Building an industrial society

The vision

Source 22

We are going full steam ahead along the road of industrialization to socialism, leaving behind our century-old Russian backwardness. We are becoming a metallic country, an automotive country, a tractor country.

Stalin, November 1929

To turn their back on the backward Tsarist past and make Soviet Russia the equal of the capitalist West was a vision of the future that many in the Communist Party, and many ordinary Russians too, must have shared for many years. Lenin himself had once, perhaps rather naively, suggested that 'Communism equals Soviet power plus electrification'.

Think about

- What does Source 23 tell us about the aims of the Soviet government in 1921?

Source 23

A poster from 1921.

The timing

At first glance the First Five Year Plan of 1928/1929 can be seen as a sudden break with the policies of the NEP. In fact the setting up of Vesenkha after the Revolution was a signal that the party intended to plan the economy in a new way. During War Communism 1919–1921 the government had taken control of the management and direction of the economy, establishing priorities and allocating resources of men and materials. Even though the NEP saw a change of strategy, it did not mean a change of direction. Gosplan in 1924 had begun to announce target figures for industrial production, and in the following year began to sketch longer term plans. In 1927 the Fifteenth Party Congress instructed Gosplan to produce a Five Year Plan for the entire economy. When therefore that plan was published in 1928, it had been in gestation for some time.

Note

Vesenkha was the Supreme Council of National Economy
Gosplan was set up to provide the government with reliable statistical information.

Note

The leaders of the Left in the mid-1920s were Trotsky, Kamenev and Zinoviev.

However, the timing of the First Plan was not an accident. There were compelling reasons for its adoption at that time. These were the 'war scare' years (see Chapter 8). Moreover, the Left of the party, who had first proposed rapid industrialization as the highest priority of the government, had now been defeated, making it possible for the party to adopt the Left's policies without putting its principal supporters in power!

Industrialization was also necessary if collectivization was to work. Tractors and agricultural machinery were desperately needed to make the collective farms successful.

The plans

The party had studied industrialization in the west, especially in the USA. It believed that heavy industry, iron and steel, had been the basis of their advance, and decided to imitate this in Russia. The belief that the USSR faced threats from foreign powers was another factor causing the emphasis on heavy industry, since this would provide the basis of an armaments industry. At the outset of the First Five Year Plan fantastic targets for increased production were set by Gosplan for each industry: in coal over 100 per cent, in iron 200 per cent, in electricity 400 per cent. When the first few months appeared to be going well the party adopted even higher 'optimal' targets in 1929. When this seemed to be working, even these 'impossible' figures were raised (see below). Some older and wiser heads disputed the viability of these new targets.

Note

1928–1932 First Five Year Plan (The government declared targets achieved nine months early)
1933–1937 Second Five Year Plan
1938–1941 Third Five Year Plan (Cut short by the German invasion in 1941)

Note

Intellectuals, managers and academics all came under savage attack as 'bourgeois specialists' when the First Five Year Plan began.

Source 24

'I cease to be responsible for the planning dept. The plan figure I consider to be purely arbitrary'
To this a young woman comrade retorted:
'We do not doubt the knowledge or goodwill of the professor...but we reject the fetishism of figures which holds him in thrall...We reject the multiplication table as a basis for policy.'

The results for the First Five Year Plan were as follows:

Millions of tons	*1927–8 production*	*1932–3 (optimal target)*	*1932 (amended target)*	*1932 actual*
Coal	35	75	95–105	64
Oil	11.7	21.7	40–55	21.4
Iron ore	6.7	20.2	24–32	12.1
Pig iron	3.2	10	15–16	6.2

These statistics alone do not tell the whole story. Much of the plant needed to meet these targets did not exist. Whole new towns and factories had to be constructed, often in distant regions. These then had to be linked to other industrial plants and mines by train and road. Labour and power were also needed in these new industrial enterprises, as well as new technology and machine tools, and the staff to manage and use them. To arrange all this required an enormous bureaucracy. Ordzonikidze, for example, headed a new Commissariat of Heavy Industry.

