

25X1



Central Intelligence Agency




Washington, D.C. 20505


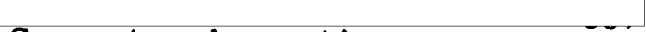

DIRECTORATE OF INTELLIGENCE

September 1987

A Revealing Gorbachev Campaign

Gorbachev's campaign for more and better statistics--still in its early stages--has exposed a major overstatement in cotton production statistics during the last decade of the Brezhnev era. The campaign has also stimulated publication of unique data that suggest Gorbachev's program to improve consumer diets by increasing sales of perishable produce through urban collective farm markets is not working. 

25X1

This memorandum was prepared by 
 Office of Soviet Analysis.
Comment and questions are welcome and can be directed to Chief,
Economic Performance Division, 

25X1

25X1

25X1

SOV M-87-20087



25X1



25X1

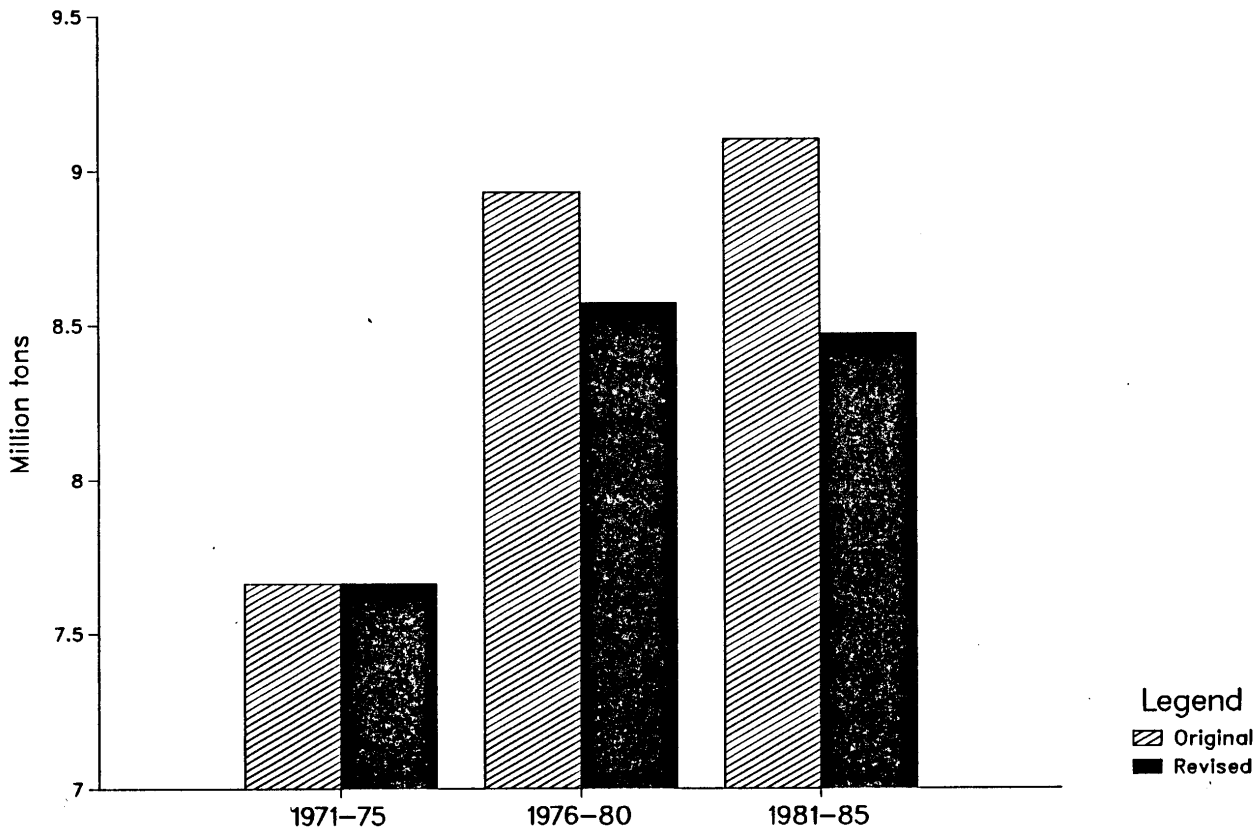
Cotton

Data published in USSR in Figures in 1986 (Tsifrakh 1986) disclose that cotton production during 1976-85 was overstated by nearly 5 million tons, an amount equivalent to over 5 percent of the total production previously reported for that period. The overstatement, which totaled 1.8 million tons during 1976-80, increased markedly to 3.2 million tons during 1981-85 (figure 1).

The gross overstatement of cotton production revealed by the new data is consistent with the pattern of events in Uzbekistan--which produces about 65 percent of the total cotton crop--over the past decade, as well as with Soviet activity in Western cotton markets. Western analysts had difficulty explaining the marked success implied by Uzbekistan's reported cotton output in the late 1970s and early 1980s. In 1982 Sharaf Rashidov, First Secretary of the Uzbek Communist Party, was challenged about discrepancies in cotton production statistics. Shortly thereafter, he reportedly committed suicide. Reports of overstated production at the local level then began to surface. At a major republic plenum in June 1984, Inamdzhon Uzmarkhodzhayev (now the Uzbek First Secretary) charged that "gross padding of cotton results had been occurring throughout the production, procurement, and ginning process." In 1984, Uzbekistan's reported cotton output dropped far more than Western analysts had anticipated, and it was theorized that overreporting was being

