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Flower Vase



A gift presented to President Kim Il Sung by the Beijing City Committee of the Communist Youth League of China in October 2009

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CONTENTS

3 Prophylaxis—Basis of Health System

The Korean people benefit from the socialist public health system partly through the medical service bases equipped with modern facilities.

- 6 For Promotion of People's Health
- 8 Doctors of Good Repute
- 9 Country Rich in Hot Springs
- 10 Academy of Koryo Medicine
- 12 Conspicuous Scene in Hospital
- 14 Increasing Varieties of Honey
- 15 Blind Doctor
- 16 Most Important Matter





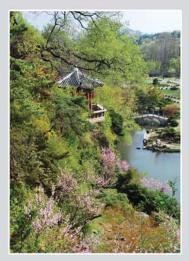
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1



Front Cover: At the Okryu Children's Hospital in Pyongyang

Photo by Ri Song Ik



Back Cover: Moran Hill in spring

Photo by Ra Jin Hyok

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- 17 Man of Various Information and Wide Knowledge
- 19 Fatherly Care for Soldiers
- 20 President Kim Il Sung's Birthplace at Mangyongdae in Spring.
- 22 Preparations for a Bloody Battle
- 24 Popular Brand Narae
- 26 Ryugyong Mushroom Farm
- 28 For Economic Development of Country
- 29 New Nano-bioactivity Accelerator Developed
- 30 Kindergarten Revisited
- 32 True Teachers
- 33 Brisk Mass Sports Activities
- 34 Woman Instructor's Desire
- 36 Kumsanpho Products Grow Popular
- 38 Believe in Yourself
- National Intangible Cultural Heritage (29)Kite Flying
- 40 Songdo Restaurant
- 42 Mt Kumgang (2)
- 44 Painter Sin Saimdang
- 45 Japan's Old Crime of Sexual Slavery Revealed (3)
- 47 Towards Peace, Prosperity and Reunification

Inside Back Cover: National Flower of Magnolia

Common Knowledge

- 5 Efficacy of Honey
- 34 Popular Nutritive Food for Athletes





Prophylaxis—Basis of Health System



Director Kim Kyong Chol.

A KOREA TODAY REPORTER HAD A TALK with officials of the DPRK Ministry of Public Health on the occasion of World Health Day. Excerpts:

April 7 is World Health Day. On this occasion I'd like to have a talk with you on the preventive medicine of Korea.

Director Kim Kyong Chol: The basic mission of our country's socialist medicine is preventive medicine. It is aimed at freeing people from diseases, protecting their life and promoting their health. In order to create a clean environment and prevent infectious and other diseases our country puts great efforts in studying and developing hygienics, loimology, microbiology, epidemiology and clinical epidemiology. And primary attention is paid to prevention of diseases in internal, external, paediatric, obstetrical and gynaecological and all other medical fields, and relevant researches and medical service activities are under way.

Since the early days after its liberation from the Japanese imperialists' military occupation on August 15, 1945 the country has consistently held fast to the principle of establishing research institutes and facilities for preventive medicine and giving priority to the sector. And achievements of virology, immunology, molecular biology, cell engineering, gene engineering and other fields of basic and advanced sciences are introduced in research and practice of preventive medicine.



Section chief Jo Tu Jin.

In our country both the attack rate and the death rate have decreased, and the average life expectancy has increased rapidly. This demonstrates the validity of our Party's health policy of giving priority to preventive medicine.

These efforts accord with the fundamental task of the WHO charter which demands that peoples of all countries enjoy health on the highest possible level.

The section doctor system in the country is a residents' health care system that complies with the intrinsic requirement of preventive medicine, I think.

Vice-director Choe Sun Hui: Under the section doctor system all our people are under regular health care thanks to the responsible and systematic assistance of their doctors.

The system ensures that doctors are in permanent charge of families in certain districts and that they look after their health regularly. This helps prevent diseases and treat cases in time before the dis-



Vice-director Choe Sun Hui.

eases become serious. The system also makes sure that the doctors frequent their charges' homes to acquaint themselves with the residents' health and sanitary conditions first-hand, and take measures for scientific prevention and treatment of diseases.

So the section doctor system is an advanced medical service system with emphasis put on prevention and capable of ensuring prevention of diseases successfully. It is a superior residents' health care system that accords with the nature of preventive medicine.

The Fourth Congress of the Workers' Party of Korea held in September 1961 proposed to increase the number of city, county and district people's hospitals and *ri* clinics and post lots of doctors to them so that the section doctor system could be enforced within a short span of time. As a result, the system was enforced in all urban and rural areas.

Later the system further developed. The rel-

evant organizational work was intensified and developed to suit the characteristics of different areas, and thus patients do not need to go to see doctors as the latter go to see residents they are in charge of.

Recently the quality of preventive medicine has reached a higher stage as medical institutions have been refurbished and the level of medical service has been raised, I think.

Section chief Jo Tu Jin: That's right. As the telemedicine system is established between the Pyongyang Maternity Hospital and provincial maternity hospitals, between the Okryu Children's Hospital and provincial children's hospitals, between national hospitals and provincial, city and county people's hospitals, all the hospitals are able to treat patients without sending the cases elsewhere and perform operations on emergency cases successfully through on-line consultation.

Amazed to learn that all hospitals in Korea are linked by the telemedicine system, WHO staff members say that the socialist public health system of Korea which provides excellent treatment conditions for the promotion of the people's well-being by increasing relevant state investment is the best in the world.

Meanwhile, modern and comprehensive medical institutions have been newly built while existing ones have been renovated in Pyongyang and all other parts of the country in a short period, including the Ryugyong Dental Hospital, the Okryu Children's Hospital and the Munsu Rehabilitation Clinic in the city, the Saenal-ri Clinic in Sinchon County and the Kosan Combined Fruit Farm Hospital. The people are benefiting from the socialist public health system to their heart's content.

And medical workers are making achievements





Section doctors visit the residents they are in charge of.

Efficacy of Honey

HONEY CONTAINS LOTS OF VARIOUS VITAMINS SUCH as B_1 , B_2 , B_6 , C, K, folic acid and pantothenic acid. As it has a proportionate content of the vitamins even a small amount works effectively. The merit of honey lies in that it brings about a great effect with a small amount as it is a complex of natural active vitamins.

4 KOREA TODAY No. 4, 2019 5

For Promotion of People's Health

Section doctor system

ONE FEBRUARY DAY IN 1960 PRESIDENT Kim Il Sung called a senior official in the sector of public health to his office. Welcoming him as ever the President said that he had called him just because he would like to tell him about the issue of enforcement of a section doctor system in order to add lustre to the country's complete and universal free medical care system, and told him about his plan. The President said that the system should be enforced for the internal, pediatric and obstetrical and gynaecological treatment first, and that it should be started in cities. And he added that children's wards and maternity wards should be established in a year or two and in two or three years respectively in all counties in order to successfully introduce the system, and that midwives should help women in childbirth at

A year later the President set forth the enforcement of the section doctor system as an important task in the sector of public health at the historic Fourth Congress of the Workers' Party of Korea, and taught in detail how to carry out the task. He said: In our social system nothing is more precious than man. We must keep developing the public health service so as to protect man's life and promote the working people's health. Public hospitals in the cities and counties and the clinics in

each ri should be expanded and have more doctors so that the section doctor system, an advanced medical service system, may be put into practice in the near future.

Later, whenever he met officials of the sector, he asked them about the state of the enforcement of the section doctor system, and saw to it that medical workers should go to the districts they were in charge of in a planned way so as to always take care of the people's health. And he, understanding their trouble, sent them ambulances and bicycles.

Thanks to his energetic leadership, the section doctor system was enforced in the country during the period of the First Seven-Year Plan prior to the realization of the socialist industrialization.

For revitalization of medicine production

On January 23, 2008 Chairman Kim Jong Il received a report that the Hungnam Pharmaceutical Factory overfulfilled its medicine production plan for the previous year in all indices.

The factory was producing the medicines on a high level, true to the Chairman's field instruction given on September 16, 2005.

It newly arranged a hydrazine production process which relied on imported materials no longer, and introduced 80 items of valuable technical innovations. It also made and repaired by itself



President Kim II Sung inspects Kim Man Yu Hospital in June 1986.

