INTELLIGENCE MEMORANDUM

MANPOWER ASPECTS OF THE SOVIET
1951-1955 FIVE YEAR PLAN

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CENTRAL INTELLIGENCE AGENCY
Office of Research and Reports
MANPOWER ASPECTS OF THE SOVIET 1951-1955 FIVE YEAR PLAN

Summary

The Soviet 1951-1955 Five Year Plan announces that the total number of workers and employees in the state economy will increase 15 percent (5.8 million). According to the Plan, the volume of industrial production will increase 70 percent and industrial productivity will increase 50 percent, indicating that employment in industry will increase 13.3 percent (1.8 million).

These increases will not cause any strain on the manpower resources of the USSR, as is indicated by the rapid increase in working age population, the comparison of the projected trends with those of the immediate past, and the operation of a number of factors sustaining productivity. In fact, if the expected increases in productivity are not attained, additional manpower over and above the planned increment is available.

The planned increases in civilian goods and services will outstrip the increase in population, allowing a substantial improvement in per capita consumption.

1. Availability of Manpower.

The hypothesis that Soviet manpower is ample to carry out the announced goals of the Soviet 1951-1955 Five Year Plan may be tested by four methods: (a) the population potential; (b) the past trends; (c) the accomplishments to date, during the first year of the Plan; and (d) the numerous factors sustaining productivity.


The population of the USSR of working age (15-59) will increase over 12 million from 1950 to 1955, or about 6 million more than the planned increase in workers and employees. Since few, if any, new workers will go into collective farms, much of this increase in the working population is available for the state economy, if needed.
Furthermore, the ratio of males in the 15-59 year age group will increase substantially, since the annual increments to the labor force will be balanced between males and females, whereas the working ages at the close of World War II were severely depleted by male war losses. As a result, it will be possible to reduce the percentage of women who are working and to eliminate from the labor force most youths under 14 years of age, leaving them in school.

b. Past Trends.

Table 1 shows the annual rates of increase in industry of production, productivity, and employment from 1947 to 1957.

<table>
<thead>
<tr>
<th>Year</th>
<th>Production Index (Percent)</th>
<th>Annual Increase (Percent)</th>
<th>Productivity Index (Percent)</th>
<th>Absolute Number of Workers ( Millions)</th>
<th>Index (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947</td>
<td>100.0</td>
<td>22</td>
<td>100.0</td>
<td>10.7</td>
<td>100.0</td>
</tr>
<tr>
<td>1948</td>
<td>127.3</td>
<td>27</td>
<td>115.4</td>
<td>11.8</td>
<td>110.3</td>
</tr>
<tr>
<td>1949</td>
<td>152.4</td>
<td>20</td>
<td>130.4</td>
<td>12.5</td>
<td>116.8</td>
</tr>
<tr>
<td>1950</td>
<td>187.6</td>
<td>23</td>
<td>146.6</td>
<td>13.7</td>
<td>128.0</td>
</tr>
<tr>
<td>1951</td>
<td>217.5</td>
<td>16</td>
<td>161.7</td>
<td>14.4</td>
<td>134.5</td>
</tr>
<tr>
<td>1952</td>
<td>243.6</td>
<td>12</td>
<td>177.2</td>
<td>14.7</td>
<td>137.4</td>
</tr>
<tr>
<td>1953</td>
<td>268.0</td>
<td>10</td>
<td>191.4</td>
<td>15.0</td>
<td>140.0</td>
</tr>
<tr>
<td>1954</td>
<td>293.4</td>
<td>9.5</td>
<td>205.8</td>
<td>15.3</td>
<td>143.0</td>
</tr>
<tr>
<td>1955</td>
<td>319.4</td>
<td>9.0</td>
<td>220.6</td>
<td>15.5</td>
<td>144.8</td>
</tr>
<tr>
<td>1956</td>
<td>348.1</td>
<td>8.8</td>
<td>235.6</td>
<td>15.8</td>
<td>147.7</td>
</tr>
<tr>
<td>1957</td>
<td>377.8</td>
<td>8.6</td>
<td>251.0</td>
<td>16.1</td>
<td>150.5</td>
</tr>
</tbody>
</table>

The rate of increase announced for the latter years of the Fourth Five Year Plan was more rapid than that planned for the Fifth Five Year Plan (see Table 2*).

