
Innsbruck Student Papers in Economic and Social History

Papers by Students and Papers for Students

ISPESH 2

China's "Three Terrible Years" – The Great Leap Famine 1959-1961

by Marlen Mittermair

submitted June 2009, reviewed September 2009, published January 2010

*A series of the research field "Economic and Social History" (at the same time working area "History of Globalization" in the Research Centre Empirical Economics and Econometrics **EmpEc**) at the School of Economics and Statistics of Innsbruck University (Austria).*

Contact: Andreas Exenberger, Department of Economic Theory, Policy and History, University of Innsbruck, Universitaetsstrasse 15, A-6020 Innsbruck, e-mail: andreas.exenberger@uibk.ac.at

*Eine Reihe des Forschungsfeldes „Wirtschafts- und Sozialgeschichte“ (zugleich Arbeitsbereich „Geschichte der Globalisierung“ im Forschungszentrum für Empirische Wirtschaftsforschung und Ökonometrie **EmpEc**) an der Fakultät für Volkswirtschaft und Statistik der Universität Innsbruck (Österreich).*

Kontakt: Andreas Exenberger, Institut für Wirtschaftstheorie, -politik und -geschichte, Universität Innsbruck, Universitätsstraße 15, A-6020 Innsbruck, e-mail: andreas.exenberger@uibk.ac.at

URL: <http://www.uibk.ac.at/empec/ispesh>

China's "Three Terrible Years" – The Great Leap Famine 1959–1961

*By Marlen Mittermair**

During the period 1959–1961 the greatest famine in history occurred in the People's Republic of China. The causes of this famine are multiple, but can be jointly attributed to the so called Great Leap Forward, a plan initiated by Mao Zedong with the goal of overtaking Britain in industrial production within 15 years. In addition to a developmental focus on heavy industry and large-scale projects, peasants had to abstain from private food production and were forced to live in communes. Further planning mistakes and bad weather added to the magnitude of the famine, which remained almost unnoticed outside of China until the 1980s. This research paper examines various factors that contributed to the catastrophe and attempts to find out, to what extent the famine can be traced back to human failure.

Introductory remarks

During the period 1959–1961 the greatest famine in history occurred in the People's Republic of China. Millions of people¹ died of starvation and fertility rates declined significantly.

The causes of this famine are multiple, but can be jointly attributed to the so called Great Leap Forward, a plan initiated by Mao Zedong with the goal of overtaking Britain in industrial production within 15 years. To reach this, he announced steel production as the major piece of this effort. A large number of peasants were abstracted from rural labour to industry to undertake large irrigation and land reclamation projects as well as to build and operate "backyard iron furnaces".²

In addition, peasants had to give up all private food production, and were forced to live in newly formed agricultural communes.

In succession, a large number of mistakes from the governmental side accompanied by three years of bad weather led to an enormous decline in grain harvest, followed by the greatest famine in human history. A famine whose magnitude was unnoticed outside of China until the Chinese government released important demographic data in the early 1980s.

This research paper examines various factors that contributed to the catastrophe and attempts to find out, to what extent the famine can be traced back to human failure.

A brief introduction on how the Famine began

When the Communists took over in 1949, China was a poor agrarian economy with nearly 90 percent of the population living in rural areas, cultivating small

* Marlen Mittermair (e-mail: marlen.mittermair@student.uibk.ac.at) is graduate student of *Applied Economics*, School of Economics and Statistics, University of Innsbruck, Austria. This research paper was presented in the course of the 3rd Symposium of Economic History, Innsbruck (19 June, 2009).

¹ The number of deaths was enormous, although it is not clear until now how many people actually died. The numbers vary from an upper bound of 30 million deaths (Chang and Wen) to a lower bound of 14 million (official statistics).

² Li and Yang, "Central Planning Disaster", p. 845

plots of land using old labour-intensive farming technology. The new government under Mao Zedong diverged from the standard Soviet planning model and announced a heavy-industry oriented development strategy in 1952. In 1958 the Great Leap Forward movement was launched with the goal to surpass Great Britain in terms of industrial production in 15 years and the United States in 20 or 30 years.³ In other words, the government aimed to transform the Chinese economy from its predominantly agrarian nature into a powerful industrial state.

