## THE ECONOMY OF THE GULAG

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After World War II a certain number of documents that the Hitlerites had taken from Soviet archives found their way to the United States. They included the plan for development of the USSR national economy for 1941 (without the secret appendixes). For a long time this document was the only archival source that allowed specialists to draw any conclusions about the economics of forced labor in the USSR.<sup>1</sup> Nonetheless, several specialized studies on forced labor were written in the West on the basis of various available materials. It is noteworthy that one of the first such works, the book by D. Dallin and B. Nicolaevsky, soon after its publication was translated into Russian in the research department of the USSR MVD (Ministry of Internal Affairs) and was typed up in four copies for the leadership of Soviet punitive bodies.<sup>2</sup> Other than this publication of four copies, not a single work on the economy of the Gulag was issued in the USSR until Gorbachev's *perestroika*. This was a completely forbidden topic for Soviet historians.

As for specific facts, the most valuable part of the first publica-

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<sup>1.</sup> N. Jasny, "Labour and Output in Soviet Concentration Camps," Journal of Political Economy, October 1951.

<sup>2.</sup> D. J. Dallin and B. P. Nicolaevsky, *Forced Labor in Soviet Russia* (New Haven, Conn.: Yale University Press, 1947). See State Archive of the Russian Federation (GARF), f. R-9414, op. 1, d. 1800.

tions both about the Gulag as a whole and about its economy was the testimony of former inmates of Stalin's camps.<sup>3</sup> But most of the other data (especially statistics) suffered from imprecision and, most important, could not be verified without access to the archives. In spite of the dearth of sources, historians managed to formulate a number of conclusions and hypotheses and to outline the basic directions for further study of the problem.

In brief, these conclusions and questions for the future boiled down to the following. First, the starting point of the genuinely massive use of forced labor was determined fairly precisely (the end of the 1920s), and the main stages of development of the economy of the Gulag were described in general terms. Second, in spite of disagreements regarding the number of prisoners, there was general acknowledgment that forced labor played a substantial role in the industrialization of the USSR. The relative size of the Gulag's economy and the real value to Soviet industrialization of the facilities that prisoners built remained an open question. Third, the extensive involvement of the punitive bodies in economic activity made it possible to raise the question of the relationship between the political and economic motives for the Stalinist terror. It was widely believed that the mass repressions were a direct function of the need to provide manpower for Gulag enterprises and construction projects. Fourth, there was interest in the problem of the efficiency level of forced labor in the Stalinist system. The general condemnation of the Gulag as a criminal and inhuman system did not eliminate the question of the objective reasons-including economic ones-for its proliferation. Most researchers leaned, more or less, toward the theory that the use of prisoners in the Stalinist economic system (which in essence was mobilizational and coercive) had a number of advantages that the Soviet leaders valued.

The opening of the archives, which began gradually in the late

3. The best known of these books are: A. Solzhenitsyn, *The Gulag Archipel-ago*, 3 vols. (New York: Harper & Row, 1973) and J. Rossi, *The Gulag Handbook* (London: Overseas Publication Interchange, 1987).

1980s and peaked in the early 1990s, radically changed the working conditions of historians of the Soviet period. Among other things, they got a chance to study the above-mentioned questions on the basis of archival materials. But to all intents and purposes the problems of the Gulag's economy remained outside the mainstream of studies of the Stalinist period, which grew over the past decade. For various reasons the majority of works on the history of the Gulag either dealt with the political aspects of the mass repressions or described individual structures of the Stalinist punitive machine, trying to determine the number of victims of the terror and conditions more precisely.<sup>4</sup> For the present, on the basis of the archival materials that have been opened up in recent years and the first studies, we can present only a general picture of the development of the forced-labor economy during the Stalinist period.

The archives have confirmed the previously established fact that the Stalinist Gulag and its economy per se began to take shape in the early 1930s and this new stage differed substantially from the previous one. In June 1929 the Politburo approved a resolution "On the Utilization of the Labor of Criminal Prisoners." To supplement the Solovetsky camp—the only camp at the time—the resolution provided for the creation of a network of new camps in remote areas of the country for the purpose of colonizing those areas and exploiting "natural resources through the use of the labor of prisoners."<sup>5</sup> This decision was adopted in order to relieve the overcrowded prisons and reduce government outlays on prisoner upkeep. The initial notion was that the camps would be of modest sizes—to accommodate a total of up to 50,000 inmates.