So impossible were the targets that to talk of these as Five-Year 'Plans' is regarded by many as a distortion of language. Just to demand high production targets did not mean there was a rational plan to achieve them!

How was this to be achieved?

1. Propaganda

The Five Year Plans were represented as battles in a war to build socialism against capitalist enemies. Workers were urged on to achieve ever greater tasks by propaganda of every kind, posters, factory meetings, radio broadcasts, theatre groups etc.

The propaganda seems to have been at least partly effective. Volunteers flocked to travel to some of the most inhospitable regions of the USSR to help to build an urban Communist society. Not to be forgotten also was the extra help of volunteers from the capitalist West.

Source 25

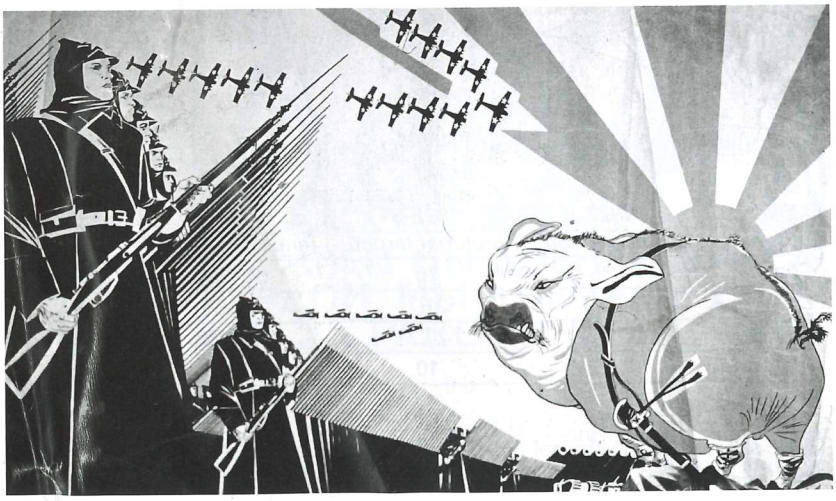
◀ A 1931 poster showing a woman in a textiles factory.

Source 26

▶ A 1933 poster. Above a capitalist laughs at the First Five Year Plan in 1928, but his reaction is different in 1933.

Source 27

▼ A 1930s poster about Japan, which says 'Let them keep their pig's snout out of our garden'. Japan and the USSR fought border wars in the 1930s.



2. Forced labour

Since there was little money available to buy construction equipment abroad, much of the work had to be done by hand. This demanded millions of hands to work often in extreme conditions. Volunteers alone would not fill the need: forced labour was the answer and it was very cheap and easily replaced. The millions of transported *kulaks* provided a great part of this forced labour, but it also comprised other 'enemies of the State', such as members of various religious groups and former members of the bourgeoisie. These forced workers were found all over the new industrial regions and along the great transport projects, such as the Belomor Canal. Deaths seem to have been commonplace.

Quotation

There is no fortress the Bolsheviks can not take.

A common Bolshevik slogan

Think about

- What themes are stressed in these posters?
- Why were these the themes chosen by the Communist Party?
- Do you think that the posters were just propaganda, or are they a real indication of the objectives of the Communist government?

Facts and figures

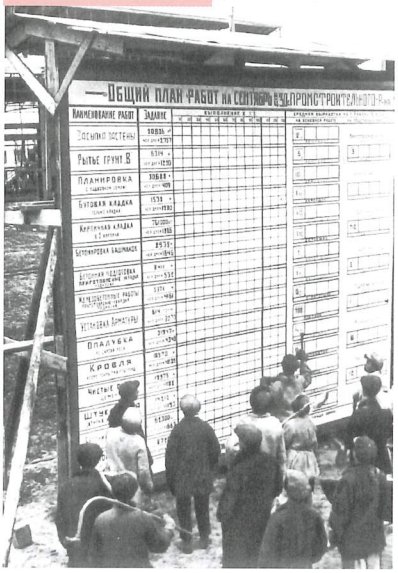
Population in millions

	Urban	*Rural*
1920	20.8	110.0
1929	27.6	126.7
1933	40.3	125.4
1939	56.1	114.5

Cross reference

You can find out more about the use of forced labour in Chapter 10.