To achieve this, the main purpose was to increase both agricultural and industrial output, the former by expanding the acreage covered by irrigation and the latter by increasing steel and iron production. But as mentioned above, China was a mainly agrarian economy with constrained capital and backward in technology, so achieving rapid growth via technical change was a relatively unlikely option. As an alternative, a part of China's vast rural population was used as resources of work and shifted from agriculture to industry and public projects.

The scale of mobilization during the Leap was unprecedented high, as 30–50 percent of the rural labour force was abstracted and involved into the new established industry.⁴ Moreover, a significant part of them had to work on projects totally unrelated to agriculture, such as the smelting of iron, mining and transporting ore in the so called backyard furnaces.

The part of the rural population that has been left was collected in large-scale collectives because Mao believed that industrialization could not take place without a great leap forward in agriculture, which in turn could not happen if the traditional household farms were not transformed. In 1953, local cadres started to create co-operatives, ending in 1958, where almost all rural households were organized into communes with thousands of members each.⁵ Before the communes were established, the harvested grain was distributed to the individual peasant households for private consumption. Now the communes collectivized all means of production, including not only land and draft animals but also small private plots as well as members' property, such as kitchenware and furniture.

In addition, millions of communal dining halls were established, providing free meals for its commune's members. The aim of these institutions was to liberate more labour, especially those of women, from housework for production purposes. Further, food preparation and consumption were now centralized and fell under the direct control of the government or its local cadres. By the end of the year, 70–90 percent of the rural population was in the communal dining system.⁶ Private kitchens were often destroyed in many communes and peasants' private food stocks were collectivized.

Although the initial idea of Mao's plan, namely to provide each commune member free services such as hospitals, schools, libraries etc. was honourable, nothing went according to this plan. Much of the iron and steel that was produced in backyard furnaces was useless. After a good harvest in 1958, grain production declined in three successive years, from 1959–1961; its causes will be explained in the subsequent part of this work. In the early stages of the Leap, food shortages and starvation were already reported in some provinces, but Mao did not react and followed his plan to industrialize China within a few years. By spring 1959, starvation became extensive and covered nearly the whole People's Republic of China.⁷

³ Li and Yang, "Central Planning Disaster", p. 841

⁴ Kung and Lin, "The Causes", p. 54

⁵ Chang and Wen, "Communal Dining", p. 3

⁶ Chang and Wen, "Communal Dining", p. 3

⁷ Chang and Wen, "Communal Dining", p. 3

Some Facts

In the period from 1959 to 1961 China experienced its probably three most terrible years of the 20th century: the Great Leap Forward failed completely, leaving millions of starvation deaths and almost an equal amount of lost births.

Up to 1957 China experienced a mortality decline due to the cessation of warfare, a reduction in the degree of extreme poverty as well as great improvements in health care.⁸ This downward trend however changed suddenly after the Great Leap Forward has initiated. The national death rate rose slightly in 1958 and reached a peak of 13.77 per thousand in urban and 28.58 per thousand in rural areas in 1960. This year was also announced to be the worst year of the famine. In 1961, although mortality was still at a high level, death rates began to normalize, reaching pre-Leap levels in 1962.

Table 1: China's demographic data

Year	Population (in Million)			Urban areas (per Thousand)			Rural areas (per Thousand)		
	Total	Urban	Rural	Birth Rate	Death Rate	Natural Growth Rate	Birth Rate	Death Rate	Natural Growth Rate
1954	603	82	520	42.45	8.07	34.38	37.51	13.71	23.8
1955	615	83	532	40.67	9.3	31.37	31.74	12.6	19.14
1956	628	91	536	37.87	7.43	30.44	31.24	11.84	19.4
1957	646	99	547	44.48	8.47	36.01	32.81	11.07	21.74
1958	659	107	552	33.55	9.22	24.33	28.41	12.5	15.91
1959	672	123	548	29.43	10.92	18.51	23.78	14.61	9.17
1960	662	130	531	28.03	13.77	14.26	19.35	28.58	- 9.23
1961	658	127	531	21.63	11.39	10.21	16.99	14.58	2.41
1962	672	116	556	35.46	8.28	27.18	37.27	10.32	26.95
1963	691	116	575	44.50	7.13	37.37	43.19	10.49	32.7
1964	705	130	595	32.17	7.27	24.9	40.27	12.17	28.1
1965	725	131	612	26.59	5.69	20.9	39.53	10.06	29.47
1966	745	133	628	20.85	5.59	15.26	36.71	9.47	27.24