Sep 21, 1987

Figure 1
USSR: Average Annual Cotton Production, 1971-85



SEV/1A--BENNETK

reduced. The new Tsifrakh statistics indicate that this hypothesis was correct. []

25X1

The statistics presented in Tsifrakh 1986 for cotton production prior to 1976 and for 1985 are consistent with those in previous publications. The authorities may feel that padding prior to 1976 was not significant or that it is not a matter of current concern, and that it had been eliminated by 1985. []

25X1

To assess the impact of the cotton-crop revisions on our calculation of year-to-year changes in Soviet agricultural production, an annual distribution of the total overstatement was necessary. On the basis of the events in Uzbekistan, we estimated that the overstatement initially was probably very small and, as a percentage of reported production, increased fairly steadily to a peak in 1982--when Rashidov was at the height of his power, and then declined to zero by 1985 (table 1). We also assumed that the published production statistics prior to 1976, the revised 1980 statistic, and the 1985 and 1986 statistics were correct.

As complaints became public and Rashidov came under increasing censure, the degree of overstatement probably dropped quickly. The total exaggeration, however, suggests that even in 1984 padding accounted for roughly 300,000 tons of reported production. Our peak estimated overstatement--11 percent (1.02 million tons) compared with the known 7 percent (730 thousand ton) overstatement in 1980--is consistent with a recent Literaturnaya gazeta article (10 June 1987) noting that the

Table 1
USSR: Selected Statistics on Cotton Production

Million tons

	<u>Original^a</u>	<u>Corrected^b</u>	<u>Estimated Annual Corrected Production^c</u>	<u>Overstatement^d</u>
1970	6.890	6.890	-	-
1975	7.864	7.864	-	-
1976	8.278		8.207	.071
1977	8.758		8.583	.175
1978	8.500		8.160	.340
1979	9.161		8.703	.458
1980	9.962	9.230	-	.732
1981	9.636		8.672	.964
1982	9.282		8.261	1.021
1983	9.212		8.383	.829
1984	8.619		8.278	.341
1985	8.750	8.750		-
1986		8.230		-

^a USSR, Central Statistical Administration, Narodnoye khozyaystvo SSSR v 1985 g., p. 180; Narodnoye khozyaystvo SSSR v 1979 g., p. 220.

^b USSR, Central Statistical Administration, SSSR v tsifrakh v 1986 godu, pp. 116-117.