Source 28



▲ Workers examine targets during the First Five Year Plan.

Think about

- Why were these figures so prominently displayed?
- Does this photograph prove they made an impact in Soviet Russia?

Facts and figures

Jasny, an expert on Russian economic data estimates wages as follows:

1928	100
1932	49
1937	60
1940	56

3. Socialist competition

In capitalist countries the pursuit of profit was what motivated managers and workers to work harder and produce more. The USSR was not supposed to believe in this. Instead 'socialist competition' was introduced – a kind of race between factories, mines etc. to produce the most possible. Regular meetings were held to urge workers on to equal the achievements of a similar factory down the road. Whether it was successful as a method is difficult to judge.

4. Stakhanovites and shock workers

During the First Five Year Plan targets were not only being set for factories and construction teams, but also for individual workers. In one Moscow factory there were over half a million norms set for different tasks! Wages were decided by a worker's success or failure to reach these norms. During a single nightshift in August 1935 Alexei Stakhanov cut 102 tons from a coal seam in the Donbass region. This remarkable achievement was 14 times the quota or norm set for a shift! In a few months Stakhanov was a household name in the USSR; thousands tried to emulate him in every sector of the economy, even apparently waiters!

This was no doubt encouraged by the party, but within a year almost one-quarter of industrial workers were classed as Stakhanovites, with as many others graded as shock workers, a slightly lower but honoured category. The planners were then able to increase industrial norms by between 10 and 15 per cent in 1936. The rapid spread of Stakhanovism does suggest to some historians a great level of commitment to the government's vision of the future. More cynical observers argue that workers simply wanted the benefits the status brought.

5. Low wages

Robert Service suggests that average real pay in 1932 was only half of what it had been at the end of the NEP because of rising inflation. Jasny calculated that even in 1940 the average Russian consumed in food and goods 7 per cent less than in 1928. This disguised what had happened to wages, because now many women were working as well as men, and they were often working longer hours. Workers, in other words, subsidized these achievements by their own lower living standards.

6. Fear

Managers and technicians were made personally responsible for their work. Failure to meet targets could be serious. The period of the Plans was punctuated by a series of industrial trials in which managerial and technical staff were accused of sabotage and wrecking. Since they had often held senior positions before the Revolution or had parents from a bourgeois background, they were easy targets.

The first of these was the famous Shakhty trial in 1928. Fifty-five engineers in the Donbass were found guilty of co-operating with foreign powers to hold back Soviet production. 'Death to the wreckers!' appeared in the headlines as their trial began in Moscow. One of the defendants was denounced by his 12-year-old son! The only evidence in the trial was the confessions of some of the accused. Some of these tried to withdraw them in the trial, explaining they had been gained by threats and ill treatment in prison. Eleven were sentenced to death, and five were eventually executed.

In December 1933 Stalin introduced a law to hold directors and managers responsible for substandard or incomplete goods. Procurators (legal officers) toured factories to educate workers and check on production. However, this led to an immediate wave of arrests, and this of course disrupted production even more. Ordzhonikidze, the Commissar for Heavy Industry, received thousands of written complaints from factories about the arrests, and he in turn sent hundreds of petitions for release to the procurators. By the autumn of 1934 the arrests of managers had slowed almost to a halt.

7. Education

The ambitious Plans required a whole new class of people to run them, and the State began a vast programme of technical education to provide them. They were especially necessary because of the baiting of 'bourgeois specialists' that the party had encouraged since 1928 in a new outburst of revolutionary enthusiasm. Academic learning, as we saw in Source 25, was no longer respected. As Stalin said to the Central Committee in April 1929, 'Wrecking by the bourgeois intelligentsia is one of the most dangerous forces of opposition to developing socialism'.