But the adoption of the resolution on the creation of the camps (which had been in the works at least since the beginning

<sup>4.</sup> See, e.g., the basic publication Sistema ispravitelno-trudovykh lagerei v SSSR. 1923–1960. Spravochnik (Moscow: Zvenia, 1998).

<sup>5.</sup> Russian State Archives of Contemporary History (RGASPI), f. 17, op. 3, d. 746, ll. 2, 11.

of 1928) coincided with the first major wave of terror of the Stalin period—the so-called "dekulakization" and the forcible creation of collective farms. In the course of a few months, several hundred thousand people, primarily peasants, were arrested or sent into internal exile. Exiled peasants were placed in so-called special settlements in remote areas of the country (altogether more than 500,000 people were exiled after the first phase of this operation, before May 20, 1930). At the same time the number of prisoners in the newly created camps increased sharply—to nearly 180,000 as of January 1, 1930, which was several-fold above the limits that had been set just six months before.

The leadership of the OGPU (Unified State Political Administration) was confronted with the problem of making economic use of these several hundred thousand prisoners and special settlers. Initially there were no coherent plans in this regard. Exiled peasants were sent to work at the enterprises of other people's commissariats, mostly lumbering. Camp inmates were used at various construction projects and in the timber industry. In many instances the camps autonomously negotiated contracts with various enterprises and provided them with workers. At first the prospects for the development of the Gulag and its economy were unclear even to its leaders. For example, in April 1930 the vice chairman of the OGPU, Genrikh Yagoda, sharply criticized the camp system and proposed replacing the camps with colonizing settlements situated in the country's remote areas. Prisoners could live in these settlements with their families, in Yagoda's view, work in lumbering or other industries and keep their own personal garden plots.<sup>6</sup> Coming from one of the creators of the Gulag (in 1934 Yagoda would become the head of the NKVD, the People's Commissariat of Internal Affairs, which was created to replace the OGPU), such liberal projects suggested that even the country's top leadership initially had no definite notions about the significance of the camps and the economic utilization of inmates.

6. GARF, f. R-9479, op. 1, d. 3, ll. 23-24.

The evolution of these notions was strongly influenced by the Gulag's first major project, the White Sea-Baltic Canal (BBK), construction of which began in the second half of 1930.7 This complex transport system, which linked the Baltic and White Seas, was built in a record time of two years. During certain periods more than 100,000 prisoners were deployed in the construction. For the first time the camp economy demonstrated its "advantages" in practice: the rapid concentration of substantial contingents of manpower in the required location, the opportunity to exploit prisoners in any conditions, without considering casualties. Methods of organizing the Gulag's major economic projects were refined at the BBK, and Chekist leadership personnel gained experience. New assignments were a logical outgrowth of this. In April 1932 a camp was established on the Kolyma, where gold prospecting and mining were developed; in October 1932 the construction of a canal linking the Volga with the Moskva River and the construction of the Baikal-Amur Mainline in the Far East (BAM) were turned over to the OGPU; in November 1932 the OGPU formed the Ukhta-Pechora Trust for the purpose of organizing coal and oil production and the development of other resources in the Pechora Basin. Prisoners and administrators who became available after completion of the BBK were transferred to the Volga-Moskva Canal.

These decisions shaped the structure of the Gulag's economy, which existed and developed right up until the mid-1950s. The nucleus of this system was large-scale projects, primarily construction that required continual infusions of manpower. A second segment of prisons (its proportions varied with the period) were used at other, less urgent projects.

Yet for all the importance of the economic assignments that were issued to the camps, camp inmates were a minority in the Soviet penal system (which, in addition to camps, included special

<sup>7.</sup> See L. Auerbach et al., *The White Sea Canal*, ed. M. Gorky et al. (London: John Lane, 1935).

settlements, colonies, and prisons). As of January 1, 1933, the camps housed 334,000 inmates, while 1,142,000 people lived in special settlements. In late 1932 and early 1933 the OGPU leadership secured the government's approval of new plans for development of the Gulag. These plans called for the special settlements in particular (they were renamed at the time as labor settlements) to be turned into the foundation of the Gulag. Only the most dangerous prisoners, with the longest sentences, were to be sent to the camps. The plan was to increase the contingents in the labor settlements to more than 3 million people, literally within a year. These numbers were subsequently reduced to 2 million, and the number of camp inmates was to stabilize at the 300,000 mark or even drop.