* Table 2 follows on p. 3.
Table 2

Average Annual Rates of Increase (Compounded) in Industrial Production, Productivity, and Employment in the USSR 1947-1955

<table>
<thead>
<tr>
<th></th>
<th>Production</th>
<th>Productivity</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947-1950</td>
<td>23.5</td>
<td>13.6</td>
<td>8.6</td>
</tr>
<tr>
<td>1950-1955</td>
<td>11.2</td>
<td>8.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Thus the increases, while as substantial in volume, will be at a slower rate than those of the postwar years. (See also Fig. 1.)

c. Accomplishments to Date.

The first full year of the present Plan (1951) has already elapsed, and announcements of the accomplishments of that year exceed the annual rates planned. Instead of 11 percent, industrial production increased 16 percent; instead of 2.5 percent, employment increased 5 percent.

d. Factors Sustaining Productivity.

The factors beginning to operate in the postwar years and continuing from 1950 to 1955 which will produce a substantial gain in productivity are the following: the increasing proportion of males in the industrial labor force cited above; the elimination of prisoners of war from the labor force and a probable slight decline in slave labor; the continual expansion of the program for training engineers, technicians, and skilled laborers (see Fig. 2); and the probable increase in efficiency of organization of the labor force. Add to these manpower trends the continuing high rate of investment in capital goods and the projected increase in productivity appears feasible.

2. Civilian Production Increases.

There will be an estimated total population increase of 15 million, or 7.5 percent. Comparable increases in civilian production would permit the USSR to sustain the present level of living.
In most lines this rate of growth could be secured from gains in productivity without additional workers. The announced increases in civilian goods, however, are far more than 7.5 percent, notably the new construction of 105 million square meters of civilian housing and the following increases in production: cotton goods, 61 percent; woollen goods, 54 percent; footwear, 55 percent; meat, 92 percent; and canned goods, 110 percent.

By 1950 the production of civilian goods had, in most lines, attained prewar total volume. The increases planned to 1955 will surpass prewar per capita production, although it does not necessarily follow that per capita civilian consumption will reach prewar levels, since the increased supplies may be stockpiled, diverted to military use, and exported.

It is also planned to employ a substantial part of the new workers in civilian services, particularly health and education.

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Explanatory Note

Method of Projection of Soviet Industrial Production, Productivity, and Employment, Midyear 1947-1957

The projection of industrial production, productivity, and employment in the USSR from midyear 1947 through 1957 (given in tabular form in Table 1 and in graphic form in Figure 1) has been derived in the following manner.

The projection of industrial production has been made for 1947-1951 from the official USSR Index 1947-1951 and for 1950-1955 by increasing 1950 production 70 percent (as per Five Year Plan announcement). The years 1956 and 1957 continue the 1950-1955 trend.

Projection of industrial employment for the base year 1950 has been estimated from the Soviet announcement that from 1940 to 1950 production increased 73 percent and productivity 37 percent, indicating an employment increase of 26 percent. Changes in employment from 1947 to 1950 have been estimated by subtracting from 1950 base employment changes indicated by production and productivity announcements. The projection
from 1950 to 1955 has been made on the basis of the Five Year Plan announcement of a 70-percent increase in production and of a 50-percent increase in productivity. The years 1956 and 1957 continue the 1950-1955 trend.

A crude productivity index has been obtained by dividing the production index by the employment index.
FIGURE 1
RATE OF INCREASE IN PRODUCTION, EMPLOYMENT, AND
PRODUCTIVITY — USSR ANNUAL AVERAGES
(For Industry)

Five Year Plan, 1951-1955

Production

Productivity

Employment

Graph plotted on Semi-Logarithmic, 1 Cycle

1947 1949 1951 1953 1955 1957
FIGURE 2
EMPLOYMENT IN THE STATE ECONOMY, USSR

Graph plotted on Semi-Logarithmic, 2 Cycles