Until the new personnel were ready, skilled tasks were often done by semi-trained ex-peasants. The First Five Year Plan saw 1.5 million workers promoted to managerial positions. There was a campaign throughout the 1930s to eliminate illiteracy. Foreign help was also bought in; Ford for example supervised the building of a giant automobile plant.

Were the Five Year Plans successful?

There has been a fierce debate between economic historians about this. R.W. Davies in his book *Soviet Economic Development from Lenin to Khrushchev* gives the following estimates for what the USSR produced over the period of the three Five Year Plans.

Note

There are many sets of statistics available, and they are all different.

Source 29

	1928	*1937*	*1940*
Gross National Product	100	172	203

This corresponds to an annual compound growth rate of between 5 and 6 per cent, significantly more than was being achieved in most western countries, which had been plunged into depression after the Wall Street Crash. However, the production increases were very uneven. The biggest gains were achieved in heavy industry, which the planners thought was the priority.

Source 30

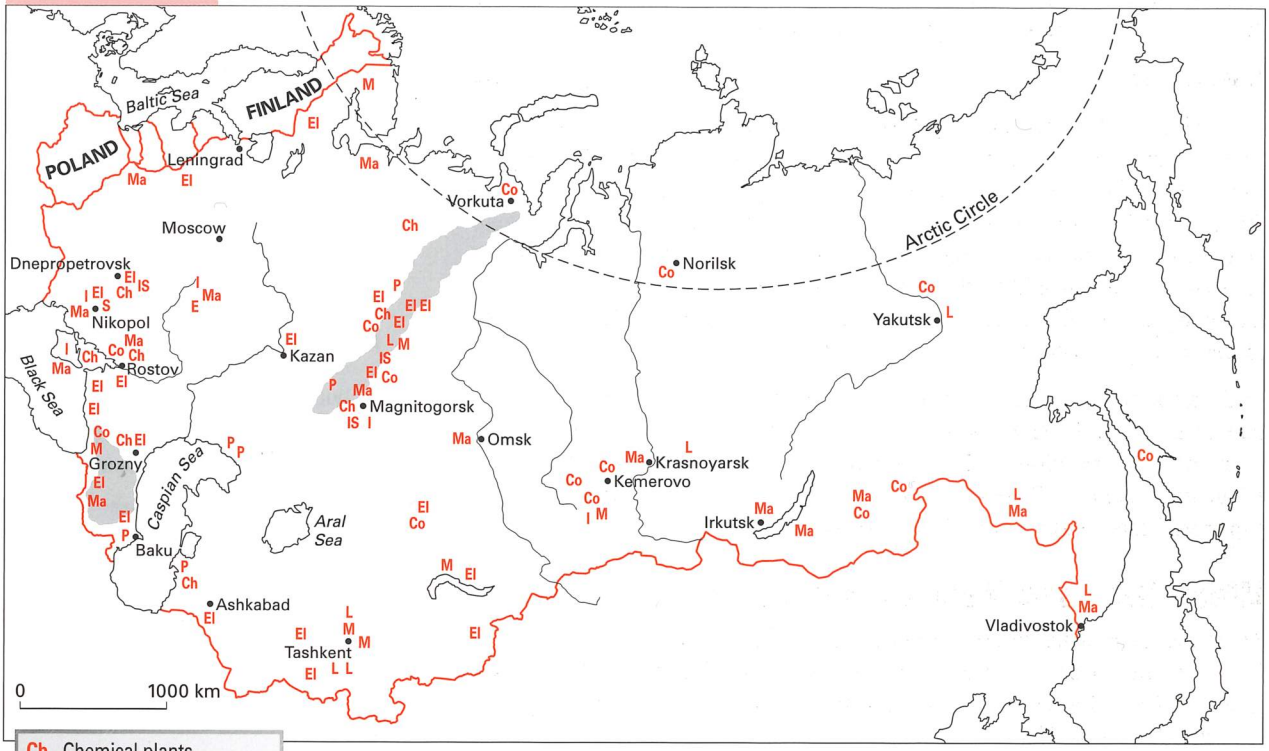
	1927	*1930*	*1932*	*1935*	*1937*	*1940*
Coal (million tons)	35	60	64	100	128	150
Steel (million tons)	3	5	6	13	18	18
Oil (million tons)	12	17	21	24	26	26
Electricity (million kWth)	18	22	20	45	80	90