Notes and Sources: own illustration according to Chang and Wen, "Communal Dining", p. 11. These data have been officially published by the State Statistical Bureau of China in the early 1980s and display 14 million deaths during the period 1959–1961. The discrepancy between these data and other published numbers of deaths may be traced back to the fact, that many records were lost or destroyed during the Cultural Revolution. Furthermore, at the time of famine, doctors were forbidden to record a death as due to starvation. See for that Becker, *Hungry Ghosts*, p. 199 ff.

As a second consequence of the Great Leap famine, massive fertility fluctuations set in.⁹ In pre-Leap years, total fertility up to age 39 was about 5.6 births per woman. This fell a bit in 1958 to 5.2 and declined continuously in the years from 1959 to 1961, reaching its lowest level, 3.06, in 1961. Afterwards, a recovery set in, and in 1963 total fertility reached a peak value of 6.9 births per woman.¹⁰

Excess mortality and massive fertility fluctuations represent the fatal consequences of the three years lasting famine which in turn was the result of a multitude of different factors: On one side, grain output decreased sharply during the period 1959–1961, leaving the population with the problem of not being able to supply enough grain for consumption. On the other side new policies changed population's life to a large extent. We will have a closer look to both approaches in the next section.

⁸ Peng, "Demographic consequences", p. 644

⁹ Peng, "Demographic consequences", p. 640

¹⁰ Peng, "Demographic consequences", p. 641

Factors contributing to the Famine

The Communist Party Central Committee blamed in 1981 bad weather for the famine and called the period 1959–1961 “three years of natural calamities”.¹¹ Although the weather was for sure partly responsible for the decline in grain production, we will see that a lot of other factors contributed to the enormous decline in grain output and the consequential famine.

Agrarian Reform

The agrarian reform was introduced in several parts of the rural population, establishing new production methods and new ways of living.

The Communes

By 1955, households were organized into production teams with typically 8 to 10 households. In 1955–1956 nearly the whole agricultural sector was reorganized into simple or advanced agricultural producer cooperatives, with 20 to 25 and 150 to 200 member families, respectively. In 1958, at the beginning of the Great Leap Forward, these cooperatives were merged to form People's Communes, with an average membership of 5,000 households.¹² Under this system, the household lost its importance as a unit of production. The commune owned the land, managed production, and controlled the output of agricultural products. The aim of these People's Communes was, as stated above, to optimize agricultural production and to drive on the Great Leap Forward. But instead of reaching record levels of grain output, being a member of such a commune had negative effects on the willingness to work. This can be attributed to three relevant features:

- families as social structures were destroyed: men and women were separated into different living quarters while their children were placed in nurseries or boarding schools,¹³
- workers were denied the right of exit from the communes¹⁴ and
- time wages were replaced by piece rates and a worker's income was distributed “according to his needs”¹⁵

Communal Dining

Inspired by the idea that public dining arrangements would liberate women from their housework and involve them in farm work, Mao encouraged the communes to set up communal dining facilities, where food preparation and consumption were centralized. Under this system, all grain output of a commune, after the deduction of the quota they had to deliver to the state, was sent to the communal dining halls. No grain was distributed among individual households and all members had to obtain their food from the communal dining halls. Even worse, members' private kitchens were destroyed and their entire accumulated food stock was collectivized.¹⁶ For not being a victim of deprivation, peasants who had private grain stocks promptly consumed them. Moreover, they began to slaughter their draft animals due to a fear of confiscation by the communes.¹⁷ If these stocks

¹¹ Li and Yang, “Central Planning Disaster”, p. 842

¹² Ashton et al., “Famine”, p. 625

¹³ Becker, *Hungry Ghosts*, p. 105

¹⁴ Johnson, “Introductory Remarks”, p. 104

¹⁵ Kung and Lin, “The Causes”, p. 54: The wage system was replaced by a reward system where commune's members received e.g. free food and housing in exchange for their work effort.

¹⁶ Chang and Wen, “Communal Dining”, p. 19

¹⁷ Chang and Wen, “Communal Dining”, p. 5

weren't consumed and if the draft animals weren't slaughtered, they could have covered a part of the missing consumption at the early stage of the food shortages.