▶ 40-odd pieces of equipment including a reactor and waged a campaign to complete sectional structures of the production process, and thus improved the quality of medicines and increased the volume of production. This helped it overfulfill in all indices the plan of producing dozens of more kinds of medicines as compared to that of the previous year.

The Chairman saw to it that the factory expanded its production capacity based on the already-achieved success and produced medicines such as isoniazid enough to meet the need.

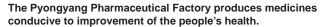
In February in the same year he proposed to renovate the factory, and saw to it that the construction of its main building was finished in that year.

The factory, true to his instructions, perfected the hydrazine production process and put production on a normal basis, thus fulfilling the annual isoniazid production plan. It also introduced technical innovations which made it possible to save many major raw materials, improve the package of medicines and enhance the purity of medicines.

The Chairman also paid deep attention to the work of the Sinuiju Streptomycin Factory. On February 13, 2008, he saw to it that the factory was provided with raw materials necessary for producing antibiotics in time. In December 2008 he inspected the Kanggye Koryo Medicine Pharmaceutical Factory, and stressed the need to put emphasis on the production of medicine, a key means of preventive and curative medical care.

The warm care of the Chairman who always paid deep attention to the people's life and the protection of their health invigorated the medicine production.

Sim Yong Jin







Doctors of Good Repute

NOT A FEW DOCTORS IN the Tongan Polyclinic in Central District, Pyongyang, are called "our doctor" by the local residents.

Responsibility

Sok Ran is the head of the section doctors' department. She always leads her doctors to have a deep understanding of their mission and role as section doctors, and fully perform their responsibility in examination of diseases and medical examination of their charges.

Early this year she scrupulously organized the medical examination to cope with influenza and explained to relevant residents the symptoms and dangerousness of the disease in relation to their actual life, thus making sure that no flu case occurred in the area the polyclinic is in charge of

She also takes the lead not only in giving publicity to information about cleanliness and hygiene, ensuring healthy environments and performing a medical service but also in introducing the advanced science and technology. So her colleagues refer to her as a flawless leader with a high sense of responsibility.

Doctor in charge of Section No. 5

An Jin Ok is in charge of section No. 5. She is favourably commented upon by the local people as she is good at treating chronic disease cases by means of Koryo therapy.

It is only two years since she began to work at the polyclinic. She, however, has already acquainted herself with all her charges including chronic disease cases, and taken measures for preventive treatment.

It happened in early November last year. She came to know that Ri Kyu Bok, a student of the Tongan Primary School, living in Neighbourhood Unit No. 2, Tongan-dong No. 1, was suffering from bedwetting. Then she gave an intensive treatment to him using a traditional Koryo therapy, and thus cured him in several months. Now the boy is learning to his heart's content as a second grader of the school.

Mother of pregnant women

Kang Son Hui is the only obstetrician of the polyclinic. She knows all pregnant women in the dong and is caring for them under a meticulous plan. She actively teaches them exercises they need and explains them in plain words how to solve the problems arising in the management of their bodies. None of the



pregnant women she has been in charge of had a difficult delivery.

She also pays special attention to the women who have premature deliveries and takes a measure for them to have a regular checkup once a month. The local residents fondly call her mother of pregnant women.

Our daughter

Ko Jong Hui, doctor in charge of section No. 6, is called *our daughter* by old people there.

Yun To Sun, a 65-year-old woman, living in Neighbourhood Unit No. 59, Tongan-dong No. 1, ▶

is a merited woman who dedicated herself to education for 34 years. She says, "Whenever our doctor comes it seems that I see my own daughter, who made a new home, coming to see me. She always brings with her the tonics she made herself such as Schizandra chinensis essence, and teaches how to solve the problems arising in the management of the health of the elderly." And she refers to doctors of the polyclinic as true medical workers striving to promote the local residents' health, adding that she wants them to be widely known.

Sim Yong Jin

Doctors give publicity to information about hygiene while giving medical treatment.







Country Rich in Hot Springs

KOREA HAS LONG BEEN known as a country rich in hot springs.

Mineral waters discovered and used in the country until now number over 170. Sixty of them are hot springs, and they are distributed mainly in South and North Phyongan provinces, South Hwanghae Province, Kangwon Province and North Hamgyong Province.

What characterizes hot spring distribution in the country is, first of all, that they are distributed largely in intrusive-rock regions, for example, Paechon, Yonan, Sokthang, Yangdok, Sinchon, Phyongnam, Unryul, Songhwa, Ongjin, Sachon, Sakju, Unsan, Rothan, Kalsan, Sechon and Songhung hot springs.

Hot springs in the country are differentially distributed according to geotectonic units, that is, they are intensively distributed in salient zones and fracture zones where oscillation speed and cycle are great, and igneous activity and structural fracture occur, for example, Unchon, Samchon, Sechon, Wonhung, Hwangjin, Onsuphyong, Sangonpho, Haonpho, Posang, Rothan and Woekumgang hot springs.

The distribution of hot spring resources in the country is also very special geomorphologically. In the mountainous areas such as North Hamgyong Province and South and North Phyongan provinces hot springs rise from mountains while those in low land areas are intensively distributed in hills and plains.

The country also has many famous hot springs, for example, Kyongsong, Jongdal, Paechon, Hwangjin and Sokthang hot springs.

The Kyongsong Hot Spring in Haonpho-ri, Kyongsong County, North Hamgyong Province, belongs to radon hot spring, and is used for treating varieties of arthritis such as rheumatoid arthritis, injuries and aftereffects of operation, spondylopathy, neuralgia, neuraxial and peripheral nervous diseases and their aftereffects, vascular system diseases and women's diseases. It is also specially efficacious in the treatment of chronic lead poisoning and other toxic diseases.

The Jongdal Hot Spring in Talchon-ri, Samchon County, South Hwanghae Province, is also a radon hot spring with sparse minerals. It is used for treating arthritis, neuralgia and women's diseases.

The Paechon and Hwangjin hot springs as simple ones are efficacious in treating cerebrovascular diseases such as hypertension and their aftereffects, and the Sokthang Hot Spring as sulfur hot spring is good for the treatment of chronic skin diseases

The hot spring resources in the country have long been actively developed and used for the treatment and prevention of diseases. Holiday camps, sanatoriums and recuperation centres have been built in the regions with hot springs, along with the establishment of hospitals and research institutes specializing in treating and studying diseases, making a contribution to the longevity and wellbeing of the working people.

Last year, in particular, Supreme Leader Kim Jong Un inspected the hot spring regions in Kyongsong County, North Hamgyong Province and Yangdok County, South Phyongan Province several times. Afterwards a nationwide undertaking was launched to modernize such regions across the country.

In the future hot springs will take a larger share in ensuring the people's longevity and the improvement of their health.

Kim Hyon Ju

No. 4, 2019 9

Acupuncture. Moxibustion. Cupping. Massage.









ACADEMY OF KORYO MEDICINE

KORYO MEDICINE IS KOREA'S NATIONAL and traditional medicine created and developed for over 5 000 years. It has prevented and cured diseases by using Koryo medicinal resources richly available in the country and such unique therapies as acupuncture, moxibustion, cupping and massage, thus helping protect and promote people's health.

Today Koryo medicine draws a special attention of the global medical circle, and is actively contributing to the development of modern medicine.

The Academy of Koryo Medicine in Taedonggang
District, Pyongyang, is a comprehensive Koryo
medical science research and service centre of the

Doctors exchange experience in acupuncture and moxibustion.



country. Hundreds of competent experts including many holders of academic degrees or titles are conducting Koryo medicine research there.

In the past several years they made an e-book of Hyangyakjipsongbang, a Koryo medicinal classic in 85 vols. published in 1433, and developed a relevant search and reading program. And they further upgraded the already-built remote video conference system making it possible for curative and preventive organizations to consult on patients and give technical and methodical guidance via the national computer network. They also developed a remote video consultation system Jongsong, which enables all organs, industrial establishments and individual families across the country that have already joined the national computer network to consult any hospitals about health care, the electronic dictionary programs Complete Collection of Koryo Clinical Medicine, Comprehensive Koryo Medical Dictionary and Complete Collection of Folk *Remedies*, which are conducive to Koryo treatment at curative and preventive units, and *Kkotmangul*, a program that helps nurse children, to be used in smart phones.

