper, and oil and fat are required for improving the life of the people and for developing the people's economy. But the following sources for the raw materials which are needed for these products are almost non-existent in our country: poplar, aspen (sasi), "hwangch'ol," paper mulberry (taknamu), pine nut (chat), Korean wild walnut tree (karaenamu), walnut, "ch'op'i," paulownia (odongnamu), arnica (haedanghwa), "paeksanch'a", and lilac.

The demand for raw materials is constantly increasing as a result of the rapid rise in the living standard of the people and the rapid development of both the local industries and the modern large-scale synthetic-fiber, paper, and oil and fat industries.

During the postwar period alone, the daily consumption of pulp-making timber has increased approximately 15 times, and it is expected to increase rapidly hereafter.

This indicates that, without the large-scale afforestation of economic forests, including pulp-making timber forests, the demand for raw materials made by the fiber, paper, and oil and fat industries cannot be met.

Sufficient quantities of these raw materials, as well as raw materials for aroma ties, paint, and cork, should be ensured through planting by rapidly increasing the volume per unit area.
The importance of cultivating economic forests can be more readily understood if we take into account the limited arable area available in our country.

This is particularly true of the cultivation of cotton and oil and fat crops, since the arable land for these crops cannot be greatly extended.

For example, as compared with one chongbo of planted cotton (about 2 tons of cotton per chongbo), one chongbo of pulp-making timber forest can produce, with smaller amounts of labor, supplies, and funds, about twice as large an output of fabrics.

### Comparison Between Pulp and Cotton

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<thead>
<tr>
<th>No.</th>
<th>Indices</th>
<th>Output Per Chongbo</th>
<th>Output of Fiber per Chongbo</th>
<th>Annual Output of Fiber per Chongbo</th>
<th>Average Annual Output of Fabrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pulp timber 150 M³ forests to be newly created</td>
<td>17,850 kg</td>
<td>1,290 kg</td>
<td>5,170 M</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Cotton</td>
<td>2 tons</td>
<td>640</td>
<td>640</td>
<td>2,560</td>
</tr>
<tr>
<td>3</td>
<td>&quot;Taknamu&quot; [a tree]</td>
<td>1.5 ton</td>
<td>825*</td>
<td>825*</td>
<td>825*</td>
</tr>
</tbody>
</table>

*As computed in terms of paper.

If oil-bearing plants are well cultivated, per-chongbo extraction of oil will be 45 kilograms for pine-nut trees, 50 kilograms for Korean wild walnut trees, and 340 kilograms for walnut trees. This is about 70 percent greater than the yield that can be extracted from the sesame or Perilla ocymoides (tulkkae) [lit., "field sesame," but this sesame is not wild because it is cultivated.]
Moreover, activated carbon can be produced from skins of pine-nut trees, Korean wild walnut trees, and walnut trees, and, after the extraction of oils, the oily chips (yubak) can be used as raw material for making high-quality confectionaries. Furthermore, by creating variegated and large-scale economic forests, we can supply chestnuts and wild fruits, such as wild pears and wild berries (tuljuk), as well as high-quality medicinal herbs and the raw materials for aromatics, paint and cork.

Therefore, a wide-scale cultivation of economic forests in our country, which has an extremely limited arable land area, possesses as great a political and economic significance as the opening of virgin lands [in the Soviet Union?].

Economic forests are required in order to create water sources, to prevent damages from drought and flood, and to further beautify the landscapes of our country.

Although Comrade Kim-Il-song has pointed out that "it is the duty of Communists to conquer nature " by fully utilizing the mountains for the benefit of the people's life, some leading forest workers and State workers have conducted their guidance work in the past in a merely formalistic manner. As a result, forests suitable for the cultivation of fibers, as well as paper-making and oil-bearing timber forests, have not been economically utilized, and many aromatic and paint herbs, high grade medicinal herbs, and wild vegetables and mushrooms, have not been adequately exploited for the end of improving the daily life of the people.

It is for this reason that the Party has proposed the challenging task of cultivating, within the next five to six years, 500,000 chonbok of economic forests (300,000 chonbok of fiber and paper-making timber forests and 200,000 chonbok of oil-bearing tree forests).

Ten to fifteen years after this task has been successfully carried out, the economic forests thus created, together with the existing economic forests, will produce 1.6 billion meters of fabrics, 430,000 tons of paper, and 14,000 tons of oil.

Therefore, by indoctrinating the masses with the political and economic significance of this task, the leading economic
workers should successfully implement this task for the progress of the Fatherland and for the prosperity of succeeding generations.

What, then, are the problems arising from the tasks of successfully creating, protecting, and managing economic forests?