Cross reference

See maps on pages 19 and 47.

Huge projects were completed. The Dneiper dam and hydro-electric power station was one of these, the biggest in Europe. Agricultural machinery complexes were built at Stalingrad and Kharkov. A huge iron and steel plant was built at Magnitogorsk (see pp. 182–186). There was also a significant shift of industry to the Urals and beyond, thought to be out of range of any foreign attack. These would also exploit the rich mineral resources of Asia.

Source 31



Ch Chemical plants
Co Coal mines
El Electricity power stations
L Lignite mining
M Metal industries (not iron)
I Iron mines
IS Iron and steel complexes
P Petroleum extraction
S Steel plants

▲ Industrial expansion during the Five Year Plans

Measuring output in the USSR does not always tell the whole story. Meeting targets was the main priority and very often quality suffered. Between 1928 and 1941 8,000 huge new enterprises were built. The difficulty of planning a whole economy as vast as that of the USSR meant all kinds of problems. Spare parts were often unavailable, so that once a tiny component needed replacing production stopped or machines became useless. Lewin argued that 'The First Five Year Plan...landed the country in such chaos that it took at least two years to straighten things out.' Of course, some of the vast projects were wrong-headed from the start. The Belomor Canal, built to connect the Baltic and the White Sea was built at enormous human cost, but in fact was too shallow to take any of the warships for which it was designed!

Bureaucracy destroyed individual initiative. It was more important to have a legitimate reason why targets were not met than to think of a way of overcoming the problems. One of the administration's responses to blockages and problems was to by-pass their own bureaucrats and to send high-ranking officials or party members to try to find a solution. When the Donbass coal-mines, despite heavy investment, produced less not more coal, the Politburo threw out three plans to improve the situation from the Commissariat of Heavy Industry and invited ordinary miners to Moscow in 1933 to discuss matters. A census in 1934 found that one-quarter of the new coal cutting machines was not being used, and one-third of the new pneumatic drills. This was presumably either because miners had not been trained to use them or because they were broken and no one knew how to repair them.

Another response to difficulties was 'storming.' This called on workers and party comrades to put in extra hours to overcome problems. Kravchenko wrote of the new metal plants at Nikopol:

Source 32

Nikopol, I thought, was symbolic of the whole industrialization effort – prodigal in spending life and substance, barbarous in its inefficiency, yet somehow moving forward.

V. Kravchenko, *I Chose Freedom*, 1946

The engineer and writer Antonov gives a similar verdict on the Moscow Metro:

Source 33

By the [engineers']...estimates the construction would be completed by 1937 at the earliest. Stalin lost patience, did not study the estimates of the engineers, and ordered that the first line should start up on November 7, 1934. Naturally there could be no objections. Feverish work got under way. Moscow young Communists were mobilized to dig tunnels. They dug day and night by hand. The timetables for organizing the work lost all sense. The draughtsmen could not keep up with the diggers. The Arbat station had to be redone three times. And the trains on the first circle of the Metro started, not on November 7 1934, but on May 15, 1935. This was a striking record, achieved contrary to engineering science. How many extra million roubles were spent to achieve this record is another matter.

Think about

- In what ways does Antonov criticize the way the Metro was built?
- Does Antonov's evidence support that of Kravchenko in Source 32?