Some time ago the medical workers of the academy newly developed a model system of electronic acupuncture and moxibustion for the channels and collaterals and meridian nerve points of Koryo medicine, and exhibited it in the Sci-Tech Complex. The system is based on the already-made Chart of Meridian Nerve Points. It consists of a large-size chart desk giving a visual panorama of the channels and collaterals and meridian nerve points of Koryo medicine, a video introducing the course of the development of the chart of meridian acupuncture and moxibustion points, the significance of the making of the Chart

of Meridian Nerve Points, and the advanced level of acupuncture and moxibustion in the country, a model of electronic acupuncture and moxibustion based on the Chart of Meridian Nerve Points, and the book *Modern Medical Basis and Clinical Practice of Acupuncture and Moxibustion*. It made a contribution to the modernization of acupuncture and moxibustion by putting the theory of channels and collaterals on a scientific footing, thus helping develop the traditional Koryo medicine of the nation.

The academy has also cured countless patients by using Koryo medicines available in the country, acupuncture, moxibustion, cupping and manual therapy. In particular, it has achieved great successes in the treatment and prevention of adult and senile diseases such as hypertensive diseases, diabetes, arteriosclerosis and hyperlipemia, those of high attack rates such as cerebral haemorrhage and cerebral thrombosis and obstinate diseases such as spontaneous gangrene and epilepsy. In the course of this, it has developed many highly effective treatment methods and Koryo medicines. Not long ago it developed the Koryo medicine for obesity Golden Pill against Obesity, and the Koryo medicine camphol eye drops for cataract.

Many medical workers of the academy thus received national certificates of registered sci-tech achievement, of copyright and of invention. Last year seven medical workers were awarded academic degrees and titles such as candidate academician, doctor and associate professor.

The academy is still making strenuous efforts to develop highly effective Koryo therapies conducive to the practical promotion of the people's health.

Pak Yong Il

Conspicuous Scene in Hospital

"Hello, Hye Yon. You look so fine. Today I'll teach you about nature. Are you OK?"

This is part of a conversation between a teacher and a student in patient's uniform in the Okryu Children's Hospital in Pyongyang. The young case is Jon Hye Yon, a second-grader of the Chukjon Primary School in Mangyongdae Distirct, who was in hospital with her mother for the treatment of her bronchial trouble.

Now, under the guidance of teachers, she is studying the subjects that she had not learnt in the study room of the hospital as she has been in hospital for over 20 days.

Her mother says, "At first, I was worried about my duaghter's study, but it was groundless. The hospital is provided with not only treatment conditions but also ed-

ucational ones for young cases. I came to realize once again how many benefits we enjoy without knowing it."

In the hospital there are many young cases from babies to senior middle school students, so it has a playing hall for nursery and kindergarten children, an education room for preschoolers, a study room for primary school students and that for middle school students.

As the study rooms have teaching materials for different graders, those in the convalescent stage are getting lessons they missed from teachers of the hospital. The teachers are excellent ones who were selected from schools in the city and who graduated from universities with good marks.

Son Su Yon, a primary school teacher, is well known as a competent teacher who brought up ▶ lots of students into talents for the past 15 years. When she was working at Pyongyang Primary School No. 4, she won several municipal teaching contests, and her students also won national school contests.

Sin Un Hye, a middle school teacher, was a promising student with a degree at Kim Chol Ju University of Edu-

The teachers of the hospital are always busy every day, because the primary school teachers should have students review lessons related to over ten subjects of primary school, and those of junior and senior middle school should deal with much more subjects.

Still, through teaching program discussion once a week, they exchange experience and discuss teaching methods with each other to guide the patients in their study. According to patients' request, they go to their rooms to give lectures after discussion with doctors in charge.

The aforesaid playing hall and education room help children have a good time playing with various toys while getting treatment.

Seeing the bright look of her son Ryang Jong U, a boy at the age of 5 from Munsu Kindergarten No. 2, singing to a kindergarten teacher's organ, his mother Jo Su Ryon says, "I found it unbelievable that the hospital has an education room for children.

And seeing the young patients being regularly provided with soya milk and nutritive paste in a regular way like healthy children, I felt the great motherly love of our country taking care of all its children."

Kim Il Bong



Senior middle school and primary school students, and preschoolers have a lesson in their study rooms.

Getting to her

classroom.

Increasing Varieties of Honey



Director Kim Song Hui (second left).

Now I'M OVER SIXTY. I SPENT MORE than half of my life at the Pyongyang Maternity Hospital. During the period I helped thousands of women in childbirth. The birth of new life means the happiest moment to women on one hand and the hugest physical exhaustion on the other

"Well done. Now eat this honey to become all right again as early as possible"—this is what we doctors say first to women just after childbirth.

It has long been Korean women's custom to eat seaweed soup and honey. Honey is the best tonic for invigorating women after childbirth and protecting them from postpartum diseases.

Actually, in 1980 when it was inaugurated, the maternity hospital had only a system of supplying fresh seaweed to women after childbirth. Along with the improvement of its medical services a system of supplying honey was established in the hospital in 1982. Different kinds of honey were sent to the hospital including scores-of-years-old wild honey from dense forests of mountainous regions like Jagang and Kangwon provinces, honey for medicine such as *Acanthopanax* honey, bee milk honey and barrenwort honey, honeyed insam, and honey mixed with fruits of a hundred kinds.

I participated in an international women's conference several times, and each time, foreign delegates asked me, "It is said that women in your country call the Pyongyang Maternity Hospital their *parental home*. What does the phrase mean?" Then I told them the following story.

In December 2001 a rare happy event happened at the hospital. A woman farm worker from

Tonghung-ri, Kim Hyong Gwon County, Ryanggang Province, gave birth to her second triplets she conceived 14 months after she gave birth to her first triplets. The second were those born for the 300th time in the hospital after its inauguration.

However, the mother was at the crossroads of life and death. A competent medical team was organized to save her, and I was a member of the team. We had scores of consultations and took necessary measures, sitting by her bedside. At last she recovered consciousness, and we all shed tears of joy, embracing each other.

During her six-month-long stay at the hospital she received countless tonics like wild honey, barrenwort honey and deer placenta-Paektusan paste. How can we measure them in terms of money alone?

So her mother said that she was free from her previous worry about obtaining honey for the daughter before childbirth, and that the hospital which took warm care of her supplying what even she could not do is really the true *parental home* of women

During the Arduous March when the country was in the worst difficulty, the hospital was provided with over 26 400 kilograms of honeyed tonics for the promotion of women's health.

The hospital has so far seen 479 pairs of triplets and seven pairs of quadruplets, and millions of women gave birth to children there and returned home in good health.

The delegates would not easily believe my story, and I said, "The foreign women who receive treatment at my hospital are steadily on the increase. Among them are mothers of Jindallae of Palestine, Saebyol of Cuba and Ma Xueguang of China. They are offered the same medical services as our Korean women."

Today the honey store of my hospital has trebled. It is said that *A drop of water reflects the universe*. This makes me optimistic about the future of the hospital which has developed into a comprehensive medical service centre for women.

My hospital was recognized as being Baby-Friendly by the UNICEF in 2996 and 2008.

The honey store of my hospital will grow bigger and bigger.

Kim Song Hui, director of the Pyongyang Maternity Hospital

Blind Doctor

IN KOREA DISABLED persons are realizing their wishes according to their aspirations, and enjoying a happy life and conducting positive social activities without the least inconvenience.

Among them is Choe Song Hyok, doctor of the manual therapy department at the Nampho Municipal Koryo Medicine Hospital.

As a child, Song Hyok dreamed of becoming an artist. He spent his childhood quietly in a coast village in Nampho. A mild and sharp-eyed boy, he was fond of drawing to express his intention and thought.

When other boys were romping about in the village, he only drew on the sandy beach without knowing the passage of time. Everything including his beautiful native village, seaside cliffs and waves was object of his drawing. Day by day and month by month, his skill improved along with his dream to be an artist.