These plans reflected intentions that the OGPU leadership indicated as early as 1930. Their implementation could bring about a drastic change in the nature of the Gulag's economy. The fact that the bulk of the repressed individuals were placed in labor settlements suggested that they would be utilized primarily at projects in populated locations—mostly in agriculture and lumbering and in the development of other resources in the country's remote areas. But the plans to create an enormous network of labor settlements collapsed. The state did not have enough resources to organize the settlements, especially during the dreadful famine that peaked precisely in 1933.

By the end of 1933 the camps had become firmly established as the principal component of the Gulag. Camp manpower, accordingly, was the basis of the forced-labor economy. By the beginning of 1935 more than 150,000 camp inmates were building BAM, and 196,000 were building the Moskva-Volga Canal. The White Sea–Baltic project—the system of transport and industrial enterprises concentrated around the BBK—employed 71,000 prisoners. A total of 21,000 inmates from the Ukhta-Pechora camp were extracting oil and coal. The Far Eastern camps (60,000 inmates) were building railroads, a shipyard in Komsomolsk-on-Amur, mining coal, and so on. The 63,000 inmates from the Siberian camp were building railroads and carrying out projects for metallurgical and other enterprises. At the Svir camp, 43,000 inmates were procuring lumber and firewood for Leningrad, while 35,000 inmates of the Temnikovo camp were performing similar jobs for Moscow. The Karaganda and Central Asian camps (about 26,000 inmates each) specialized in agriculture, but they also served industrial enterprises and construction projects.<sup>8</sup> In the mid-1930s the Dalstroi (Far Eastern Construction) Trust (36,000 inmates in January 1935) was rapidly building up the mining of gold. In the first six years of operation (1928–1933), 1,937 kg of gold was obtained on the Kolyma; in 1934 there was a quantum leap: during the 1934–1936 period Dalstroi produced more than 53 tons of gold. In 1937 a plan was assigned—and fulfilled—for 48 tons of gold, which was about one-third of the country's gold production.

Dalstroi's successes reflected, on the whole, the comparatively favorable situation in the Gulag economy during this period. Though the number of prisoners remained stable, the production and volume of major projects carried out by the camps increased. In June 1935 the Gulag was assigned the priority construction of the Norilsk Nickel Integrated Plant (which to this day is one of the largest enterprises in Russia). The NKVD used substantial capital investments in carrying out construction projects for the Committee of Reserves (warehouses for storage of reserve state stocks of foodstuffs and industrial goods). In 1936 a special administration that handled highway construction was transferred to NKVD authority.

The relatively successful development of the forced-labor economy was interrupted by the Great Terror—the mass repressions of 1937–38. Between January 1, 1937, and January 1, 1938, the population of the camps and colonies rose from 1.2 million to 1.7 million. On January 1, 1939, there were 350,000 people in

<sup>8.</sup> GARF, f. R-5446, op. 16a, d. 1310, ll. 13–14; *Ekonomika GULAGa i ego rol v razvitii strany v 30-ye gody. Sbornik dokumentov*, compiled by M. I. Khlusov. (Moscow: RAN, 1998), pp. 35–39.

prisons, and about 1 million people were living in labor settlements. But in spite of this formidable increase in the prisoner population, the Gulag economy was going through a severe crisis. The NKVD leadership, preoccupied with carrying out the mass repressions, was not very interested in economic problems. Enterprises under NKVD authority were disorganized by the arrests of their directors, by mass executions, and by the sharp increase in the mortality rate and physical exhaustion of camp inmates. For the first time in several years the NKVD was falling far short of fulfilling its economic plans.