In addition, the communal dining halls encouraged enormous wastage of food. Much of it was lost or damaged in storage, and the free food supply induced vast overconsumption.¹⁸ The Chinese economist, Xue Muqiao, estimated that this overconsumption amounted to 17.5 million tons which was equivalent to 11% of the rural grain supply in 1958.¹⁹ Chang and Wen even believe that the communal dining system was the main reason for the grain shortage that occurred after the good harvest in 1958.²⁰ Anyway, the commune mess halls were short-lived and abolished in the course of 1961.²¹

New Production Methods

At the beginning of 1958, peasants were forced to transplant crops with an absurdly high density in order to raise yield. The Communist government believed that high planting density would bring more harvest which, later on, turned out to be totally wrong. Furthermore, at the end of 1958 Mao initiated a new planting system, where the acreage had to be cultivated to one third with grain crops, to another third with cotton and the last third should be left wasted or rather used for rotation. This led to a constant reduction in sown areas in the years 1958 and 1959.²²

A contemporary witness reported that not only senseless production methods such as deep ploughing but also the huge wastage of harvest in terms of uncollected crops has decreased output: If there were, after collecting it the day before, some grain left on the fields, no one went there later on to harvest the rest. This resulted from a labour shortage – mostly women and children worked on the fields since men were involved in steel production and irrigation projects—and from little incentive to work, which in turn may be attributed to the collectivization of private plots of land.²³

Together these factors were one of the reasons, why grain output declined constantly in the years 1959–1961.

*The "Wind of Exaggeration"*²⁴

In China's planned economic structure the acquisition and distribution of food were directly controlled by the central government. The rural population had to deliver quotas to procurement agencies at prices that were set by the government. With the establishment of the communes, local officials were assigned to report grain output of each commune. To demonstrate their loyalty to Mao, these local officials began to exaggerate the real grain output. On the provincial level, of course, the officials were in competition with each other in setting new output records. Liu Lian, a contemporary witness of the Great Leap Famine, stated to the "wind of exaggeration": "As I had to work on the fields, I recognized how the increase in production was reported by the officials. They only made their

¹⁸ Due to the good harvest in 1958, a lot of dining halls started to provide free meals to members that were not restricted in quantity. Overconsumption also increased when the peasants were engaged in heavy physical work such as steel production and irrigation projects.

¹⁹ Chang and Wen, "Communal Dining", p. 21

²⁰ Chang and Wen, "Communal Dining", p. 21

²¹ Wemheuer, *Großer Sprung*, p. 7

²² Yao, "Causal Factors", p. 1367: sown area was reduced by 4.5 percent in 1958 and another 9 percent in 1959.

²³ Wemheuer, *Großer Sprung*, p. 58

²⁴ Wemheuer, *Großer Sprung*, p. 25

calculations on the paper but did never control the real output coming from the fields."²⁵

On the basis of these exaggerated reports, a 68% increase in summer grain harvest was announced in 1958, and predictions stated that China could even reach a 92% increase.²⁶ So Mao thought that China was going to produce more food than it could consume. It was this assumption that formed the basis of Mao's decision to reduce the sown area by about 9% in 1959.²⁷ As a result, the grain output fell in 1959 by 15% and reached only about 70% of the 1958 level in 1960 and 1961.²⁸

Table 2: Grain output on national level

Year	Output (million tons)
1954	169,52
1955	183,74
1956	192,75
1957	195,05
1958	200,00
1959	170,00
1960	143,50
1961	147,50
1962	160,00
1963	170,00
1964	187,50
1965	194,53
1966	214,00

Notes and Sources: own illustration according to Lin and Yang, "Food Availability", p. 143

Government Grain Procurement and Net Exports

In 1953, the Communist government introduced a system of Unified Procurement (central purchase and supply system) and Unified Sale for grain crops, which allowed them to control grain production and consumption.²⁹ This system guaranteed grain supplies to the non-agricultural population in Chinese cities but did also eliminate any grain trade across provinces by private traders. As stated above, peasants had to supply a quota of grain output to the state. This quota then was used by the state to provide a fixed ration of grain at a fixed price to the urban population. The proportion of the harvest, that has been left, was resold to the rural population and used by them for consumption.

