

BUILDERS OF
THE MING
TOMBS RESERVOIR

BUILDERS OF THE MING TOMBS RESERVOIR

CONTENTS

INTRODUCTION	1
HEROES WHO SPLIT MOUNTAINS Yen Yao-ching	5
THE "SEVEN SISTERS" Hsu Pi-jun	14
THE WELL-SINKERS Cheng Chen-to and Hsieh Chia-hang	22
THE "NINE-ORCHIDS" TEAM Feng Yu-an	36
THE YOUNG STEEL SHOCK BRIGADE Kuo Hsiao-chuan	47
HEROES WHO CHANGED NIGHT INTO DAY Chang Ping-cheng	62
THE FIRST GROUP OF WOMEN TAMPERS Chu Chen-yi	72
BELOVED LEADERS, ORDINARY WORKERS From the "Ming Tombs Reservoir Bulletin"	85
FOR OUR COMMON AIM Yuan Mu and Yu Min-sheng	93
THEY ARE COMMON WORKERS Yuan Mu	99
HOW COMMON PEOPLE BECOME HEROES Hsia Yen	108

ONE-ARMED HERO Tuanmu Hung-liang	115
THE MAN WHO DARES TO THINK AND DARES TO DO Chen Ping	122
INDOMITABLE AUNTIE HSIAO Kao Liang-tung	129
SHE GAVE HER HEART TO THE RESERVOIR BUILDERS Wu Hung-pin	141
WANG FU-TANG, A MODEL COOK Kuo Chih-yung and Chou Feng-chun	151
MAN PREVAILS OVER NATURE	150
Lou Hsieh-yi	159

•

•

INTRO DUCTION

With socialist construction going ahead at full speed, the Chinese peasants, now all working on co-operative lines, have launched an extensive movement for the building of water conservancy projects. Between October 1957 and April 1958, a total of 350,000,000 mou¹ of land were brought under irrigation in the country, that is, 80,000,000 mou more than the overall increase in irrigated area in the eight years after liberation, or 110,000,000 mou more than all the irrigated land at time of liberation which was the result of several thousand years of cultivation.

The building of the Ming Tombs Reservoir in Peking is a typical example of a water conservancy project constructed by peasants and other volunteers.

The reservoir is situated just below the valley of the tombs of 13 emperors of the Ming dynasty (1368-1644) at the Changping District on the northern outskirts of Peking. It is 5,500,000 square metres in area and has a water-storing capacity of 60 million cubic metres. The main construction work is the dam lying across the gap between two hills. It is 29 metres high, 618 metres long, 7.5 metres wide at the top and 179 metres wide at the base. The dam alone involves more than 1,800,000 cubic metres of earthwork. At the west end of the dam is a spillway, 15 metres in width and 341 metres in

¹ A mou equals 1/6 acre or 1/15 hectare.

length over which will be conducted surplus water in the high-water season. In addition there is a conduit to supply water for irrigation and a hydro-electric power station.

Such a huge project would usually need one or two years for preparation and several more years for actual construction. The Chinese People's Government originally planned to build the reservoir in the Third Five-Year Plan period (1963-1967). However, in the winter of 1957, when the campaign to build water conservancy works swept the whole country, some peasants in Changping District proposed the building of the reservoir at an early date and expressed their willingness to take an active part in the project. The peasants of the whole district responded enthusiastically to the proposal and assured their full support. The Peking committee of the Communist Party made a decision that the agricultural co-operatives on the outskirts of Peking should start immediately to build the Ming Tombs Reservoir with their own hands; that they should be helped by the state with technical personnel and necessary building materials, and that the project should be completed before the rainy season in July 1958.

Under the leadership of the Party committee the peasants discarded all the rules and conventions practised in the building of big reservoirs and pressed ahead with surveying, designing, preparation and building simultaneously. Thousand upon thousand of army men, industrial workers, employees of government departments, shop assistants, students and the ordinary run of citizens in the capital volunteered to work on the construction site in the collective spirit of communism. A

total of 400,000 people took part at different stages of the work.

All the participants exerted their utmost effort in their race against time and flood, and work went on round the clock in three shifts, rain or shine. Full of enthusiasm, there were challenges between groups and between individuals for greater effort, higher efficiency and more innovations so that the construction went on at an astonishingly rapid pace. In the short span of 160 days these volunteer workers brought the main job, gigantic though it was, to a successful completion.