The situation that the Great Terror produced in the Gulag was the most graphic evidence that the political motives for the Terror took absolute priority over economic ones. The critical condition of the camps and the impossibility of making economic use of hundreds of thousands of additional prisoners were an important reason for the unprecedented number of death sentences: Between August 1937 and November 1938, according to official data, almost 700,000 people were executed. A significant portion of them, the lists of those executed show, were able-bodied men, highly qualified specialists and workers, who were constantly in short supply at NKVD projects. The main purpose of the Great Terror was declared at the very outset to be the physical annihilation of "enemies," rather than their use as "cheap" labor. It should also be pointed out that not a single document before, during, or after the Great Terror recorded any proposals by the OGPU-NKVD leadership that additional repressions be carried out in order to replenish the prisoner shortage. There is no indication in the archives of a direct link between the Terror (in terms of the numbers and qualifications of the individuals repressed) and the economic needs of the OGPU-NKVD.

The NKVD economy stabilized somewhat and then grew between 1939 and early 1941 as the Terror abated significantly. This economic growth was achieved through the "utilization of internal reserves"—intensified exploitation of prisoners, harsher punishments for failure to fulfill plans, some adjustments in the management of the camps, and so on. After World War II began, the Soviet government feverishly and hurriedly adopted numerous resolutions on the construction of military enterprises and facilities. A large portion of these plans was assigned to the NKVD. The most massive effort during this 1940 period was the railroad construction in the Far East and the northern part of the European USSR. NKVD hydraulic-engineering projects accounted for the second-largest volume: canals (specifically, the Volga-Baltic and Northern Dvina waterways, which linked the Baltic Sea and the White Sea with the Caspian), hydroelectric stations, and ports. The NKVD's nonferrous metallurgy surged sharply during the prewar years: There were increases in the production of gold, nickel (the Norilsk integrated plant and the Seronikel [Nickel Sulfide] integrated plant in Murmansk Province), tin, and copper (Dzhezkazgan integrated plant). The NKVD played a substantial role in the program to increase aluminum and magnesium production, adopted in October 1940.

In addition, prisoners set up new oil installations in the European North and built hydrolysis, sulfite-liquor, and aircraft plants, roads, and many other facilities. As a result, the NKVD's originally approved plan for major projects in 1940 was surpassed by 1.1 billion rubles and reached 4.5 billion rubles, and by the beginning of March 1941 the volume of major projects that the NKVD was to carry out in 1941 had reached a huge number—7.6 billion rubles (including capital investments that came under the ceilings of other people's commissariats).<sup>9</sup> But the transfer of new industrial enterprises and construction projects to the NKVD continued even after this, right up until the German invasion in June 1941. The most significant assignment, received by the people's commissariat on March 24, 1941, was to build and renovate 251 airfields for the People's Commissariat of Defense in 1941. To fulfill this super-urgent and top-priority order, the

9. GARF, f. R-5446, op. 24a, d. 4, l. 59; GARF, f. R-5446, op. 25a, d. 7181, l. 60.

NKVD had to allocate 400,000 prisoners, and the People's Commissariat of Defense had to form 100 construction battalions of 1,000 men each. But the outbreak of war soon interrupted these projects.

The NKVD sector's share in the Soviet economy varied with the industry. The people's commissariat played a significant role in the production of nonferrous metals. In 1940 it produced 80 tons of gold at Dalstroi, and the 1941 plan was increased to 85 tons.<sup>10</sup> As a result of the transfer of a large number of new enterprises, the 1941 plan called for the NKVD to provide 9,300 of the 17,200 tons of nickel produced in the country, 1,200 of the 1,600 tons of molybdenum concentrate, 20 of the 150 tons of cobalt, 1,200 of the 3,220 tons of tungsten concentrate, and a substantial quantity of tin and chromite ore.<sup>11</sup> Before the war the NKVD accounted for nearly 13 percent of all the lumber production in the USSR.<sup>12</sup> The Gulag did not play a significant role in other industries. Agriculture at the camps and labor settlements was also insubstantial; it was designed chiefly to meet the needs of the Gulag itself.