First of all, the leadership of the responsible workers assigned to these tasks should be strengthened. ....

In cultivating economic forests, great care must be taken to utilize our land in the most effective manner by planting the right plants in the right places.

To this end, both the land to be planted and its scope must be correctly determined. The lands of treeless forests, the raw lands (saengji) of mountains, the lands of miscellaneous shrub forests, the lands along rivers and roadsides, and the lands of forests with useless pine trees should first be allotted for the planting of profitable fruit trees, mulberry trees, and for tussah cocoonery; thereafter, both the lands for afforesting economic forests and the scope of afforestation should be determined. These lands should be allotted for specific purposes only after a careful study has been made by the responsible workers to determine whether they should be used for fruit trees, mulberry trees, tussah cocoonery, or pastures—in this case, they would be zoned as land to be used for agricultural purpose—or for economic forests, protective forests, or forests for timber use. Unless this determination is made on the basis of careful study and analysis economic forests cannot be adequately cultivated, with the probable result that the development of industry and agriculture will be impeded.

In order to avoid the confusion and duplication that have occurred in the past, in surveying and designing, each zone allotted should be clearly land-marked as "chongbo of the land of the cooperative or the agricultural-livestock farm for agricultural purposes."

The afforestation of economic forests also calls for an adequate output of saplings by nurseries. The work of the State nurseries should be greatly improved.
They should primarily raise those saplings that require greater skill, e.g., the walnut, Korean wild walnut, and lacquer trees, and they should conclude contracts with experienced and skilled agricultural cooperatives to establish State-consigned nurseries (Kukka wit'ak yangmyojang) for raising poplar, aspen, "hwangch'ol," and chestnut saplings; thus, the mass production of saplings will be systematically achieved. The fertilizer program should be further strengthened in order to increase the per-unit productivity and to improve the quality of saplings. To this end, an average of 50 tons of self-supplied manures should be applied per chongbo of nurseries. At the same time, nurseries should be fully irrigated in order to prevent damages from both drought and flood.

Moreover, seedling selection campaigns should be widely conducted in order to improve the quality of saplings. Special seedling selection forests (ch'aejongnim) should be separately established for such important seedlings as those of the pine-nut, Korean wild walnut, and walnut varieties.

A radical improvement is also required in planting afforestation work. Our experience indicates that irresponsible planting in contravention of standard working procedure and in adequate protection thereafter, result in a very low proportion of live plants to the total saplings planted. For example, this proportion of live plants (hwalch'aknyul) during the four pre-war years was only 12 percent; during the Korean war, it was 35.1 percent, and during the five post-war years it was 55.6 percent. These defects should no longer be left unchecked.

As the December 1959 Plenum of the Party Central Committee has proposed, we should raise the proportion of live plants above 90 percent. To this end, the organs, enterprises, social groups, and agricultural cooperatives mobilized for the task of afforestation should enhance their sense of responsibility and should strictly adhere to the technical procedures of planting.

Furthermore, temporary nurseries should be established near the lands to be afforested in order to prevent damage to saplings during transport. In planting, the principle of close planting should be widely applied, so that timbers, when grown, can be thinned out from time to time.
It should be pointed out that the protection of forests after they have been planted is of equal importance.

For these reasons, all the organs, enterprises, schools, social groups, and agricultural cooperatives should be assigned a plot of land and held responsible as "honor guards" for the planting, afforestation, and protection of the forests thus assigned to them. (Kyongje Konsol, No 12, December 1959, pp 20-25)

[The following is a translation of "Creation of Economic Forests and Tasks for Forestry Workers" by PAK Pyong-ju, Choson Imn, No 12, December 1959, pages 5-6.]

At the 1959 December Expanded Plenary Session of the Party Central Committee, problems in connection with creating economic forests by the people as a whole were discussed and concrete tasks in creating economic forests were proposed.

Since our country is mountainous and limited in the area of arable land, positive mobilization and use of forests resources is of great importance in development of the economy and promotion of the people's welfare. This problem is all the more important because with the development of large-scale modern industry and local industry, the demand for raw materials such as fiber and pulp is steadily growing.

The demand of the fiber and paper industries for raw materials will not be met by raising cotton alone. Pulp wood sources are limited and their growth rate is not capable of catching up with the steadily growing demands. During the postwar period, the consumption of pulp wood has increased by 1,400 percent over the prewar period, and the demand is expected to continue.