In early May 2000 he unexpectedly lost the sight of his left eye in an accident. But he never gave up but continued to draw at school and home every day.

One day in October 2006, he heard the glad news that there would be held a national art festival in February the next year, which excited the teenager who wished to become an artist. So he set a goal of completing a picture of the beautiful seaside at his village in two months and presenting it to the festival. After making a concrete field survey,

he buckled down to the work.

He was engrossed in drawing day and night for a month. Then he suddenly felt something strange in his right eye. Sometimes he felt a sting in the eye, and its sight often grew dim. After a week, he lost his eyesight completely. On December 26, 2006, he was diagnosed as being unable to see anymore for lenticular fracture due to overwork.

Though he could not realize his dream to become an artist, he never yielded but rose up again. With an intention of instilling delight and hopes in those suffering from diseases like him, he decided to become a doctor.

So he got blind education, learned to use the computer and studied medical books by himself. Later, according to Cabinet decision No. 21 that the disabled can get college education as they wish, he entered the Nampho University of Medicine.

At last he graduated from the university in March 2018 and became a doctor of the manual therapy department, Nampho Municipal Koryo Medicine Hospital, as he wished.

Several months later rumour had it that the hospital had a noted doctor who diagnosed any diseases merely by feeling pulses and acupoints and treated them completely by his skilful manual therapy.

The doctor was none other than Choe Song Hyok. Still many people go to see him and get treatment from him. Everyone who is completely restored to health by his treatment, is amazed by his skill and asks him about the secret.

Then Song Hyok says, "The saying goes, 'Medicine is a benevolent art.' Though I have lost my eyesight, I see people with my mind and feeling."

Kim Son Myong

Choe Song Hyok and his family.



Most Important Matter

THE WORKERS' PARTY OF Korea (WPK), which was founded on October 10, 1945, set it as the overriding principle of its activities to incessantly improve the people's standard of living, and has strived to do so.

From its early days the WPK has regarded it as its iron rule to defend and realize the interests of the people, and has formulated all its lines and policies in such a way as to correctly reflect the people's opinions and interests

Now the socialist economic construction is briskly under way, and the WPK is invariably pushing ahead with the improvement of the people's living standards as a matter of paramount importance.

Last year alone decisive measures were taken to radically improve the people's living standards. The Pyongyang Pharmaceutical Factory turned into the one producing various medicines needed for the promotion of the people's health and for the treatment and prevention of diseases, and the Koam-Tapchon Railway Bridge was built in the East Sea of Korea, the Pyongyang Taedonggang Fish Restaurant was built on the Taedong riverside, and the Yonphungho Fish Stocking Station was built near Lake Yonphung in such a way as to blend well with the surrounding scenery. And the Samiivon County town began to take shape as a model of modern mountainous city, and the Wonsan Leather Shoes Factory mass-produced shoes.

Meanwhile, a dynamic campaign was conducted to produce quality consumer goods. Several exhibitions were held including the National Footwear Exhibition 2018, the 8th exhibition of products from provincial general foodstuff factories, the exhibition of the processed corn products, the 7th national exhibition of 206 items of sundry goods for daily use and the National Exhibition of August 3 Consumer Goods. They all served as an important opportunity to raise the quality of light industrial goods onto a higher stage.

Supreme Leader Kim Jong Un, in his New Year address 2019, said that improving the people's standard of living radically is a matter of greatest importance for the Party and state, clarifying the detailed tasks and methods to this end.

The whole country has turned out for the implementation of the tasks set forth by the Supreme Leader.

The agricultural sector is now regarded as the major point of attack in socialist economic construction. Efforts are made to give effective scientific and technical guidance for each farming process, and supply sufficient amounts of materials needed for farming. The opinions and interests of farm workers, masters of farming, are respected, and the demands of the socialist principle of distribution are met properly.

The four key factors for the development of livestock farming are adhered to, stockbreeding bases like chicken farms are modernized and reenergized and the joint stockbreeding by cooperative farms and the sideline stockbreeding by individual farm workers are encouraged so as to supply the people with more meat and eggs.

The fishing sector is striving to consolidate its material and technical foundations, put fishing and aquatic culture on a scientific basis and protect and increase aquatic resources.

The sector of light industry, by consistently upholding the banner of modernizing production lines, obtaining at home everything needed for production and improving quality, is producing and supplying various kinds of consumer goods that are favoured by the people. And provinces, cities and counties are making efforts to renovate the condiments factories and other locally-run plants and maintain their regular operation by relying on the locally available raw materials and other resources.

Huge construction projects are pushed ahead with in a bold manner.

The whole Party, the entire country and all the people have turned out to transform Samjiyon County into a model of modern mountainous city, an ideal socialist village. The construction projects, including the Wonsan-Kalma coastal tourist area and other new tourist areas are being accelerated. And efforts are made to improve architectural designing and construction methods, and ensure domestic production and better quality of finishing materials.

The Korean people's dynamic struggle to realize the plan and intention of the Party, which is making selfless, devoted efforts for the good of the people and directing primary attention to their life in any conditions and environments, will bear brilliant fruit.

Ri Jong Nam

Man of Various Information and Wide Knowledge

Kim II Sung, eternal President of the Democratic People's Republic of Korea, was not only a peerlessly great man who opened a new history of the Korean revolution and socialist construction but also a man of encyclopaedic knowledge.

Reading throughout His Life

NE FEBRUARY DAY in 1987 the editor-in-chief of a children's literature magazine of the former Soviet Union looked round the President's birthplace and other historic mementos at Mangyongdae.

Then he questioned the President about what influence books had had on him and what kind of books had taught him in the hard time.

The President answered: My ideology, faith and will did not come into being in a day or two but formed through my long struggle and life. And the starting point came in my childhood when I liked reading very much. Books were really a fine teacher that taught me the truth of struggle and life, and served as guide for me to embark on the journey of true life.

Kim Il Sung loved reading in his childhood. His father Kim Hyong Jik, an indomitable revolutionary fighter, told him that he should learn in order to regain their country. Bearing his father's words deep in mind, he studied a lot about the history, culture and geography of Korea, and read biographies of famous patriotic generals and their

writings

At that time his family was badly off, so it was difficult for them to pay for his education. It was not an easy job for him to obtain books. He, however, managed to get and read books by all means.

He was so fond of books and

so eager to read that he once had a dream that he had a lot of books. One day during the anti-Japanese revolutionary struggle (1926-1945) he had a rare dream: Having learned that the commander [Kim Il Sung], so anxious to read even in the anti-Japanese war, dispatched his men to various places to obtain books for him to read, the anti-Japanese war heroine Kim Jong Suk had a large room filled with books, and told him to choose and read books as he pleased, adding that the books were too many for him to read all throughout his life.

After Korea's liberation from the Japanese imperialists' military occupation, the anti-Japanese war heroine, without forgetting the story of the dream, had Kim Il Sung's study filled with books on different fields, and told him to read to his heart's content now that the country was liberated.

Reading was the President's

most favourite hobby.

He never stopped reading even behind bars. In Jilin prison during his revolutionary activities in his early years, he won over a prison guard and, with his assistance, not only guided revolutionary organizations outside but also regularly obtained and read newspapers and revolutionary novels.

Later he recalled time and again that he had been deeply impressed by the revolutionary novel *The Iron Flood* he read in the prison and that the thought of its contents inspired him with vigour and courage whenever he was in difficulties. He regarded reading as the most important lever for the formation and development of his world outlook and for having many-sided knowledge, and as an indispensable part of his life.

His reading knew no limits. He read newspapers, magazines, books on politics, the economy, military affairs, culture and all other fields, and never missed important novels. By the end of his teens he had already read the theoretical classics such as The Communist Manifesto, The Capital and The Fundamentals of Socialism. Later he read lots of such foreign revolutionary literary works and books on his-

torical records as On the River Amnok, Mother and The Biography of Lenin as well as books on the history of Korea and the life of ancient Koreans.

There was no special place or time fixed for his reading. Early in the morning he read newspapers and news bulletins. In his spare time he read varieties of books and magazines. And in the evening he read novels and books on different fields. Sometimes he read books over a meal or on a tour of field guidance

And with a design to provide the people with eggs and chicken he read books on chicken raising even in wartime. And with a design to amply feed the people on sweet potato he read books on its cultivation deep into the night.