With the reservoir built, an area of 217 square kilometres no longer is menaced by flood and its consequential disaster, nor is there any danger of waterlogging, so often experienced in the past. Moreover, the water from the reservoir can be used to irrigate 250,000 mou of farmland, which will result in an annual increase of 25,000 tons of grain for the Changping District. Fish breeding in the reservoir will give a yearly supply of more than 1,000 tons of fish. A power station will generate 240,000 kwh of current a year for the villages in the area. When the surrounding hills are planted with trees, the reservoir area will become one of Peking's most beautiful parks. What is more, evaporation of the water in the reservoir may help to some extent in changing Peking's weather by contributing towards a readjustment of the rainfall.

The Ming Tombs Reservoir which serves so many useful purposes and involved so huge a construction undertaking, would, as originally planned, have required several years to complete, yet it was built in several months and completed five years earlier than planned. In addition, the state was saved 15 million yuan. The

Ming Tombs Reservoir is really an outstanding incident in the history of water conservancy.

Who made this wonder after all? It was made by the socialist-minded, common working people of Peking and its environs. They are the people who displayed unmatched heroism and creativeness on the construction site. They invented and improved so many kinds of tools and put forward many labour rationalization and organizational proposals, thereby greatly raising efficiency. More than 2,600 units and 20,000 individual builders were cited for their exemplary role. Their revolutionary drive as displayed in their work will command our admiration for all time.

This book is devoted mainly to portraying word pictures of those advanced figures and other ordinary working people who contributed their share to the building of the reservoir. The stories dealing with the busy scene on the working site, and with the participation in the voluntary labour by Chairman Mao Tse-tung and other leaders of the Party and government, will undoubtedly leave on readers an indelible impression. Reading the articles in this book, one feels how great a power the Chinese people can develop in their fight to conquer nature in their advance towards socialism.

HEROES WHO SPLIT MOUNTAINS

YEN YAO-CHING

At the foot of Hanpao Hill on the site of the Ming Tombs Reservoir was located the headquarters of the seventh detachment formed by an engineering corps and a unit of infantry of the People's Liberation Army. In front of the tents were three brightly-coloured oil paintings depicting "the mountain-splitting heroes." Underneath, written in red ink, were the following remarks:

These were our tasks and our achievements: Splitting two mountains, digging two channels and blasting 200,000 cubic metres of rock in four months. If a stone wall one metre wide and one metre high was built of the quarried rock, it would circle Peking ten times.

It was June 11, the day the mass rally was held to celebrate the completion of this job.

"Thanks for your good work, you 'mountain-splitting heroes' of the seventh detachment," said General Yang Chen-wu, commander of the PLA stationed in Peking, grasping the hand of Sun Min-lun, leader of the detachment. "You've done a most arduous job with full credit. My thanks to all of you."

The praise of the commander was surely the highest award.

When the seventh detachment commenced rigging up their tents at the foot of the bare hill, a chilly wind was blowing and snow falling on the outskirts of Peking. The detachment was given the task of blasting away part of the Hanpao and Mangshan Hills, between which the dam would be thrown up. Only when both sides had been blasted down to bedrock could the foundation of the dam be built up, the water channel excavated at the base of, and the spillway opened halfway up, the Hanpao incline.

Whether these tremendous projects could be completed according to schedule depended on their resourcefulness. Four months of intensive labour faced the detachment.

The urgent, strenuous task burned at their hearts like fire. Braving the penetrating wind and the frozen earth, the fighters who wielded the hammers on the hard rock perspired liberally, despite the fact that they wore only simple tunics. A coat of ice from their breath formed around their hair and eyebrow and the rims of their caps. In striking the steel hand-drills, many fighters had their hands cracked open between thumb and forefinger. When this happened, they would have the blood wiped off, their hands dressed, and then return to the battle.

Wang Chun-hsiang sustained a crack between the forefinger and the thumb from the harsh jolt that followed each blow on the terrifically hard blue stone. He discovered this only when the blood dripped on to the body of his partner who held the steel bar. As he pulled his hand off the handle of the sledge-hammer, a piece of skin tore away and blood streamed down. As soon as his hand was bandaged, he clenched his teeth, snatched the hammer and continued the rhythmic: raise, down, strike!

I'm a blasting hero, the high mountain trembles at sight of me.

As soon as the order comes, a thousand-foot-high mountain would be flattened.

Thus sang the fighters.