It goes without saying that pulp wood are of greater economic value than cotton, and that is the case with oil-bearing woods (yu'jirim) and other economic forests. It was against this background that a decision was adopted at the plenary session that in the next five or six years 500,000 chonbo are to be planted with pulp woods and oil-bearing woods. It was also decided at the plenary session that the creation of economic forests should be conducted along with the creation of timber forests and protective forests.
To carry out these tasks successfully, it is important
to discourage the tendency to keep felling trees without
taking measures to create forest resources. Forestry
workers should be induced to regard it as their own respons-
ability to create new forests to take the place of felled
trees.

It is also important to have forestry workers cultivate
a sense of responsibility towards surveying and drawing
up designs and long-range plans for creating economic
forests. Since creation of economic plans represents an
enormous recreation of nature, afforestation plans should
be drawn up as to what trees should be planted in what
years by taking into consideration the prospects of the
economy, the natural and geographical conditions of each
locality concerned, and the biological properties of
various trees.

In determining afforestation sites, each forestry work-
shop (imyo chikchang) should give priority to the locations
which are not afforested yet and which are covered with
shrubs. The new forests should be planted mainly with
trees suited to high altitudes where forestry workshops
are located, that is, pulp woods such as "samsog" and
"mulhwangch'ol" as well as oil-bearing woods including
"chatnamu" and "karaenamu."

Surveys, designs or plans should be conducted in the
light of the experiences acquired in drawing up the ten
year afforestation plan in 1958 for Yanggang-do. In addi-
tion, a great number of laborers and technicians should be
induced to participate in visiting the afforestation sites
before drawing up the final plans.

During the afforestation weeks in spring and autumn
each year, all forestry workers should take part as a duty
in the afforestation drives together with their dependents.
Each work group of enterprises should plant trees on its
own sites so as to feel responsible for the results. The
goal should be to have at least 90 percent of the saplings
root securely. Also, these work groups of enterprises
should be responsible for weeding and protecting the newly
planted trees in many other ways.

To conduct afforestation successfully, it is necessary
to secure saplings in advance, not only nursery trees but
also natural trees. We have already succeeded in having a high percentage of newly planted trees survive by organizing forestry teams (chorimban) on an extensive basis in response to Premier Kim Il-song's on-the-spot instructions; and at that time we have achieved good results by weeding and protecting the young trees in many other ways.

Protection and effective use of existing forests are as important as creation of new economic forests. However, in the past, some forestry enterprises felled trees not selectively but indiscriminately, and thus whole parts of forests were utterly destroyed. Moreover, felled trees were not transported in time and were left to deteriorate. Measures should be taken to eliminate such deficiencies in the future and to protect trees from fire and noxious insects.

To conduct this task of afforestation successfully, it is important that the value of forest resources in the development of the people's economy and improvement of the livelihood of the people is so inculcated in the forestry workers that they are induced to participate in this work with enthusiasm. This educational drive should be combined with training the forestry workers in patriotism, so that they will be led to exert themselves to protect our forestry resources as well as to do their part in afforestation campaigns.

Creation of economic forests is an enormous task indeed. However, if everybody follows the example of the laborers with the forestry enterprises at Poch'on and Yup'yong in planting ten saplings for one tree felled, then this task is certain of accomplishment. (Choson Il'go, No 12, December 1959, pp 5-6.)
VII. LABOR

Supply Problem

[The following is a summary of "For a Correct Solution of the Labor Supply Problem" by KIM Un-jong, Kyongie Konsol, No 11, November 1959, pages 29-30.]

The national economy of Korea has been advancing at a rapid pace with the result that the demand for labor supply has been increasing. In solving the problem of labor shortage since the war, encouraging results have been achieved. Unprecedented innovations have been accomplished by the working masses who have carried on a creative struggle in response to the Party policy that increased production and construction should be conducted without increasing the number of personnel by raising labor productivity.

Nevertheless, the labor shortage has become more acute because of the increase in production and construction projects and particularly because of the attempt by agriculture to increase the output of livestock and industrial crops at an increased pace with continued stress on the production of food grains.

It is important that reserve labor is mobilized and utilized to the maximum in various sectors, including industry, agriculture and transportation but particularly in agriculture, so as to solve the problem of labor shortage within a brief period of time. In solving this problem it is most important that labor supply is properly mobilized and distributed so that balanced development of various sectors in the economy can be assured in accordance with the basic line laid down by the Party. This is all the more important in view of the fact that labor sources in the countryside, which is to provide supplementary labor to industries other than agriculture, is found inadequate to meet the urgent needs of agriculture itself.

However, some leading workers of industries other than agriculture ignored this situation. In 1958, some workers in the industrial and transportation fields obtained 30
percent of the supplementary labor, requiring 380,000 
persons from the countryside, thus aggravating the labor 
shortage problem of rural areas.