He also read foreign political books and magazines on science and technology a lot even when he was far advanced in years. The data, conclusions and experience he obtained from books on different fields were reflected in the policies and lines of the Party and the state in combination with the people's aspirations and the actual conditions of the country.

Encyclopaedic Knowledge

The President regarded it as his iron rule in his work to solve any problem arising in the revolutionary struggle and the work of construction by referring to his correct analysis and judgment based on his own encyclopaedic knowledge, not in accordance with any other's opinion or assertion.

When the country decided to build the West Sea Barrage

across the rough sea, there were different assertions on where to build it exactly between the sea and the Taedong River with a tremendous difference between high tide and low tide. The positioning of the structure was an important matter which would weigh heavily on the construction and operation of the barrage.

One May day in 1981 the President, together with officials and able hydraulic engineers, went out to the raging sea by boat. On a spot some distance away from the shore he had the boat stopped, and studied the surging waves attentively for a while. Then he said that it was the most ideal spot for the barrage to be built on. The spot gave a view of the definite boundary between the sea and the river. If the barrage was built along the boundary, it would be the most ideal structure on the sea. He fixed the spot after acquainting himself with the details of the depth of water and mud, the state of the tide and the colour of water there while comparing the actual place with that of a map. It was recognized as the most ideal spot for the location of the barrage. The officials and engineers were struck with admiration at the profound knowledge of the President who knew even the bottom of the sea at his fingertips.

The President once stopped his car on a road across a field belonging to workteam No. 3 of the Sakju Town Cooperative Farm. He studied attentively the gratifying bumper crops of the field. He asked the local officials and farm workers how much manure and chemical fertilizer they had applied to the field. They could not give a correct reply as they

had neither manured the field properly nor fertilized them in time. As a matter of fact, they had previously reaped good crops every year even without manuring and fertilizing the field. But they did not try to find out the secret of the success. After studying again the ripe ears of maize and millet in silence for a while, the President said that it seemed that apatite was deposited there, and that the maize and millet grew well like that on the sloping field without manure and fertilizer because the soil contained phosphorus. A later prospecting showed that the whole land of Sakju is an apatite field. Previously even geologists had concluded that the country had no apatite, and those who had tended the field themselves did not know it. Now the underground treasure came to the fore thanks to the President.

His knowledge was unusually extensive and profound covering politics, the economy, culture and all other fields. He was well versed even in religious doctrines. Though he worshiped scientific truths alone throughout his life, he studied Buddhism, Islam, Christianity and other religions as well for the reunification of the country and the cause of global independence.

His broad knowledge came to help solve not any given problems alone in certain fields or cases. Thousands of works of his, which are the valuable materialization of his encyclopaedic knowledge, are recognized as immortal classics, eternal treasures full of logical principles and scientific truths.

Jang Myong Sik

Fatherly Care for Soldiers

Frontline Holiday Camp

ON MAY 25, 1951 DUR-ing the Fatherland Liberation War (June 1950-July 1953) Kim Il Sung, Supreme Commander of the Korean People's Army (KPA), called in an officer to the supreme headquarters. Mentioning that cases of nyctalopia were now occurring among the soldiers of the frontline units, the Supreme Commander said that it was because commanding officers did not look after the soldiers' life and health properly, and that one who did not value soldiers and neglected their life and health thinking only of battle, was ineligible to be an officer. Presently, the Supreme Commander said that the general staff should soon take a prompt measure to bring the soldiers of the frontline units back to health, and added: Fish, vegetables and other non-staple foodstuffs should be preferentially supplied to the soldiers of the frontline units, and oil, too, should be given sufficiently. Especially cod-liver oil should be supplied to them. The oil is the best for cases of nyctalopia. The Soho and other fishing stations on the east coast have certain amounts of the oil, so it is advisable to bring 20 tons of the oil from them and supply it to the frontline units first.

Then, as if he were still worried, the Supreme Commander thought for a while, and said with a bright smile: As the war is portending prolongation, a frontline holiday camp should be established for People's Army soldiers. Then it will inspire the frontline combatants to fight

better with redoubled courage.

This is how a holiday camp came into being on the front line—this is almost a legend.

New Quilted Clothes

One day in February 1996 Chairman Kim Jong Il was inspecting Height 351.

After acquainting himself with the enemy's movements opposite the defence line of the local KPA unit, the Chairman met two soldiers on combat lookout duty near the forward observation post. Appreciating their trouble to defend the height, he felt the breasts of the soldiers' quilted clothes by turns. He could hardly take his eyes off the clothes. Then he knelt down to feel their winter shoes. Now he said anxiously: Deep attention should be paid to the life of soldiers in winter. Now it has become an issue that clothes supplied to soldiers in recent years are poor in quality. Today, seeing the winter clothes and shoes of these soldiers, I've come to know that military uniforms are really poor in quality.

Back from his inspection of the height the Chairman made time to acquaint himself with the state of the army's clothes once again, and taught in detail how to ensure the quality of military uniforms.

Some time later, trucks loaded with new winter clothes associated with the Chairman's benevolent affection arrived at the frontline post.

Fish Brought by Supreme Leader

One January day in 2012

Supreme Leader Kim Jong Un inspected an air unit. After having a significant photo taken with its airmen, the Supreme Leader observed the airmen in flight training. Mentioning that they really did well, he said: I see that the airmen are very skilful in flight control like taking off and landing, and that they are courageously moving.

Then he taught in detail how to thoroughly prepare airmen as death-defying corps ready to fight resolutely for the Party and the leader, and for the country and the people.

Presently, he dropped in at the airmen's mess hall to inquire about what dishes the airmen liked best, how fishes were supplied to them and if butter was supplied to them regularly.

After a while, he, pointing at something he had brought in his car, told the commanding officer of the unit to let the airmen eat it.

It was a variegated carp weighing as much as 60 kg. This rare fish was the one people had presented to the leader who was devotedly leading the building of a powerful socialist country.

The airmen were moved to hear the story of the fish.

Seeing the officers and cooks of the unit moved to tears, the leader taught them a special method to cook the fish. And before leaving the unit he said to the officers that as he entrusted the airmen to them, they should become the soldiers' revolutionary comrades-in-arms and look after their life well like they should do their own younger brothers and sisters.