^c Described in text.

^d Original less corrected or estimated corrected.

exaggeration could have reached one million tons in Uzbekistan alone in the early 1980s. The annual estimates of cotton production that result from application of our annual distribution of the overstatement are contrasted with production statistics reported during 1976-85 in figure 2. We believe the resulting estimates of annual cotton production are reasonable, but we remain open to alternative methodologies. Perhaps glasnost' will in time permit publication of the annual data. []

25X1

The effect of incorporating the estimated annual cotton production data into our measure of the value of farm output (net of feed, seed, and waste) and on crop output (net of seed and waste) was slight as the following tabulation shows:¹

	Percentage change			
	Based on Data Published During 1976-85		Based on Revised and Estimated Data	
	<u>Crops</u>	<u>Net Farm Output</u>	<u>Crops</u>	<u>Net Farm Output</u>
1975	-7.28	-8.54	-7.28	-8.54
1976	18.65	7.96	18.54	7.90
1977	-5.21	4.11	-5.36	4.03
1978	8.69	3.18	8.47	3.06
1979	-6.74	-5.87	-6.93	-5.97
1980	-7.22	-4.06	-7.67	-4.28
1981	-3.56	-0.75	-3.97	-0.92
1982	13.39	7.19	13.51	7.20
1983	2.86	6.05	3.19	6.24
1984	-3.31	-0.73	-2.66	-0.39
1985	-3.47	-1.68	-3.00	-1.45

The average annual change over time is negligible. []

25X1

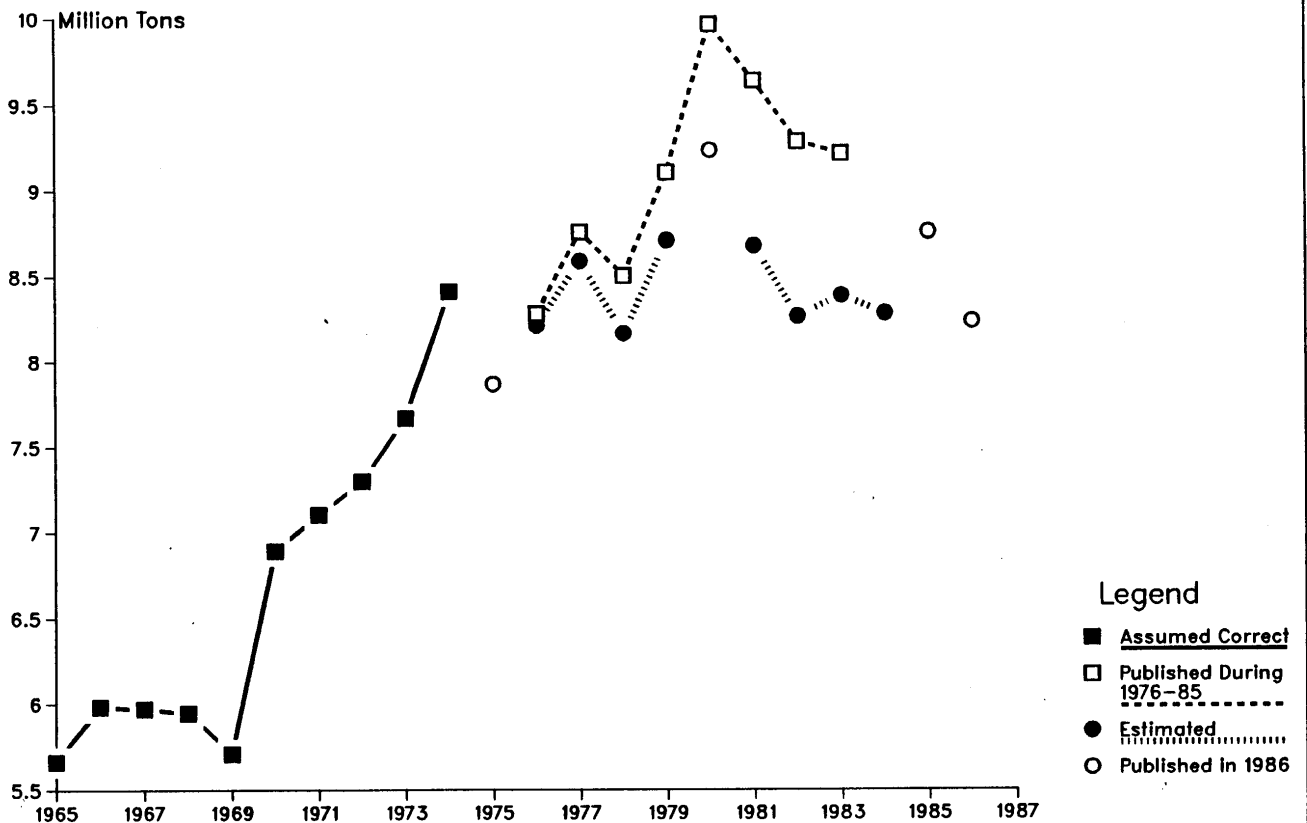
¹ The methodology for deriving net farm output is presented in US Congress, Joint Economic Committee, USSR: Measures of Economic Growth and Development, 1950-80, Washington, D. C., 8 December 1982, pp. 245-316. []