The "wind of exaggeration", however, led the government believe that even more grain could be purchased from the rural population and forced them to increase grain procurement.³⁰ Before the Great Leap Forward, grain procurement was at a 25 percent level of total grain output. Due to the exaggerated reports coming from the officials of the communes, the government rose grain procurement to 29.4 percent in 1958 and to 39.7 percent in 1959, although total grain output in 1959 was 25 million tons less than in 1957. In 1960 grain procurement

²⁵ Wemheuer, *Großer Sprung*, p. 57; Liu Lian (Univeristy of Agriculture, Beijing) and some other academic staff were sent to Chinese provinces in order to optimize agricultural techniques and to support the Great Leap Forward.

²⁶ Chang and Wen, "Communal Dining", p. 3

²⁷ Kung and Lin, "The Causes", p. 54

²⁸ Lin and Yang, "Food Availability", p. 137

²⁹ Lin and Yang, "Food Availability", p. 139

³⁰ Peng, "Demographic consequences", p. 656

declined to 35.6 percent of total output, but at the same time grain output was 51.5 million tons less than in 1957.³¹

This enormous procurement increase resulted also from an increase in China's urban population. Since a huge proportion of the rural labour was shifted from agriculture to industry³², urban population increased from 99.49 million in 1957 to 107.21 million in 1958, 123.71 million in 1959 and 130.73 million in 1960.³³ As the grain supply for the urban population relied exclusively on the Chinese procurement system, this sudden expansion of the non-agricultural population caused a higher demand on grain from the government's side.

Beside this, exaggerated reports also increased grain exports. Until these three terrible years, China has always been a net grain-exporting country. In fact, net grain exports in 1959 were more than 50 percent greater than those of 1958. These large net grain exports continued throughout 1960.³⁴ After eventually realizing their mistake, the government reduced grain procurement rates in 1961 and started vast grain imports, making China for the first time a net grain-importing country.³⁵ Thus, as the "wind of exaggeration" blew through the country, grain procurement and high exports in combination with output decline after 1958 contributed significantly to the Great Leap Famine.

Urban Bias

When looking at famine mortality rates, a significant difference between urban and rural areas can be noted.³⁶ This results from the already stated fact, that the government guaranteed a fixed food supply to the urban population, but not to rural residents. The latter were responsible for feeding themselves while the former could rely on the state, no matter how the last harvest fell out. In other words, basic food availability for this part of China's population was guaranteed as long as the government did not cut grain rations.

Although consumption declined nationwide, the rural population experienced a much higher decline in per capita consumption than urban residents (see Table 3).

The reduced consumption in urban areas however did – in contrast to rural areas – in general not lead to famine in cities. This may be explained by the fact that the communal dining system, with its free food supply, did not exist in urban areas. Although in cities there were similar dining facilities, called neighbourhood dining rooms, dining there was not obligatory and above all not for free. Further, most of the urban residents still preferred to eat at home. Therefore, although food supply to urban residents was at a minimum level, as residents were allowed to cook at home and organize their consumption on their own, famine did not at all – or at most at a very low level – occur in cities.³⁷

³¹ Peng, "Demographic consequences", p. 655

³² This will be explained in the section "Shifts of the rural population to industry – resource diversion"

³³ Peng, "Demographic consequences", p. 655. At this point one may ask if the urban population might also have increased due to escape from the rural areas to urban areas. But this cannot be the reason because in the mid 1950s a rigid household registration system has been established which deprived the rural population of the right to move to urban areas (travellers for example had to obtain authorization from their place of residence as well as temporary registration at their destination). See for that Lin and Yang, "Food Availability", p. 139. In addition, Mao introduced an internal passport which ensured that anyone registered as living in the countryside could not enter a city and obtain state grain rations there (Becker, *Hungry Ghosts*, p. 221).