Choe Sol Mi

President Kim Il Sung's Birthplace at Mangyongdae in Spring

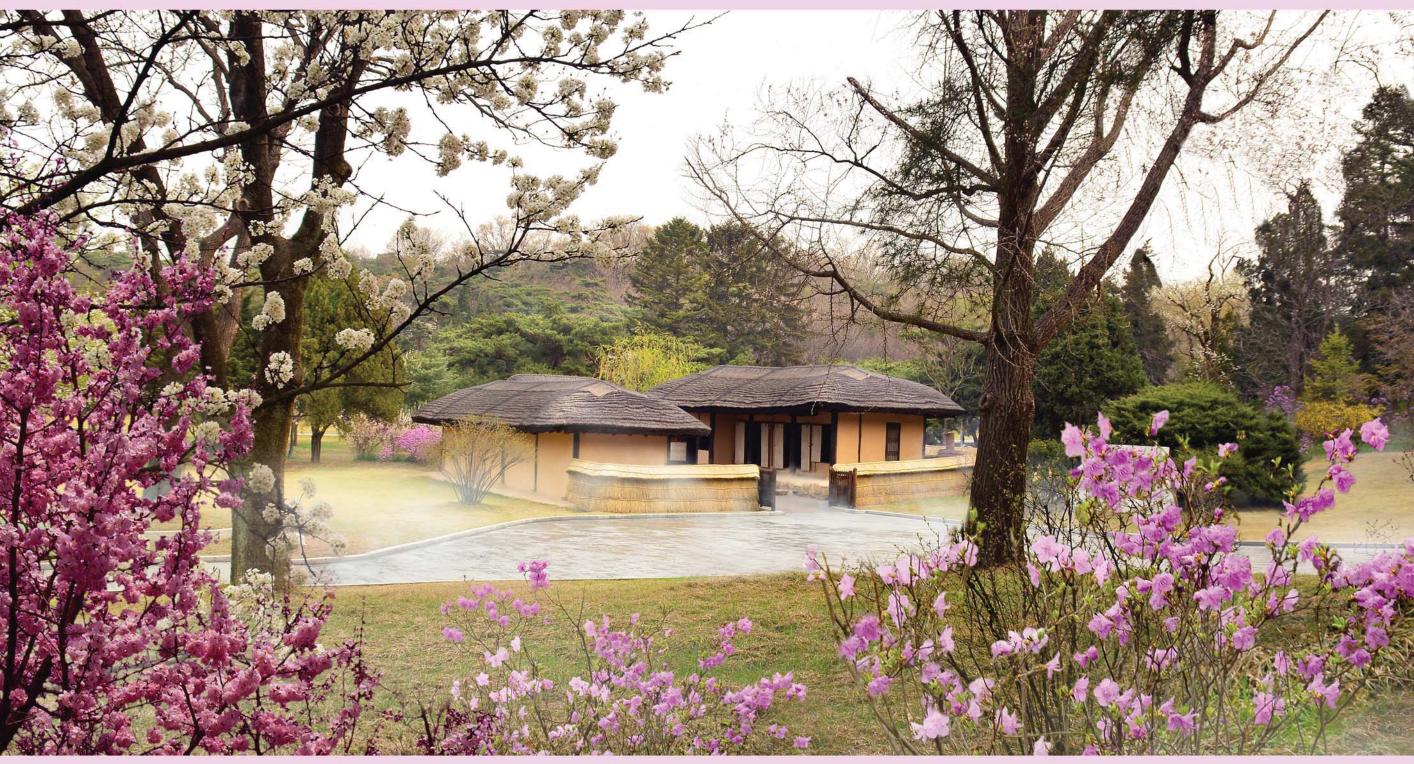
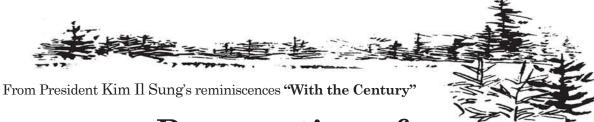


Photo by Pyon Chan U



Preparations for a Bloody Battle

UR EFFORTS TO FOUND the Anti-Japanese People's Guerrilla Army faced difficulties from the beginning. The questions of cadres, weapons, military drill, provisions, the mass foundation and relations with the national salvation army, as well as many other questions of a military and political character, were raised and awaiting solution.

In forming the armed units we considered cadres and weapons as the most essential two elements. But we were short of them both.

By cadres we mean those who were prepared militarily and politically. We needed young people who understood politics and military affairs and were ready to fight in arms for the country and people for a long time.

In the national liberation revolution in colonies it is impossible to make people take up arms by means such as a mobilization order or a system of obligatory military service. In the revolution the appeal of the leader of the revolution or farsighted people replaces the law, and the political and moral awareness and militant enthusiasm of each man decides his voluntary entry into the army. The masses take up arms for their liberation of their own accord without the request or direction of anyone else. It is an act natural to the people who regard

independence as their lifeblood and are ready to devote their lives to it.

Based on this principle, we began to search for people to be enlisted in the guerrilla unit in Antu and the surrounding area. In the paramilitary organizations such as the Red Guards, the Children's Vanguard, the worker pickets and the local shock brigades there were many sturdy young people who wanted to join the army. Paramilitary organizations grew fast and young people were awakened ideologically beyond recognition in the stormy harvest and spring struggles.

With the training in the Red Guards, the Children's Vanguard, the Children's Expeditionary Corps and other paramilitary organizations being intensified and their ranks built up, dozens of reliable young people who were prepared politically and militarily were rallied around us. We selected those who were working in the various counties along the River Tuman and the young people tempered and seasoned in the harvest and spring struggles and called them together in Antu. Many young people came to us from different parts of east Manchuria, including Antu and

We selected 18 of them as core elements... and formed them into a guerrilla group. At the

same time we saw to it that similar armed groups were formed in the Yanji, Wangqing, Helong and Hunchun areas. As a result, armed groups comprising between 10 and 20 men came into being in succession in each county. This was the line adopted at the Mingyuegou Meeting, that of forming small armed groups, obtaining weapons and accumulating experience through stealthy activities, increasing the ranks and forming large armed groups in each county when the situation was right.

The formation of these guerrilla groups was attended with a bloody struggle to acquire weapons. The struggle was beset with great difficulties.

The Japanese aggressor army steadily increased the fighting ability of their ground, sea and air forces by supplying them with modern arms and other equipment mass-produced in their own country, whereas we had no home front to provide weapons nor money to buy rifles. What we needed was not cannons and tanks but, for the time being, rifles, pistols, grenades and other light arms. If our country had had factories producing weapons, we could have acquired them with the help of the workers. But our country did not have such factories. Unfortunately, in arming ourselves we did not benefit from the industry of our country.

That was why the grim slogan "Let's take the enemy's weapons and arm ourselves!" was adopted.

On returning to Antu I dug up from the ground the two pistols which my father had entrusted to my mother. I said to my comrades, as I held up the two pistols:

"Look, these are the pistols my father left for me. My father did not serve in the Righteous Volunteers or in the Independence Army, but he had these pistols with him until the day of his death. Why? Because he considered the armed struggle to be the highest form of struggle to achieve national independence. My father's desire was to launch an armed struggle. When he left me these two pistols, I made a firm resolve to do what he desired in his place. The time has come. Let us start our march for independence with these two pistols to help us. Now we have two pistols, but think that one day they will have multiplied to two hundred, two thousand and then to twenty thousand. With 2 000 rifles, we will be fully able to liberate the country. Let us multiply these two pistols into two thousand and then twenty thousand rifles."

I felt a lump in my throat at the thought that my father had died an early death without realizing his aspiration, and I could speak no more.

We chose the difficult way. I thought that we might buy weapons but I did not encourage this. To ask the people for money was the way of the Independence Army, not our way.

Even if we had raised money, it would not have helped us much.

The struggle to obtain arms was waged vigorously in a mass movement all along the River Tuman. The revolutionary masses, irrespective of age and sex, with members of the guerrilla group, the Red Guards, the Children's Vanguard and the local shock brigades in the van, waged a brave battle against the Japanese aggressor army, the Japanese and Manchukuo police, the pro-Japanese landlords and the reactionary bureaucrats to take their weapons from them under the slogan "Arms are our lifeblood. Arms for arms!"

The struggle to obtain arms was a prelude to an all-people war of resistance. All the revolutionary organizations and the entire people roused themselves to the struggle and enlisted in it. As the revolution required arms, the masses came out in the struggle to obtain them without hesitation. In the course of this they were awakened ideologically, and they came to realize how great their strength was.

Our slogan that one should obtain weapons for oneself proved its great vitality everywhere.

Needless to say, in the course of struggle we lost many revolutionary comrades. Each rifle we obtained was imbued with the warm blood and the ardent patriotism of our revolutionary comrades.

At the same time we launched the struggle to make weapons for ourselves under the slogan of selfreliance

At first we made spears and swords at smithies. Then we made pistols and bombs.

The Suribawigul Arsenal made bombs with powder obtained by the revolutionary or-

ganization in a mine in Badaogou, Yanii County,

At first they made noise bombs. They exploded with a thundering sound, but their killing capacity was slight. Next they made chilli bombs, an improved version. They were better than the noise bombs but they merely emitted a disgusting smell and were not very effective.

Later comrades in Helong made some effective bombs with iron shrapnel instead of chilli powder. These were the famous Yanji bombs.

If a writer were to collect episodes about the unexcelled spirit of self-sacrifice, boldness, wit and creativity our people displayed in their struggle for arms and give a vivid portraval of them, it would make an epic story. A simple people who had been worked hard as cheap labour for tens of thousands of years, plunged in the darkness of ignorance and illiteracy and were suffering the sorrow of a stateless nation shedding tears of blood, deeming it to be their fate, finally embarked on the path of the noble liberation struggle to forge their own destiny.