25X1

25X1

Sep 29, 1987

Figure 2
USSR: Original and Corrected Estimates of Cotton Production



Urban Collective Farm Markets

Unique data on sales and prices of 17 commodities in collective farm markets (CFMs) in 264 cities for January-June 1986 and 1987 have been published in Ekonomicheskaya gazeta, No. 32, August 1987, p. 19. These data indicate that less tonnage of nearly all commodities listed is now being sold in major-city CFMs than was sold in 1963, when data on tonnage of the major commodities sold in 251 cities were last published (table 2).² The decline in sales of 16 of the 17 products in the new listing (parsley is the exception)--and the extent of the decline for many--in the first half of 1987 compared with the first half of 1986 suggests that Gorbachev's proposal for more state and collective farm sales of perishable foods through CFMs may be falling on deaf ears.

25X1

The vagaries of Soviet weather undoubtedly played a role in the 45-percent decline in sales of new potatoes in the first half of 1987 compared with the same period in 1986 and in the similar drops in sales of cucumbers and tomatoes. But the brief article accompanying the statistical tables noted that collective and state farm sales of potatoes, vegetables, and fruit accounted for only 2 percent, 5 percent, and 4 percent, respectively of CFM sales of these products. (Most sales come from surplus produced on private plots.) It also noted that overall sales for all CFMs

² See Appendix A for a review of the availability of collective farm market statistics and the expansion of the 251-city sample to one of 264..

25X1

25X1

Table 2

USSR: Sales of Selected Commodities in Collective Farm Markets

	Thousand tons			
	251 cities ^a			264 cities ^b
	1955	1960	1963	1987 est.
Potatoes	1428.4	1408.1	996.5	532
Cabbage	299.4	232.3	158.6	126
Dry onions	144.5	137.6	103.0	94
Cucumbers	176.0	194.1	130.8	44
Tomatoes	232.7	195.6	143.8	30
Beef	93.9	120.7	136.7	46
Mutton	31.3	26.1	27.7	4 ^c
Pork	83.9	45.3	53.8	72
Pork fat	25.8	16.7	17.5	20

^a Sovetskaya trgovlya, Moscow, 1964, p. 267.

^b Based on 6-month data from Ekonomicheskaya gazeta, no. 32, August 1987, p. 19. The estimate assumes sales during January-June account for half of total annual sales. This probably means total vegetable sales, and particularly sales of cucumbers and tomatoes, are understated. An alternative assumption--that only one-third of annual sales occur in the first half--led to the same conclusion except that the pork anomaly (footnote c) becomes larger, pork fat quantities increase well above 1963 levels, and sales of cabbages and dry onions were roughly the same as in 1963.