³⁴ Ashton et al., "Famine", p. 629

³⁵ Peng, "Demographic consequences", p. 657

³⁶ See table 1

³⁷ Chang and Wen, "Communal Dining", p. 28

Table 3: Grain consumption of urban and rural population (Consumption in terms of kg/person)

Year	National	Urban	Rural
1957	203,06	196,00	204,38
1958	198,23	185,55	201,00
1959	186,59	200,89	183,10
1960	163,62	192,59	156,00
1961	158,79	179,49	153,71
1962	164,63	183,84	160,57

Notes and Sources: own illustration according to Wemheuer, *Großer Sprung*, p. 79

An explanation for the urban bias may be that China attached great importance to "save" their intellectuals, mainly located in urban areas.³⁸ A contemporary witness stated in an interview, that the intellectuals were considered as the valuable talents of the state and therefore were not only given grain for a basic consumption but also beans and sugar in order to prevent diseases such as dropsy.³⁹

This systematic bias of course existed already before the Great Leap Forward, but did not necessarily lead to a famine since food supply was still adequate. But as grain output fell and provincial exports continued to rise, the rural population suffered enormous from food shortages.

Shifts of the Rural Population to Industry – Resource Diversion

As stated above, Mao's goal was to surpass Britain in terms of industrial production within 15 years. These production targets actually were revised upward several times, reaching unrealistic levels.⁴⁰

Because of its lack of technology China's supposed sole possibility to reach this goal was to shift labour from the vast rural population to industry. Thus, during

Table 4: Rural labour force in China

Year	Rural labour (millions)
1954	182
1955	186
1956	185
1957	193
1958	155
1959	163
1960	170
1961	197
1962	213
1963	220
1964	228
1965	234
1966	243

Notes and Sources: own illustration according to Li and Yang, "Central Planning Disaster", p. 841

³⁸ Wemheuer, *Großer Sprung*, p. 43: the term "intellectuals" in China actually meant something different from that of Western Europe. During the Mao-era, each graduate from high school was considered as an intellectual while in Western Europe this term is often connected with important personalities dealing with art, literature or science.

³⁹ Wemheuer, *Großer Sprung*, p. 43

⁴⁰ Wemheuer, *Großer Sprung*, p. 60: By the end of 1958, Mao announced that China would surpass Great Britain within the next year.

the period 1957–1958 the rural labour force was reduced by 38 million people. Rural residents, young and old, moved into cities to work in factories.⁴¹ This high proportion of rural labour clearly was missing in agriculture and could be compensated neither by others such as from housework liberated women nor by successful outcomes in steel production.

Because of the lack of materials, cadres went from house to house and collected everything that was iron. They even collected iron-woks and other kitchen utilities and began smelting them, producing steel and iron of such poor quality that at least 50 percent had to be thrown away.⁴²

Moreover, a lot of commune authorities were so preoccupied of producing high rates of iron and steel in autumn of 1958 that they neglected to harvest the crops, which were left in the fields.⁴³

Li and Yang found out, that this resource diversion was the most important factor contributing to the collapse between 1958 and 1961 as responsible for 33 percent of the decline in grain output.⁴⁴

Weather and Natural Disasters

Natural disasters have continually visited China: the northern part has been frequently afflicted by catastrophic droughts. Further, flooding has also been a problem. In central China, the Yangtze caused massive flooding over a few decades. In southern China, however, the climate is less variable so that droughts and floods have been less frequent and less severe.⁴⁵

Although many scientists do not blame weather for causing a famine, the impact of natural disasters on grain production was nevertheless significant during 1959–1961. Droughts and flooding severely damaged agricultural harvest so that the grain yield per hectare fell in almost all provinces.⁴⁶ Anyway, without the “helping hand” of wrong policies, natural disasters alone should not have resulted in such a substantial grain output decline.⁴⁷ Even Liu Shaoqi, who succeeded Mao as head of state, stated that the crisis was three parts natural and seven parts man-made.⁴⁸

China's Isolation

China's political isolation made it difficult for anybody outside the country to assess the actual situation (officially there was no famine in China). By 1961, however, the existence of a famine was widely accepted in the rest of the world. Offers to help came from the International Red Cross, but the People's Republic rejected any kind of international aid. Foreign Minister Chen Yi stated that the food crisis of China had to be solved domestically and that they would never beg for food.⁴⁹

⁴¹ Peng, “Demographic consequences”, p. 639

⁴² Wemheuer, *Großer Sprung*, p. 60

⁴³ Kung and Lin, “The Causes”, p. 54

⁴⁴ Li and Yang, “Central Planning Disaster”, p. 870

⁴⁵ Ashton et al., “Famine”, p. 620

⁴⁶ Peng, “Demographic consequences”, p. 651

⁴⁷ Ashton et al., “Famine”, p. 620: although food shortages that result from natural disasters are hard to eliminate, human intervention can reduce the effects of famine. So it happened in 1920 in North China when, after a drought and famine, rail transport and international aid provided grain and reduced the number of deaths to „only“ 500.000.