We paid special attention to laying a mass foundation for the anti-Japanese armed struggle while pushing ahead with the preparations for building active revolutionary armed forces. It was an essential demand of our developing revolution to awaken and ceaselessly temper the masses in the practical struggle and prepare them thoroughly for the anti-Japanese war. Their voluntary enlistment across the country in the anti-Japanese war was a guarantee for ultimate victory in the war.

Popular Brand Narae



A new product goes through collective review.

DECENTLY, THE SHOES **N**from the Pyongyang Leather Shoes Factory are popular with the people.

It was one day in January last year.

The officials of the factory had a discussion from the early evening till late at night on the problem of how to produce fine shoes. The meeting stressed the need to create patterns of new distinctive shoes.

Pak Yong Chan, chief engineer of the factory, said, "Of course the aforesaid problems are important. But what is the most important in the production of quality and smart shoes is to encourage all the officials and employees to turn out as one." Then he proposed to conduct a technical innovation competition among the employees. The meeting thus made an outline for the competition.

From the next day the factory conducted a competition to create one or two technical innovation schemes like patterns of new-style shoes and introduce them in production.

For a few days alone, lots of patterns of shoes for men,

women and children and other technical innovation schemes and rationalization plans were suggested. Among them were dozens of patterns of distinctive

Some officials proposed to introduce the patterns in production. Then Kim Myong Dok, general manager of the factory, said, "Though we like them, we should inquire whether the people like them. We cannot stamp pass marks."

His words had a great im-

pact on all the officials and technicians. He is right. The shoes should be to the people's liking, and they can stamp pass marks. This should become a motto to us workers of the light industrial sector.

From then on the factory conducted the work to have people deliberate on each of the fine shoes patterns chosen in the competition. The designers of the technical preparation section went among citizens and made efforts day and night to complete the shapes of quality and smart shoes relying on domestic raw materials and reflecting the people's demand.

The pattern designers went to a department store, shoes shops, dongs and neighbourhood units to find out shapes that old, middle-aged and young people and children like and colours fit for each season and reflect them in designing. Back home from work the designers of shoetrees and shoe soles also discussed their problems with their family members till late at night. The technicians of the laboratory developed new gum for shoemaking.

The factory thus created over 200 kinds of various shoe patterns and completed their >

moulds in a short span of time. Soon they embarked on the trial shoes production. The shoes of various shapes and colours were committed to deliberation by the people.

Those who saw the shoes

were very pleased that the shoes were light, smart and of various shapes. Some of them expressed their demand for better shoes.

The factory increased the kinds of children's shoes while renovating the production

Narae brand shoes from the factory for different ages, seasons and occupations were highly rated at the Pyongyang Spring International Trade Fair, the Pyongyang Autumn International Trade Fair, the National Exhibition of Consumer Goods and the Pyongyang Department Store No. 1 Commodity Exhibition held last year.

In particular, men's laceshoes, sports shoes for men and women and woman's highheeled shoes won gold medals at the National Footwear Exhibition 2018 held in October last year for their high quality and technical advantages.

The officials and technicians of the factory are still going among the people for their estimation of their products.

Sim Chol Yong



The uppers making process.



Some of the products of the factory.

24 KOREA TODAY No. 4, 2019 25

Ryugyong Mushroom Farm

THE RYUGYONG MUSHROOM FARM WAS built in 2013 on the outskirts of Pyongyang for the purpose of producing and supplying fresh mushrooms to citizens.

Covering a building area of over 24 800 square metres and a total floor space of 9 560 square metres, the farm consists of main production buildings and outdoor arch-style cultivation grounds.

Using industrial and highly intensive methods, it is producing mushrooms in accordance with the Good Manufacturing Practice (GMP). It is based on an integrated production system and a management information system.

It also has a control room, an inoculation room, a culture room, a cultivation room, a technical preparation room, a sci-tech learning space and a substrate moulding shop.







It produces hundreds of tons of mushrooms a year. While using a lot of corncobs as the main materials for mushroom production, it is conducting substitute substrate research. Refractory plastic bottles are used as containers in the production, which are long in life. And the production processes of spores, culture and cultivation are based on an automatic flowline.

Mushrooms from the farm mainly include King Oyster Mushroom, agaric and *Auricularia polytricha*. The mushrooms are cultivated three times indoors, and the by-products are used for the fourth cultivation outdoors. The fifth by-products are widely used as fodder because of their high unit feed.

The farm also ensures profitability in the use of a sterilizer and cooling water. In close connec-

tion with scientists and technicians of the related units like Kim Il Sung University and Kim Chaek University of Technology, it reduced the sterilizing time to one third.

In addition, the farm built a water tank of scores of cubic metres on a highest place there and thus turned a power-driven water cooling system for cooling the first and second sterilized water into a gravitational system. This makes it

possible to produce mushrooms while saving hundreds of kws of electricity a month and freeing the cooling room from environmental pollution.

Mushrooms from the farm are sent to greengroceries, a baby home, an orphanage, primary and middle schools for orphans, war veterans and meritorious persons in the city.

All the employees of the farm are now sparing no effort to produce more and more mushrooms with low cost and send them to citizens.

Sim Hyon Jin

Mushroom growing is put on a scientific basis to increase production.







For Economic Development of Country

IN RECENT YEARS THE POWER-DRIVEN Machine Institute of the State Academy of Sciences has achieved successes in the research into modernizing the national economy using domestic resources.

A few years ago the institute designed and manufactured a new-type clutch conducive to the country's automobile industry, and established an engineering system which makes it possible to produce it in a serial way. It also pushed ahead with the undertaking to actively introduce SR motors in the mining industry, and developed on a modern line a new-type pump and many other power-driven equipment badly needed in reality, thus giving much profit to the state.

Last year it intensified the research to ensure the accuracy of a turbine system of the Pukchang Thermal Power Complex and solved many problems, thus opening up a bright prospect for the regular production of electricity.

In July 2016 the institute started the research to solve sci-tech problems arising in the manufacture, trial run and regular operation of a steam turbine system of the generating equipment extension project of the complex. But the research was not smooth from the beginning. The researchers had to ensure the project successfully and solve scitech problems arising in operating the equipment and making its output proper by establishing the technical process of and giving technical guidance in installing and assembling the steam turbine cylinder, auxiliary equipment, a water feeding system, a condensing system, a circulating water system, an oil feeding system, a packing steam

Efforts are made to improve the accuracy of turbine parts.



supply system, different sorts of equipment and conduit.

First of all they ensured the horizontality of the lower cylinders of the turbine, the generator and the exciter, and the surface finish of the parting planes of the upper and lower cylinders in order to establish the process of assemblying the steam turbine cylinder. And they ensured babbit contact surfaces of medals at over 90% and enhanced the stability of axis rotation by adjusting clearance of medals with high accuracy. They also ensured the concentricity between rotators below 0.02 mm in assembling them, and the widening degree between couplings to cope with axis deflection to meet the technical requirement.

What they attached primary importance to in solving problems was to raise the proportion of domestically-made equipment. For example, they designed and made by themselves a large-size high-performance mechanical rotatory seal device in the water feeding system. The import price of a set of the device is millions of won, so much fund was needed to install such devices in four feed-water pumps. But it might take a lot of time to make them by themselves which would lead to as much delay in the inauguration. Then some people said that they had better import the devices.

The researchers, however, could not agree with them. If we depend on import today, we will have to continue to import them in the future, too. And if we fail to import them, the complex will not run properly, and it will hold up the economic development of the country. We cannot remain indifferent to the matter as scientists. With this thought they conducted the relevant research day and night, and thus they managed to complete the design, and buckled down to its manufacture.

Soon they experimented with what they made, but without success—water penetrated oil. In the course of examining all aspects they found that the failure was due to the improper accuracy of manufacture. They solved the problem together with the complex's technicians, and thus succeeded in making the device by their own strength and technique, hastening the date of the assembly and inauguration of the equipment and ensuring its normal operation.

They also designed and made by themselves over 50 units of equipment including a water-sulfuric acid ejector and the coupling elastic plate of a feed booster pump. This earned them over 20 certificates of registered sci-tech achievement and of introduced sci-tech achievement, and made it possible to save much fund and increase the power production.