The stone broken by the blasts had to be removed to the site. After the first couple of hours with the carrying pole, the shoulder would get swollen and bruised, the skin would break and the blood would stain the clothes. When this stage was reached the touch of the pole on the shoulder would produce excruciating pain. And the body muscles would get so sore that one could hardly stand upright.

But what did it matter? The abraded shoulder of Wang Chun-fu, another soldier, had festered. He would not let the leader know; for if he did, the leader would certainly order him to rest. Nor did he want to go to the doctor, for he knew that he, too, would interfere. He bore the pain secretly, washing the spot with boiled salt water after everybody was asleep.

To speed up the completion of the reservoir, the men steadily increased the load — from two to four, then six, and even eight baskets — and marched in big strides. It was in a verse on the carrying pole that the soldiers expressed their zest:

A quivering pole, five feet long, with eight baskets of rock suspended on each end.

Removing the big mountain, we exchange grain for our sweat,

Our enthusiasm surpassing the big ox.

With blood and sweat the people's fighters broke the frozen earth; they split the mountains asunder with their

hands and carried off the shattered sides on their shoulders, fulfilling their task four days ahead of time. In the following eight days, they completed a water conduit four hundred metres long, six metres wide and five metres deep, removing 12,000 cubic metres of stone.

The battle was getting hotter and hotter. flood water could not overflow the dam, a spillway 265 metres long and 25 metres wide, entailing the removal of 85,000 cubic metres of rock, had to be cut half way up Hanpao Hill. It was one of the principal projects of the reservoir. This arduous job had to be completed before June 15 — when flood rains were to be expected. No large-scale blasting was possible and no excavator was available. Here was a problem on which they must use their brains. Under the guidance of the Party committee, the members of the detachment swapped experience and taught one another so that the infantry learned to handle the hammer and steel bar, and the engineers mastered the pneumatic drills and the skill of blasting. The leading cadres were especially industrious at learning their new job. Inspired by the call to build the reservoir quicker, better and more economically, to race with flood and time, they displayed a daring communist spirit to think, act and create. Discarding conservative ideas they turned out many new devices such as the "quick-drilling method," the "air-borne delivering rack," the "protective shield" and the "reflecting lamp" adapted for night shift. They laid a track to the top of the hill and used tip-trucks to transport crushed stone in place of manpower. The daring creations and continuous innovations by the rank and file, backed by the leadership, resulted in a better method of blasting which not only quickened the tempo of the project, but economized for the state 20,000 kilogrammes of dynamite, 40,000 detonators, and fuses worth more than seven thousand yuan.

In the four months of hard physical training and socialist education they were steeled and tempered as never before; their hands became as hard and solid as iron. From the commencement of the work, they had not had a single day's rest—no Sunday, no holiday. On festival days they worked even more joyously. "Rain or shine, healthy or sick, hold on! The worse the weather, the harder we'll work!" was their watchword.

It was after midnight on June 2. Rain poured down in buckets amid the rumbling of thunderclaps and furious blasts. Even the electric lights looked pale. One found it well-nigh unbearable just to stand under the torrential rain, raincoat on, doing nothing. One could hardly open one's eyes. In this situation, Mo Liang-hua, a Communist Youth Leaguer, threw off his raincoat and shouted: "Comrades, if we are to race with the flood, let us work harder in heavy rain!" As he finished speaking, he seized a carrying pole bearing six baskets of rocks (weighing more than 200 catties) and strode towards the rugged path of the slope. This started all the others. They chased one another, with four or six baskets suspended on their poles, shouting: "Hurry, comrades! It's time to give battle to the Dragon King!"1 heroism could be seen from the following ballad they freely sang:

¹ According to Chinese legend, dragon is a sacred creature, and the dragon king is the leader of the dragon family which could summon the cloud and cause rain.

Attack along the route pointed out by Chairman Mao; Stick the red flag on the top of the Dragon King's palace.

Sealed up in the Ming Tombs, the Dragon King Bows, kowtows and salutes with folded hands.

In four months, the six-foot-long steel bars used as drills were worn to mere stubs of a foot long; some were worn to uselessness. The twelve-pound hammers, what with beating day and night, became flattened. An old folk saying describing perseverance has it: "An iron bar can be ground into a needle if you keep pounding it." The "mountain-splitting heroes" proved an equivalent with their steel bars. No difficulty could stop them from advancing!