Another factor responsible for labor shortage in the 
countryside is that some workers in agriculture have been 
carrying out their own production and construction pro-
jects without accurately estimating their needs for labor 
supply, with the result that labor productivity was not 
improved and much labor wasted.

It was against this background that the Standing Committee 
of the Party Central Committee, when it met 21 October 
1959, took measures to have everybody capable of working 
participate in socialist construction.

It will be possible for industry to further economize 
labor by raising the level of mechanization in a short 
period of time. But, since its technological foundation 
is much weaker than that of industry, agriculture is not 
in a position to mechanize its work at a rapid pace.

Therefore it behooves other industries to continue to 
give technical assistance to agriculture so that the latter 
can mechanize its work; and the former should improve 
labor productivity so as to contribute toward proper 
solution of the labor shortage problem.

Another solution of labor shortage problem in rural 
areas is to make proper use of the dependents of employees 
in factories and enterprises located near the countryside, 
and of dependents of laborers and clerical workers near 
cities, and of discharged servicemen.

A third solution of the problem is to economize and 
effectively use the labor supply available right in the 
countryside. To achieve this, it is necessary to further 
mechanize agriculture. Advanced farm machinery, including 
tractors and auto-vehicles, will be provided to agriculture 
more than before. These items should be kept in good 
repair so as to improve their utility rate. At the same 
time, agricultural cooperatives should make efforts to 
secure minor machines on their own and utilize farm im-
plements of advanced types. There are many agricultural 
cooperatives that persist in wasting much labor by de-
pending upon human labor in performing various farm work.
In some cooperatives insufficient work is assigned to work-teams which have no alternative but to waste much labor. For instance, at the Songgyori Agricultural Cooperative, Sunan-gun, Hwajhae-pukto, three persons were put in charge of thirteen persons, who used their time in securing fuel wood for personal use. They worked at 54.3 percent of their capacity.

Much labor has been wasted by changing the membership of work-teams too often. At the Chlonamni Agricultural Cooperative, Sunan-gun, 70 percent of its 712 members were included in different work-teams two to four times in a year. In addition, some work-teams have to measure work by inaccurate work norms; youths are separated from basic work-teams to be organized into youth shock troops (ch'ongnyon tolgyoktaes), keeping the basic work-teams from doing their work properly. Dependents of some managerial personnel devote themselves to subsidiary industries of their own. Therefore it is important that everybody in an agricultural cooperative capable of work be included in basic work-teams and exceed his work-norm so as to prevent waste of labor.

In this connection it should be seen that each and every agricultural cooperative member is educated in communist ideology and thus get rid of individual egoism and conservatism and all other vestiges of old-dated bourgeois ideologies so as to be converted into responsible participants in socialist construction.

Another solution of the labor shortage is to further economize and properly utilize labor in industry, transportation, and construction fields, and to further search for and mobilize latent labor reserves. In response to the red letter from the Party, the working masses have adopted resolutions to raise labor productivity by over 100 percent through mechanization and application of their own creative devices.

Good results have been achieved at enterprises and construction sites where proper guidance was provided to the laborers for implementation of their resolutions. However, at some factories, enterprises and construction sites under ministries or bureaus, irresponsible attempts have been made to fulfill increased production assignments by increasing the absolute number of laborers alone.
At the welded steel tube workshop of the Kangson Steel Works, labor productivity during the first half of 1959 went down to 55 percent of the corresponding period in 1958, and a great deal of labor was wasted. At some other factories and enterprises, work has been suspended quite often due to equipment troubles, and much labor has been wasted. Under the defunct Ministry of Coal Industry (Sok't'an Kongop Song), during January through June 1959, the labor wasted amounted to an average of 3.8 persons per day. In Ministry of Metal Industry, during the first half of 1959, the number of laborers in indirect sectors (kanjo' puman) was greater than those in direct sectors by over 3,300. At the Kimch'aek Iron Works and Songjin Iron Works, an average of over 300 laborers a day were diverted from production to participate in physical training or discussions, etc.

Besides, much labor has been wasted due to the low level of mechanization, inefficient organization of labor supply and to some extent to loose labor discipline. At the rolling workshop of the Kangson Steel Mill, transportation of coal, which is easily mechanized, is still conducted on human back with the result that every day six times as much labor is wasted. At the Kangson Steel Mill, transportation is mechanized only nine percent. At the Anju Coal Mine, the labor of thirty persons per day can be saved by improving the double loading and unloading (ijung chokhach'a) of mine props (kaengmok), but nothing has been done about it.