In terms of meeting the needs of industry, the prisoners' labor could hardly be called irreplaceable. Even though the Gulag's lumber production was considerable in quantity, it was still a supplement to the enterprises of the People's Commissariat of the Timber Industry. New lumber camps were set up more as an appendage of the punitive system than of the economic one; they were established in connection with the mass operations of 1937–38 as urgent facilities for new prisoners. The camps did not work well, and some of them were soon eliminated altogether. The number of prisoners employed in nonferrous metallurgy and the mining industry was not very large. The Northeast camp, which served Dalstroi, held up to 50,000 people in the first half of the 1930s, and only before the war did their numbers substan-

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<sup>10.</sup> GARF, f. R-5446, op. 25a, d. 7184, ll. 101-2.

<sup>11.</sup> GARF, f. R-5446, op. 25a, d. 7181, l. 6; op. 1, d. 176, l. 268; d. 177, l. 9.

<sup>12.</sup> Ekonomika GULAGa, p. 141.

tially increase (to 180,000 on January 1, 1941). Units of the Main Administration of Camps of Mining and Metallurgical Enterprises, which served integrated nonferrous metallurgical plants, held 55,000 prisoners before the war.<sup>13</sup> The NKVD's other industrial enterprises did not play any significant role in the country's industrialization: A sizable proportion of the prisoners were actually engaged in supporting the Gulag system itself (making clothes, shoes, and other goods for the camps, construction inside the camp, subsidiary agricultural facilities, and so on).

The importance of forced labor in capital construction projects was indeed unique. In cost terms, the volume of capital projects performed by the NKVD on the eve of the war amounted to about 13–14 percent of the total volume of capital projects. It should be noted that we do not know the share of construction in this capital investment, but these NKVD projects were priorities and were built under extremely tight deadlines and, as a rule, in arduous climatic conditions. As the literature has repeatedly pointed out, in the Stalinist economic system the camps were the most convenient method for rapidly deploying hundreds of thousands of workers at such projects. Yet it is also fair to ask this question: How essential were these projects themselves, which prisoners built at the cost of such incredible casualties? The archival sources that have opened up are making it possible to begin researching this fundamental problem.

A number of important observations on this subject have been made in reference to the White Sea–Baltic Canal, the symbol of the OGPU's construction industry in the early 1930s. The decision to build the canal, which largely predetermined the direction of development of Stalin's Gulag, resulted from the interplay of two factors. First, Stalin was convinced of the military-strategic and economic importance of such an installation and, in spite of objections from not only the "rightwing" chairman of the government, Aleksei Rykov, but also from his loyal associate Molotov,

13. Sistema ispravitelno-trudovykh lagerei v SSSR. Spravochnik, p. 108.

insisted that the relevant plans be adopted.<sup>14</sup> Documents substantiating the necessity of the BBK construction said it would make it possible to ensure the defense of a considerable part of the USSR's seacoast and the protection of fisheries and internal commercial routes by "transferring from the Baltic to the White Sea submarines and surface torpedo ships and cruisers." The plans for the national economy were extensive: to create a far-flung transportation network—from the Arctic Ocean to the Black Sea (after completion of the Volga-Don project)—to secure sources of cheap water energy, and to utilize the resources of the North, etc.<sup>15</sup>

Second, even with such imposing support, the canal construction was unlikely to have been undertaken if the OGPU had not had a large number of prisoners who appeared as a result of the mass operations against the "kulaks." The planned allocation of 140,000 prisoners for the BBK eliminated the extremely serious problem of using the camps' growing populations for labor purposes and opened up vast opportunities for the OGPU in terms of economic activity.

The results of this construction, however, were so much more modest than the originally announced intentions that the economic and military-strategic necessity of the whole project must be questioned. Because the shallow depth of the canal allowed the passage of only small surface ships and submarines (and then with enormous problems), it had only a limited capability of transporting national-economic cargoes. These problems were quickly recognized, and right after the BBK was opened for operation, plans began to be discussed for the construction of a second line of locks and for deepening and widening it. These plans were never carried out. Therefore, as a present-day researcher proves on the basis of numerous facts, the canal "remained a costly monument to the

14. See L. T. Lih, O. V. Naumov, and O. V. Khlevniuk, eds., *Stalin's Letters to Molotov.* 1925–1936 (New Haven, Conn.: Yale University Press, 1995), p. 212.