⁴⁸ Wemheuer, *Großer Sprung*, p. 30

⁴⁹ Ashton et al., “Famine”, p. 631

Summary

To sum up, the Great Leap Famine can be traced back to two main factors, namely the food availability decline⁵⁰ and the introduction of new policies. The former can be seen as the most important one contributing to the famine, while without the latter, this famine would have never been so severe.

Because of the exaggerated harvest reports and the introduction of new agricultural methods, China's grain sown area has been continually reduced. Further, with the establishment of the steel and iron campaign, millions of peasants were diverted from agricultural labour to industry. The rural labour force remaining in agriculture was heavily weakened, not only in absolute numbers but also in quality, since often the "best" and mainly male workers were subtracted from agriculture. This resulted in enormous labour shortages on the fields, so that much harvest remained uncollected. In addition, for those left in agriculture, productivity was reduced by the lack of work incentives since every private property was collectivized under the commune system.

An additional decline in grain output occurred, as a high proportion of sown area was hit by natural disaster during the bad weather period lasting from 1959 to 1961.

While grain output declined, demand for food rose continuously. With the shift from rural work to industry, even more residents had to be supplied by the state, so grain procurement rose during the crisis. Energy-exhausting activities such as producing steel, land levelling or implementing irrigation projects, raised further the participants' biological requirement for food. In rural areas, communal kitchens offered free meals without any quantity restriction. This led to a change in consumption patterns and consequently to an enormous overconsumption which in turn contributed to a large extent to the famine.

Three Parts natural, seven Parts man-made

When analyzing the causes of the Great Leap famine the question occurred, how much of the food availability decline could have been traced back to national policies. To answer this question, the findings of Houser, Sands and Xiao, who used a Bayesian empirical approach to distinguish the relative importance of weather and national policies on food availability decline, were considered.⁵¹ Their primary hypothesis was that national policies played an overall more important role in the decline than weather.

The data used in the analysis were constructed from Chinese sources and include annual mortality data for 28 of China's 29 provinces and major cities (Tibet was excluded for lack of data) during the years 1955–1982. The research, however, was concentrated on the period between 1955 and 1965 since new policies were introduced as the Cultural Revolution started in 1966.

It is surely very difficult to measure the effect of national policies on food availability decline because no national policy index exists that could be used to estimate its effect on mortality rates. The authors, however, assumed that national policies should have a common influence on a province's food availability and therefore mortality rates. With this assumption it was possible to distinguish quantitatively the roles of national policies and weather. The result was that national policy did not have a direct effect on mortality rates during the years from 1955 to 1958 and from 1962 on while it had a significant effect during the period from 1959 to 1961, the years of the famine. Expressed numerically, about 2/3 of excess

⁵⁰ Food availability decline may be interpreted as the decline in food available for the Chinese population.

⁵¹ Houser et al., „Natural vs. man-made”, p. 150–156

deaths that occurred during the Great Leap Forward seemed to be attributable to national policies.

This finding seems to be obvious when recalling the causes of the factors contributing to the famine described above: It was the government's decision to launch the Great Leap Forward with the collectivisation of the rural population in communes, the introduction of new production methods, and the establishment of a new industry that substracted a high proportion of unexperienced rural labor force from agriculture. It was the government's decision to provide communal dining halls offering free and quantitatively unlimited meals, leading to severe over-consumption. It was the government's decision to isolate China from the rest of the world and to not allow international aid. And last, it was the government's decision to leave millions of people stranded as they were not allowed to move to urban areas, not even to beg.

How did the Famine end?

By the end of 1958, food shortages were already reported in some provinces but Mao stuck to his policy.⁵² Any criticism was severely punished so that no one had the heart to rebel against the system.