^c The marked increase in estimated tonnage of pork sold in 1987 is a puzzling contrast to the decreases in all other products listed is puzzling. It could perhaps result from larger-than-usual slaughter and CFM marketing of hogs both by collective and state farms and by individuals in the early months of the year when the unusually harsh winter increased demand for feed supplies and snarled transportation, making feed replenishment difficult.

[redacted]

were down by 12 percent. The decline in CFM marketings is reflected in comments such as those reported in Sovetskaya Rossiya, 8 August 1987, p. 1, that in Kurgan "We haven't seen any of the change promised on radio and television and in the press that was to result from the creation of the agro-industrial complex." Ironically, some of the decline in CFM marketings may result from Food Program initiatives that allow farms to encourage individuals to produce commodities on contract and permit cooperatives (who procure large quantities of fruits and vegetables, primarily from farms) to buy more from individuals. In both cases, commodities produced by individuals are marketed through state channels. [redacted]

25X1

The decline in sales has been accompanied by an increase in prices. A crude index based on sales of roughly half of the commodities listed in the new tables (using weights derived from our Moscow CFM price index) indicates that the average price level over one year in the 264-city sample increased by about 10 percent.³ The article containing the new price data notes that for all CFMs, average prices "increased by 6 percent" in the first half of 1987. Our Moscow CFM price index indicates that the average price level for the 17 products systematically reported there (not the same 17 that appear in the newly published statistics) increased by 4.4 percent in the first half of 1987. [redacted]

25X1

³ See Appendix B for comparisons of the official CFM statistics with unofficial Moscow data and Radio Liberty data. [redacted]

25X1

[REDACTED]

Because no US Embassy Moscow CFM price observations were reported for June 1986, a May 1986 - May 1987 comparison was constructed to provide an average CFM price level comparison for Moscow approximating that available from the 264-city sample. The result was surprising: the Moscow price level calculated from the US Embassy survey was unchanged, but the officially compiled 264-city price level increased by 10 percent. Changes in average meat prices were roughly the same in Moscow and in the 264 cities, but prices of most vegetables in Moscow were down by 7 percent or more. Thus Moscow residents may, in fact, perceive an improving situation. The apparent decline in Moscow vegetable prices may result from relatively larger supplies--individuals prefer to "bring their suitcases to Moscow"--or simply from limitations of the data. [REDACTED]

25X1

Although the Soviet 264-city data present new problems of interpretation, these data provide new, if tentative, insight into the progress of Gorbachev's food initiatives, and highlight the danger of placing undue weight on the Moscow CFM or Radio Liberty CFM price reports. The data inadequacies of non-official Soviet CFM data are clear. The emigre responses suffer from a "recall" problem, and the US Embassy reporting on Moscow CFMs covers only a very limited sample geographically and temporally. Differences between emigre data and the US Embassy Moscow data probably reflect the substantial city-to-city price variation, especially for seasonal produce. [REDACTED]

25X1

Appendix A

Statistical Lacunae

The two comprehensive statistical publications on domestic trade are old. Sovetskaya trgovlya, Moscow, 1956 and 1964, included annual data on the value of sales in all CFMs (except village markets), indexes of the physical volume of sales of the major categories of products sold (grain, fruit, and vegetables, for example), and tonnages for a number of products sold in CFMs in 251 cities. They also included selected data on CFM sales of a few products in each of 32 cities. No data on the prices of individual products were included. Although during the late 1960s the Central Statistical Administration (CSA) several times promised to publish another volume in the series, CSA has not yet done so.