In coal mines, the level of mechanization still remains very low: digging is mechanized only 29 percent, and loading of the dirt (poryok) from excavation is mechanized 42 percent. The level of mechanization is low in the forestry field too: the level in felling and saving, 18 percent; and collecting felled trees, 19 percent. Thus mechanization of forestry is only 50 percent in all. What is deplorable is that at some enterprises under the Ministry (Bureau), labor productivity is lower than in the corresponding period of 1958.

The basic cause for all this lies in the fact that leading workers have failed to adjust the level of guidance to the vigorous urge to produce among the laboring masses; leading workers in charge of labor management in the Ministry (Bureau) have been concerned only with securing supplementary labor supply rather than their most important
task of improving organization of labor supply and wage scales so as to eliminate waste of labor and raise labor productivity.

To solve the labor shortage problem, it is essential that labor productivity should be raised in an epoch-making manner by mechanization of work in all sectors of the economy including industry and agriculture, by proper organization of labor supply, by assuring normal working conditions, by improving work norms and wage scales, and by raising the level of techniques and skills among the laboring masses. (Kromje Konsol, No 11, November 1959, pp 29-32.)

Coal Industry Productivity

[The following are excerpts from the editorial, "Let Us Increase Labor Productivity in the Coal Mining Industry," Sotč'an Konsop, No 10, November 1959, pages 1-3.]

Under the correct leadership of our Party, the people's economy has made continuous progress and the output of coal increased 28 percent in October over September 1959.

The most important requirement for fulfilling the 1959 plan for the coal industry, which is requisite for a more successful implementation of the tasks envisaged for the adjustment period of 1960, is to realize the plan by a more effective use of the currently available labor force rather than by an absolute increase of the labor force.

To increase labor productivity, we must first do everything possible to prevent the spreading out of efforts over too many tasks. In particular, the construction of pits should not be thinly spread out over too many pits. Effort should rather be concentrated on the construction of existing galleries, with a view to maximizing the output of coal from existing pits.

Some results have already been achieved along this line. For example, whereas in 1957 there were only 20 pits with an annual production capacity of more than
100,000 tons, in 1958 the number of pits with an equivalent capacity rose to 31 and is expected to further increase in 1959.

But the task of concentrating effort on key projects has been carried out badly by many mines. For example, instead of preparing the ground for coal mining through intensive excavation, many anthracite mines in the Western region diverted much of their labor to the task of excavating galleries which were not immediately required; the result was that the immediately extractable coal reserve "dried up." Consequently, the coal production plan was underfulfilled by a big margin.

The leading workers of the Sinch'ang Youth Coal Mine spread out drilling over 26 locations without even considering the capacity of the available compressors and rock drills; as a result, a shortage of compressors and rock drills developed and only 35 meters a month were drilled at each of those locations during the January-September period.

An increase in labor productivity also calls for a systematic distribution of the labor force. More of the labor force should therefore be kept inside the pits, and the labor force directly related to mining, e.g., miners, drillers, and detonators (tongbal), should be considerably increased.

Another requirement consists in the mechanization of mining operations. Mechanization should be introduced wherever possible, without waiting for modern equipment to be supplied.

Great amounts of labor could have been economized if the bituminous coal mines in the Northern region had automated ventilating doors installed in galleries. To date, this has not been carried out.

Moreover, machine facilities installed in galleries, such as pumps and endless conveyor belts, could have been automated. But, again, this has not been carried out by some of the leading workers, who are prone to label such an automation movement as "premature."

An increase in labor productivity also calls for making adequate provisions for working conditions, for
the timely inspection and repair of mining facilities, and for the enhancement of the skill levels of the workers.

The adequate determination of work norms, taking into account the concrete conditions of production, is also required. Since this has not been done in the past, the workers' incentive to produce has been reduced, and the wages of the workers engaged in different shops of enterprises have not been kept in proper balance.

The old and anachronistic work norms must therefore be revised to conform to new realities, and every technical measures required must be taken so that the workers may exceed their work norms and thus achieve a new and higher work norm.

As for wage payment, under the current circumstances where combined brigades are widely used, it is very important to correct the harmful practice of paying wages on an equalitarian basis and to ensure a correct wage payment on the basis of the quality and quantity of labor; the latter is the socialist principle of distribution.

In this connection, it is important to organize the combined brigades on a more systematic basis. The membership of these brigades should not be increased at random; rather, workers should be selected and organized into such brigades only where their work is inextricably related to the task of the combined brigades.

All of these tasks require that the leading workers increase their sense of responsibility and follow adequate methods of management. (Sokt'an Kongop, No 10, November 1959, pp 1-3)
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