We have already suggested that most Russians were no better off at the end of 1940 than they were in 1928 before the Five Year Plans. There were, however, some important exceptions, which might strike you as odd. Marx had after all written, 'From each according to his ability, to each according to his need.' Stalin criticized the equalization of wages in a famous speech in 1931, insisting that workers be paid in accordance with their responsibilities and skills. Stalin argued that equality of pay would only be possible when true communism had been achieved. Technicians and managers, therefore, were now able to earn up to four times more than ordinary workers.

Cross reference

You will read more about equality of pay in Chapter 11.

Millions more paid a heavier price for the Soviet Union's industrialization – the prison camp population. Before Soviet archives had been opened up, some historians estimated that as many as 9 million people were to be found in labour camps. Now the number is generally assessed as between 2.5 and 3.4 million people, the majority of them men. These men made a significant contribution to the success of the plans, especially in the major construction projects. Twelve per cent of timber was produced by the gulag population, and they also mined most of the nation's gold.

Note

There were over 100 gulags (forced labour camps) spread throughout the USSR in the 1930s.

Perhaps the best testament to the success of the USSR is to compare its victory in the Second World War with Russia's defeat in the First World War. It is difficult to see how the USSR of the 1920s could have withstood the violence of the Nazi *blitzkrieg* and emerged victorious.

Activity

KEY SKILLS

Prepare a report which presents all the costs and benefits of the economic policies of the 1930s. Use visual materials, maps, timelines, pictures, to illustrate your points from more than one electronic source and create a new way of presenting statistical information in your report. Email your fellow students with your ideas and exchange any sources you think are particularly helpful. You might find a comparison between the achievements of the Soviet economy with that of the Nazi economy at the same time helpful. Prepare materials to present your views to the class.

You are now in a position to debate/discuss in your class the following questions:

1. Did the achievements of collectivization and the Five Year Plans justify the suffering they caused?
2. Would the New Economic Policy have provided a better way forward to achieving an industrialized society? How different would that society have been?
3. Write an essay 'How successful were the agricultural and industrial policies pursued in the USSR in the 1930s?'

Conclusion

In the 1930s a gigantic experiment in the organization of human society took place in the Soviet Union, one that attracted great interest far outside her borders from both the detractors and the supporters of Marxism. Her traditional farming communities were transformed into supposedly model collectives and her industrial capacity was vastly increased.

There is still debate as to whether this could have been achieved more effectively by other methods; whether the enormous cost in death and human misery could have been avoided. It is difficult to make a case for the changes in the countryside, where millions died callously ignored by their own government without achieving any improvements in production. Indeed farming continued to be a problem area for the Soviet government long after Stalin was in his grave. It seemed almost impossible to boost levels of production to match those achieved in the West. Looking at the changes in government policy, it is possible to argue that the peasants secured important concessions from the government.

The legacy of the industrialization of the 1930s is with Russia still. The 'produce at any price' philosophy resulted in poor quality though increased quantity of goods. It left Russia with a legacy of inefficiency, which meant that it was unable to compete with the West once the Iron Curtain was removed. However, in the short term it gave Russia the capacity to produce the military equipment to defeat its enemies in the Second World War.

If the 'Second Revolution' was to be fully successful, it demanded not just higher growth rates. It also needed a change of heart in the Soviet people themselves. Would the population be willing to forego increases in their own standard of living indefinitely to meet the targets set by the government? Would Soviet citizens be able to find a new work ethic which did not depend on the individual profit motive, but on working for the good of the wider community instead? This is the subject of Chapter 11.

As we have seen one method employed by the government to spur on their citizens to greater efforts was to raise the spectacle of 'enemies within'. Soviet citizens were told that as they approached communism, capitalist countries and class enemies would try even harder to overthrow their 'successful' system. Vigilance and self-criticism was demanded of everyone. The next chapter will examine how this affected the USSR in the 1930s.

Further reading

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R. Conquest, *The Harvest of Sorrow*, 1986

R.W. Davies, *The industrialisation of Soviet Russia*

S. Fitzpatrick, *Stalin's Peasants*, 1994

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