25X1

After 1964, the annual Narodnoye khozyaystvo SSSR continued to publish a few tables on all aggregate value and price-index CFM series for 251 cities. In 1968 the yearbook repeated the 1967 tables but--without explanation--noted a 264-city base. The indexes of quantities sold and of prices were also rebased from 1950 to 1960. CIA analysts compared the 1967 and 1968 data sets to determine whether the 264-city data were indeed a new series or whether the larger sample data presented in 1968 were merely linked in. The results were inconclusive, because only three years of data were available and the rounding necessary for the

[REDACTED]

USSR to publish three-digit numbers markedly reduced precision. Technical literature at the time indicated that the 264-city sample was merely an expansion in coverage, that is, an addition to the original 251, not a change in the basic list. The cities included have not, to the author's knowledge, been listed in any publication available in the West. The matter lost importance, however, as the tables in question have not been repeated since 1968. (The only official CFM statistics available since then are the value of CFM sales in current prices and the CFM shares of total food marketed both in CFM prices and in state retail prices.) [REDACTED]

25X1

[REDACTED]

Appendix B

The newly published price statistics also permit a comparison of official statistics on CFM prices in 264 cities with US Embassy observations in three Moscow CFMs (table B1). For the most part, Moscow, as would be expected, appears to be an expensive city. Only three markets in Moscow are observed by US Embassy price checkers on one day (not necessarily the same day) each month. The new CSA 264-city-sample price averages may mask large price variations within the month as well as between cities. Thus one cannot judge the degree to which the Moscow CFMs may be atypical. Soviet textbooks claim that the CSA collects daily price data from many CFMs in each of the 264 cities. The new statistics also permit a comparison of average prices of eight commodities in 264 cities with those in 67 reports from emigres for June 1986 (table B2). The prices in the 264-city sample are consistently lower than those reported by emigres, probably reflecting in part the predominance of emigres from larger cities. [REDACTED]

25X1

Table B1

USSR: Comparison of Observed Collective Farm Market Prices

	Rubles per kilogram		
	<u>264 cities^a</u>	<u>Moscow</u>	
	<u>June 1987</u>	<u>June 1987^b</u>	<u>May 1987^c</u>
Potatoes	.58	1.50	.60
Dry onions	1.05	NA	3.00
Carrots	1.21	NA	2.00
Cucumbers	2.06	2.06	2.08
Tomatoes	3.95	3.95	3.50
Apples	3.18	6.00	4.33
Beef	4.93	9.00	7.75
Mutton	5.36	7.00	8.00
Pork	4.43	8.00	7.75
Pork fat	3.97	6.00	5.67

^a Ekonomicheskaya gazeta, No. 32, August 1987, p. 19.

^b US Embassy Moscow, UR 7052, 9 July 1987.

^c US Embassy Moscow, UR 7051, 9 July 1987.

Table B4
USSR: Collective Farm Market Prices, June 1986

	Soviet Official: 264 Cities ^a			Radio Liberty Food Reporting ^b		US Embassy Moscow ^d	
	Rubles per kg.	Rubles per kg.	Deviation ^c	Rubles per kg.	Deviation ^c	Rubles per kg.	Deviation ^c
Potatoes	.47	1.01	+115	.60	+ 28	.60	+ 28
Cabbage	.94	1.37	+ 46	NA	+ NA	NA	+ NA
Tomatoes	3.04	3.55	+ 17	8.83	+190	8.83	+190
Apples	3.00	3.62	+ 21	4.33	+ 44	4.33	+ 44
Beef	4.93	8.25	+ 67	7.75	+ 57	7.75	+ 57
Mutton	5.20	9.81	+ 87	8.00	+ 54	8.00	+ 54
Pork	4.39	9.78	+123	7.75	+ 77	7.75	+ 77
Butter	7.42	7.52	+ 1	NA	+ NA	NA	+ NA

^a Ekonomicheskaya gazeta, no. 32, August 1987, p. 19.

^b Based on data from 67 respondents.

^c Percent deviation from Soviet official price average for 264 cities.

^d Observations for May 1986 (US Embassy Moscow, UR6057, 22 July 1986). No US Embassy observations were reported for June 1986.

R79

25X1