At the end of 1960, however, it was clear that Mao's plan had completely failed. In early 1961, senior leaders of the Communist Party began to send inspection teams to the countryside to gather evidence that could be presented to Mao. Reports looked widely the same: peasants were too weak to work and starvation occurred all over the town.⁵³ After critical debates among top officials, the government started to moderate its radical policies. China's main focus was shifted back from steel production to agriculture. Grain imports were increased while grain procurement was reduced. Millions of people have been sent back from cities to the countryside, raising the rural labour force. The government also reduced the size of rural collectives to an average size of less than 100 households, each of them responsible for its own finances.⁵⁴ Peasants were now allowed to decide whether to keep communal dining halls or prepare their meals at home. Further, small private plots of land were returned to the peasants. All together, these changes led to a growth in grain output in 1962. In the same year, mortality rates began to recover, the population regained normal growth and thus the famine officially ended.

Conclusion

After looking at different factors contributing to the famine, its origins can be traced back to Mao Zedong's decision, to launch the Great Leap Forward. Although obviously some people knew at an early stage of the famine that there were food shortages, only a few tried to draw attention to the deplorable political and social circumstances. This, under a system that was built on fear, manipulation and political pressure, was not an easy task. And the fact that so many people had to die and that the magnitude of the famine has been unnoticed in the rest of the world until the early 1980s shows that these people's plan has unfortunately failed.

A question that probably will never be answered remains: How can a state, whose nourishment is based on the grain harvest of its rural residents, allow that even this part of population dies to such an unbelievable large extent? Isn't this kind of self-destruction? Well, Mao wanted to show that the Chinese were capable to build socialism. He wanted to impress the world – especially the socialist one – with his genius and his leadership. Failure has not been accepted as possibility.

⁵² Ashton et al., "Famine", p. 625

⁵³ Becker, *Hungry Ghosts*, p. 235

⁵⁴ Li and Yang, "Central Planning Disaster", p. 848

When the failure occurred, however, Mao preferred to sweep it under the rug and to let millions of people die than to concede that he was wrong. But maybe he did not even recognize that it was the leader himself to cause such a human disaster. Maybe he did not recognize or he simply ignored it.

References

- Ashton, Basil, Kenneth Hill, Alan Piazza, and Robin Zeitz. "Famine in China, 1958–61". *Population and Development Review* 10, no. 4 (1984): 613–645.
- Becker, Jasper. *Hungry Ghosts – China's Secret Famine*. London: John Murray, 1996.
- Chang, Gene Hsin, and Guanzhong James Wen. "Communal Dining and the Chinese Famine of 1958–1961". *Economic Development and Cultural Change* 46, no. 1 (1997): 1–34.
- Houser, Daniel, Barbara Sands, and Erte Xiao. „Three parts natural, seven parts man-made: Bayesian analysis of China's Great Leap Forward demographic disaster". *Journal of Economic Behavior & Organization* 69 (2009): 148–159.
- Kung, James Kai-sing, and Justin Yifu Lin. „The Causes of China's Great Leap Famine, 1959–1961". *Economic Development and Cultural Change* 52, no. 1 (2003): 51–73.
- Johnson, D. Gale. "China's great famine: Introductory remarks". *China Economic Review* 9, no. 2 (1998): 103–109.
- Li, Wie, and Dennis Tao Yang. „The Great Leap Forward: Anatomy of a Central Planning Disaster". *Journal of Political Economy* 113, no. 4 (2005): 840–877.
- Lin, Justin Yifu, and Dennis Tao Yang. "Food Availability, Entitlements and the Chinese Famine of 1959–61". *The Economic Journal* 110, no. 460 (2000): 136–158.
- Peng, Xizhe. "Demographic Consequences of the Great Leap Forward in China's Provinces". *Population and Development Review* 13, no. 4 (1987): 639–670.
- Wemheuer, Felix. *Chinas „Großer Sprung nach vorne“ (1958–1961). Von der kommunistischen Offensive in die Hungersnot – Intellektuelle erinnern sich*. Münster: LIT-Verlag, 2004.
- Yao, Shujie. "A Note on the Causal Factors of China's Famine in 1959–1961". *The Journal of Political Economy* 107, no. 6, Part 1 (1999): 1365–1369.

Further readings

- Chen, Yuyu, and Li-An Zhou. „The long-term health and economic consequences of the 1959–1961 famine in China". *Journal of Health Economics* 26 (2007): 659–681.
- Smil, Vaclav. "China's great famine: 40 years later". *British Medical Journal* 319 (1999): 1619–1621.