15. GARF, f. R-9414, op. 1, d. 1806, l. 1 (the memorandum "O sooruzhenii Baltiiskogo-Belomorskogo puti," prepared to support a government draft resolution on construction of the canal).

mismanagement of the Soviet system": "The canal's value to the region's economic development, as soon became clear, was minor. And strategically the waterway's value was negligible."<sup>16</sup> In 1940, the canal was used to 44 percent of its capacity; in 1950, 20 percent.<sup>17</sup> Moreover, most of the cargoes that were transported through the BBK before the war belonged to enterprises situated in its zone; that is, the canal was primarily a route of local significance.

A researcher on another major construction project managed by the OGPU-NKVD, the Baikal-Amur Mainline, comes to similarly skeptical conclusions.<sup>18</sup> This was one of the largest projects: At the beginning of 1938 there were more than 200,000 prisoners in Bamlag (BAM camp), and a few months later it served as the basis for several new camps.<sup>19</sup> Notwithstanding the considerable material resources and manpower invested in this railroad and the numerous casualties among the prisoners, the actual results of the construction were meager. The mainline was not completed by the slated deadline. The sections of it that were actually put into operation were of no substantial value.

The BAM (and railroad construction as a whole) were a typical example of the wastefulness of the Stalinist system of mobilizing forced labor. The disorganized construction of many railroads without the necessary feasibility study led to the dissipation of enormous resources. By 1938 the length of railroads on which construction had started but had been suspended was approaching 5,000 km (not counting railroads that had been completed but were unused or partly used because they were unneeded).<sup>20</sup> Meanwhile, the total increase in the USSR's railroad system between 1933 and 1939 amounted to a mere 4,500 km. A consider-

<sup>16.</sup> See Yu. Kilin, Karelia v politike sovetskogo gosudarstva. 1920–1941 (Petrozavodsk, 1999), pp. 122–27.

<sup>17.</sup> GARF, f. R-5446, op. 81b, d. 6645, l. 52.

<sup>18.</sup> O. P. Yelantseva, "BAM: pervoye desyatiletiye," in Otechestvennaya Istoria, no. 6 (1994): pp. 89–103.

<sup>19.</sup> Sistema ispravitelno-trudovykh lagerei SSSR. Spravochnik, pp. 153-54.

<sup>20.</sup> Yelantseva, "BAM," p. 102.

able portion of the "dead railroads" was built at the cost of many prisoners' lives.

A similar fate befell other Gulag projects. In September 1940, for example, a resolution was adopted to suspend the construction of the Kuibyshev hydraulic engineering system, which had been started in 1937.<sup>21</sup> The government attributed the decision to "the lack of available manpower" to perform work at an ambitious new project—the construction of the Volga-Baltic and Northern Dvina water system. At the time of the suspension, an enormous sum had already been spent on the Kuibyshev system— 126.7 million rubles<sup>22</sup>—and between 30,000 and 40,000 prisoners had been deployed at the Samara camp, which had been serving the project.<sup>23</sup>

It is important to stress that no special studies have so far been done on the dimensions of incomplete or useless construction done by the OGPU-NKVD. The individual examples cited at least show that the results of the camp economy's activities cannot be evaluated on the basis of the amount of capital investments formally spent. Moreover, the sizable forced-labor economy fostered waste and low yields on capital investments, which were endemic to the Soviet economy as a whole. The large contingents of "cheap" and mobile camp labor made it possible easily to adopt plans for accelerated construction of major projects without serious economic or technical calculations, and then, with equal ease, to scrap projects that had been started and transfer prisoners to new ones. Suffice it to say that a considerable portion of the NKVD's priority projects were funded without plans or estimates, on the basis of actual expenditures.

The OGPU-NKVD leadership itself, understandably, preferred to emphasize the efficiency and importance of the Gulag

<sup>21.</sup> Resolution of the USSR Sovnarkom and the Central Committee of the All-Russian Communist Party (Bolsheviks) dated September 24, 1940 (GARF, f. R-5446, op. 1, d. 73, l. 212), approved by the Politburo on September 23 (RGASPI, f. 17, op. 3, d. 1027, l. 75).

<sup>22.</sup> GARF, f. R-5446, op. 81b, d. 6691, l. 69.