Hsiung Ta-ti, winner of special award and leader of the model squad, had a large carbuncle on his neck which caused him great pain. The doctor, the leader, and all comrades urged him to take a rest at home. But this stubborn fighter would hear nothing of it. The company commander, at his wit's end, ordered him to Hsiung Ta-ti promised to stay at home, but felt the company commander did not "understand" his position. Above all, he was angry with himself for having. of all times, an accursed carbuncle. He couldn't keep still on his bed, thinking: "I remember the heroic Battalion Commander Liu Jen-hsiang, who, despite his broken leg and three holes in his arm, crawled and rolled towards the enemy and won the battle. How can I play truant just for having a mere boil - and I a Communist Youth Leaguer!" Thus thinking, he stood up abruptly, as if he had talked it over with somebody and had reached agreement on the matter: "Yes, I'll act thus!"

The soldiers had just started work when Hsiung Ta-ti, taking his pole and the baskets, stole to the working site through a bypath. He was about to start carrying earth, when the political instructor came up. "The company commander's ordered you to rest," he said with comradely affection. "Now why did you come again? Please go back, my dear, good squad leader."

Hsiung Ta-ti was temporarily at a loss to reply. With flushed face, he picked up the outfit and said, deprecatingly: "Political instructor, you, too, cannot understand me? Look, ain't I carrying four baskets? Can't I walk and run? You can't make me come here and yet let me take no part in building the reservoir. I won't be a deserter!" Saying which he picked up the pole and baskets and fled.

The officers who took over the commanding post in the daytime and at night, were organizers of the battles against nature, but they were, as well, ordinary workers among the rank and file. They shovelled earth, carried stones and pushed tip-trucks. It was hard to tell among the labouring mass which was an officer and which a soldier. Political instructor Liu Chen-piao had his hair clipped short, wore an ordinary soldier's uniform and worked among them. Light rails had to be laid over the high hill and he acted for a time the part of engineer, studying the project on the site for three days and three nights. He took the lead in everything, digging the roadbed, laying the track, and so on. Some comrades thought it was a knotty job even for technicians, for the sizes of the rails were irregular and the mountain path was rugged. But the only thought that occupied Liu Chen-piao's mind was how to fulfil the task ahead of

time. "What sort of People's Liberation Army are we if we choose only the easy jobs?"

He was so tired his head spun, but he stuck it out, time being all important now. His hand was ripped by a nail and blood dripped on to the track. He had it dressed quickly and continued to work. Through such selfless labour the little mountain railway took shape and was completed.

Kuo Hsiang, political commissar of the detachment, was an experienced veteran and a model worker. He was over forty. In this battle against the mountains, he worked each night through, giving directions or joining with the soldiers in the ordinary tasks. Although he was physically not robust, he could carry four baskets of stones and run as quickly and as sure-footed as the youngsters. The soldiers did not want their leader to overdo things and possibly do harm to himself. Once four soldiers attempted to snatch his pole. But the political commissar clung to it and wouldn't let go. The fighters could only retort by refusing to load his baskets.

"I'm a director as well as a labourer on the reservoir," said the political commissar, smiling. "Nobody knows the taste of an apricot without eating it. I must work like everybody else."

Many government and army leaders, from marshals and generals, came to give them commendation. Premier Chou En-lai praised and encouraged them. "You are the People's Liberation Army," the Premier said. "It's natural that you should take on the most strenuous job. Well, this time you've again won the first place!" And he shook hands warmly all around.

The Premier's words fired their enthusiasm. One day, a furious windstorm raged over the working site, whip-

ping up such a mass of sand and grit that they found it hard to open their eyes and walk. Yeh Ta-ming who had four baskets of stones on his shoulder pole, encouraged his companions, crying: "We're the Liberation Army. How can we win the first place without doing the hardest jobs!"

As the steel bar pierced the hard rock, the hammer swishing down would bounce back, the sparks flying. Remembering the Premier's words, the engineers swung their hammers with added might. Observing blood dripping from Tan Fang-kuei's finger, the political instructor demanded to examine his hand. With a quick movement Tan hid his hand in his sleeve, took two steps backward and said: "Nothing much the matter. For the Liberation Army, shedding a little blood is nothing!" Fearing he would be ordered to stop working, he grabbed four baskets and ran away.

Inspired and guided by their leaders, the "mountain-splitting heroes" exerted their wisdom and might, and, in sweat and blood, vanquished the frozen earth and the hard rock. The spillway, one of the main projects of the reservoir, was opened on June 8, 176 hours ahead of time. Their brilliant achievements shall ever inspire others to advance; their images shall remain indelible in the minds of the people.