<sup>23.</sup> Sistema ispravitelno-trudovykh lagerei SSSR. Spravochnik, pp. 370-71.

economy. In a message to the government in May 1933, Z. A. Almazov, assistant director of Dalstroi (a few months later he would be given a second, concurrent job, the high-ranking position of assistant director of the Gulag), wrote: "Supporting one man in the fields [the Kolyma gold fields-Ed.] for one year requires goods with a gross weight of about 1 ton (including building materials); one man produces 1 kilogram of metal per year."<sup>24</sup> In a memorandum addressed to Stalin in November 1935, Yagoda promised that the NKVD would build roads at an average of 50,000 rubles less per kilometer than the civilian people's commissariats had been building them to that point; Yagoda attributed this to the lower cost of maintaining the administrative apparatus and to the high production norms that had been set at the NKVD.25 The cost of mining gold and tin at NKVD projects was lower. In 1939, for example, the government set an accounting price of 6.9 rubles for one gram of gold (compared with 5.2 rubles in previous years), whereas the price at enterprises of the People's Commissariat of Nonferrous Metallurgy varied from 15.3 to 16.7 rubles. Similar prices for a ton of tin produced by Dalstroi and the People's Commissariat of Nonferrous Metallurgy were 40.8 and 60.2 rubles, respectively.<sup>26</sup>

Yet even if one puts aside the destructive humanitarian and moral consequences of the Terror, many factors suggest that forced labor was more a heavy overhead expense for the economy than a source of profit, albeit immoral.

The mass deportation of kulaks to remote regions of the country was obviously a losing proposition, even in purely economic terms. For example, according to official estimates, between 1930 and 1932 the state spent 250 million rubles on moving and setting up the kulaks, an average of 1,000 rubles per farm, whereas the value of the confiscated property was about 560 rubles. The special settlers' farms remained unprofitable for many years; their

<sup>24.</sup> GARF, f. R-5446, op. 14a, d. 656, l. 18.

<sup>25.</sup> GARF, f. R-5446, op. 18a, d. 656, ll. 23, 26.

<sup>26.</sup> GARF, f. R-5446, op. 23a, d. 105, ll. 40, 42.

debts to the state rose so high that they periodically had to be written off.<sup>27</sup> At the same time the destruction of the most viable peasant farms led to an extremely severe crisis throughout Soviet agriculture. This crisis resulted in the famine of the early 1930s and periodic, smaller outbreaks of famine and serious food problems, which the USSR was unable to escape for decades.

The untimely death of hundreds of thousands of people in the Gulag and the senseless waste in hard labor of energies and talents that could have been of incomparably greater usefulness if they had been at liberty significantly weakened the country's labor capacity.

The special conditions in which the Gulag economy functioned (heightened secrecy and a lack of control) promoted the wide proliferation of padded statistics and false reports. The reminiscences of former prisoners overflow with testimony about how tenaciously and resourcefully people in the camps sought to "pull a tufta." "Tufta (sometimes: tukhta)—scam, deception; chicanery; work done only for appearance; deliberately falsified, inflated indicators in an official report."28 This term, which came into universal use in the Gulag, reflected an equally universal and daily occurrence in the Gulag, one of the underpinnings of the forced-labor economy. "If it hadn't been for tufta and ammonal, there wouldn't have been a White Sea Canal"; "The Soviet Union rests on *mat* [obscene language], tufta and *blat* [pulling strings]," prisoners used to say.<sup>29</sup> But prisoners were not the only ones who were interested in preserving the system of padded statistics (which often saved their lives); their bosses also had a stake in it.

Many of the high economic indicators of the camp economy were essentially tufta, since they were achieved not through normal organization of production but through predatory exploita-

<sup>27.</sup> Spetspereselentsy v Zapadnoi Sibiri. 1930-vesna 1931 g., ed. V. P. Danilov and S. A. Krasilnikov (Novosibirsk: EKOR, 1992), p. 12; Spetspereselentsy v Zapadnoi Sibiri. 1933–1938, ed. V. P. Danilov and S. A. Krasilnikov (Novosibirsk: EKOR, 1994), pp. 7–8.

<sup>28.</sup> J. Rossi, The Gulag Handbook. The entry Tufta.

<sup>29.</sup> Ibid.

tion of resources. Since they had at their disposal both vast territories for uncontrolled "economic development" and reliable labor resources, the leaders of the NKVD enterprises preferred not to create permanent, long-term projects that required substantial investments, but exploited the most resource-rich areas for brief periods. This was precisely the basis, in particular, of Dalstroi's "economic miracle" in the second half of the 1930s and the nominal "cheapness" of Kolyma gold. This could not go on for long. Whereas the average gold content between 1935 and 1938 (thanks to the exploitation of the richest deposits) was 27 to 19.3 grams per cubic meter of sands washed, in 1946–47 it was already only about 7 grams. Accordingly, the amounts mined dropped sharply as well.

The NKVD economy, which was based on hard physical labor, rejected technical progress. According to 1939 data, mechanized haulage of timber at the People's Commissariat of the Timber Industry, the country's chief timber producer, ran at more than 90 percent, while the figure for the Gulag was about 67 percent.<sup>30</sup> Although in many instances NKVD enterprises were technically equipped much better than similar enterprises of other people's commissariats, they made poorer use of this hardware. Managers at NKVD projects preferred to deal with the chronic problems of the Soviet economy-a shortage of skilled personnel and poor-quality support and repair of mechanisms-by increasing the use of the prisoners' physical capacity. An inspection of Gulag construction projects and the management of NKVD railroad construction in early 1940 showed that a large proportion of the machinery and mechanisms were idle. Excavators were being used at 40 percent of capacity, tractors at 11 percent, and so forth. A powerful imported excavator lay idle at the Volga construction project for three years, and 112 dump trucks at the construction of the Moscow-Minsk highway did not work for more than two months a year.<sup>31</sup>

30. GARF, f. R-5446, op. 24a, d. 2940, l. 2.

31. GARF, f. R-5446, op. 24a, d. 4, ll. 41-42.

As a purveyor of less than outstanding examples of production organization, the Gulag with its "cheap" manpower also had a corrupting effect on the sectors of the economy that were based on civilian labor. Soviet economic people's commissariats, which for objective, systemic reasons had little interest in organizational or technical progress, preferred to deal with many problems by issuing "work assignments" to prisoners. The people's commissariats' pressure on higher party and government bodies with requests for prisoners to be allocated was so heavy that even Stalin could not stand it. At a plenum of the Central Committee of the All-Russian Communist Party (Bolsheviks) in July 1940, he declared:

You have noticed that the people's commissariats very often ask the NKVD to provide people from the Gulag, from among the criminals. If one takes all our construction projects, I must tell you that one-third of the manpower at the construction projects in the North in the remote corners, in railroad construction, in the forests, one-third of the manpower there are criminal elements. . . . We need to have a reserve rather than take people from the Gulag. This is a disgrace; this is an undesirable practice. The Gulag can be used somewhere in the remote corners, but in the machine-building industry, in the cities, where a criminal is working on the side, and then a noncriminal is working there, I don't know about that, I would say it's very impractical and not altogether proper."<sup>32</sup>

These criticisms by Stalin did not have any serious consequences.

The massive use of prisoners impeded the development of the labor market and the social infrastructure. Prisoner labor became a kind of narcotic for the economy, which it found increasingly difficult to give up by replacing prisoners with civilian workers. The Stalinist system of exploiting prisoner labor was gradually dismantled in the 1950s and 1960s, after Stalin's death.

All these questions-about the actual value of forced labor in

32. RGASPI, f. 71, op. 10, d. 130, ll. 173, 179.

the Soviet industrialization of the 1930s, about the impact of the Gulag economy on the Soviet economic system as a whole, and so on—need further study. The problem of the Gulag's "intellectual zone," which this chapter did not address, requires special attention. So far there is little known material about the use of the labor of arrested engineers and scientists in special units of the OGPU-NKVD during the 1930s—which makes it all the more important to continue searching for it.

If one compares the enormous volume of archival information about the economic activity of the Gulag with the extent to which the information is utilized, it is clear that research on this topic has only begun. Documents from the central archives have not been put to significant use. There are even fewer works on the Gulag's individual economic units, based on local material. But if the initial attempts at such studies have not yet met with much success, the fact that such efforts are at least being made inspires some optimism.