Kim Pong II, head of the institute, says, "The present era requires us scientists to make more strenuous efforts. We will actively contribute to the country's economic development with much more sci-tech achievements."

Pak Thae Ho

New Nano-bioactivity Accelerator Developed



Researcher Ri Kum Hwa.

POURTEEN YEARS AGO, a girl arrived at a chi-l a girl arrived at a chicken farm in a remote mountain region. She was Ri Kum Hwa who had been appointed a researcher for the Poultry Engineering Division of Agricultural Research Institute after graduating from the Biology Faculty of the then Pyongyang University of Agriculture. As soon as she was appointed, she volunteered to go out to the farm to acquaint herself with it to the surprise of others. Thus Ri went to the farm where, she heard, the rate of hatching was decreasing.

When she entered a hatchery, she heard two girl breeders saying with worry that the hatching rate was gradually decreasing though they had used the same operation method.

After learning about what kind of breeds they had talked about, Ri asked them, "When did the hens begin to lay eggs?"

"It was about three years ago," they replied.

"Then it is not only your fault," Ri said.

She then explained to the breeders that it was an unavoidable phenomenon occurring in the eggs laid by old hens, but their faces did not brighten.

That night in her bed Ri thought and thought about the girl breeders who were in worry. It is not natural that the old hens are removed as their rates of laying eggs are decreasing, she thought. What about making them lay healthy eggs by the method of improving the activity of the organisms?

The next day she went to see the director of the division and suggested that she take charge of the research. Though half in doubt that she could do it successfully as she was fresh out of college, the director supported Ri's suggestion.

At first she paid attention to the fact that all reactions within an organism are enzyme reactions and started the research in such a way as to activate enzymes. Through scores of repeated experiments and study she found out the rational density in combining several microelements favourable for the growth of poultry, invented the nutritive active liquid conducive to redoubling their capability to absorb nutrients and added it to their feed. The result was good as she expected.

However, her pleasure did not last long. The research findings made a great contribution to improving the rate of hatching, but did not help increase the egg laying rate. The director said that the active liquid was another advance in the poultry sector, and that the success was fairly good, suggesting that she present the research result to the public. But she said, "I know I can content myself with it. But it is my desire to develop an accelerator which raises not only

the rate of hatching but also the egg laying rate."

Now she began research under the positive support of the director. He gave her his research data and many reference books needed for the research. During the period of the research the other members of her department dug into a huge amount of documents to help her and took a long journey to visit other chicken farms across the country to acquire correlation data. When she left her home for research, they helped her with her household matters.

Thanks to the team's care and support she made rapid progress in her work. At last she developed a nano-bioactivity accelerator which helps sharply increase not only the egg laying rate but also the weight of poultry by improving their absorbing capability using the method of putting all nutrients necessary for the growth of poultry on a nano basis.

Use of this accelerator makes it possible to improve poultry's capability to absorb inorganic and organic nutritive elements and have them lay healthy eggs for a long time. It also retards ageing of organisms, promotes their growth, enhances their resistance to diseases and helps raise healthy breeding poultry. Now it wins popularity among chicken farms and co-operative farms across the country. Last year, at the 33rd national sci-tech festival, it took first place, which was just 13 years since Ri had begun the research.

She and other researchers are now striving to develop high-protein feed whose processing method will not be so complicated.

28 KOREA TODAY
No. 4, 2019 29

Kindergarten Revisited



POUR YEARS AGO I WENT to Kinmaul Kindergarten No. 1 in Moranbong District, Pyongyang, to get the story of Choe Sung Gwon, who produced a collection of poems of his own writing at the age of six.

My impression of the kindergarten at the time was that in view of its tradition and experience it would consolidate its fame of being good at producing child prodigies of literary interests in the future, too.

Recently, however, the kindergarten's achievements have not been limited to that aspect alone. Children from the kindergarten won Pyongyang municipal children's paduk (go) contests held in spring and autumn

for the last three years, and one of its pupils won a special prize at the 11th national contest of outstandingly talented kindergarten pupils held last year.

So I decided to visit the kindergarten once again.

Situated in the middle of a residential district, it looked as fine as ever.

Told why I was there, the head teacher showed me certificates of commendation and diplomas covering a wall of her room. Among the winners of the certificates was a teacher, Han Hyang Ran. She was the one who had trained the young poet.

Han herself had had an interest in literature in her college days, and she expressed her determination to train much more prodigies of literary interests.

In the education room of higher class No. 1 I saw Han engrossed in teaching children to play *paduk*. When I asked her if she had changed her major, she shook her head telling me the following story.

One day, when she met the mother of a child she had taught, the woman anxiously said that her child was the best in the study of mother tongue, but had trouble in learning mathematics and other subjects.

The teacher was shocked by her words. She tried to console

herself that success in a field was likely to be accompanied by failure in other fields, but could not forget the words despite the passage of time.

She visited other kindergartens and educational institutions in order to find out a solution to the problem. In the course of this she came to know that children who learned *paduk* in their kindergarten days were successful in the study of all subjects at school, because it is a game of intelligence capable of developing the intelligence of children in a comprehensive way.

While playing the game children have to consider their opponents' moves and make moves while inwardly counting the number of the stones and crosses they win. In the course of this they develop their ability of mental calculation. And while planning to form encirclement rings they have geometrical thinking. Besides, they learn and apply aphorisms related to the game, and thus develop their linguistic logical thought very much and become well-mannered.

Now Han concluded that education in *paduk* was multipurpose education fit for her object. From then on she visited the Pyongyang Municipal Paduk House and other places for playing *paduk* in order to master high-grade moves of the game.

Those close to her doubted whether she could successfully learn the game, but she persisted. Her family members reproached her citing the saying "Jack of all trade is master of none." Then she said, "My object's never changed. I only think that I should have more props to raise my young trees into large ones."

When Kim Phyong Un, a member of higher class No. 1 she is in charge of, won a special prize at the abovementioned contest, the child's mother said, "Mothers want to provide even one more thing for their children's bright future. I have noticed such a mind in the teacher of my child."

Han was not the only teacher that unsparingly dedicated all her wisdom and efforts for the sake of children. Other teachers fresh out of college, too, were striving to develop and introduce new teaching methods by studying their charges' characteristics, psychology, aptitudes and intellectual standards while mixing themselves with them. Their efforts were reflected by distinctive teaching aids and toys for intellectual development I saw in every education room, and by the way children narrate fairly well, give ready answers to questions of mental calculation and recite prompt poems related to any word.

The head teacher said, "To think that the future of children depends upon us teachers, I feel that our efforts are still not enough."

When looking at the small building of the kindergarten in a residential district before leaving it, I felt it was never a small educational institution, but an important one for the upbringing of the future of the country.

Ri Kum Chol

Director Ko Sun Yong (right).







No. 4, 2019 31

True Teachers



Efforts are put in to improve educational environments and teaching methods.



IN CENTRAL NAMPHO, A port city, there is the Waudo District Pongdae Primary School. Though it is small in the number of pupils and building area, the school is widely known for the teachers' good education. Not long ago a Korea Today reporter visited the school to meet some of the teachers.

Mother

Kang Jong Hui has been working as a teacher for 30 years. She is held in respect by not only pupils but also other teachers for her rich experience and kindheartedness.

What she attaches paramount importance to in education is the voluntary effort of pupils. Her opinion is that success of education depends on the ability of pupils and that it requires pupils to work hard voluntarily rather than under compulsion.

Therefore, she orients her teaching to encouraging them to study voluntarily. In order to get them interested and engrossed in study she takes the trouble to understand what they are worried about and look after them in all aspects of life.

She congratulates them on their birthdays, and she tells them interesting stories during breaks

She says, "We should become *mothers* of the pupils in order to make fine persons of all of them who are different in personality, taste, features and preparedness."

Such personality of hers helps awaken the zeal for studying.

Yardstick

Department head Jong Kwang Suk is called *yardstick* by pupils as she puts emphasis on repeated practice in their study, and is stern with them.

She, however, never minds it. Through her long experience in teaching, she came to know that constant strict demands on pupils are important in helping them improve their ability and achieve greater successes in their study.

The contents of her teaching to impart to students extensive knowledge of nature and society are daily increasing in scope and depth.

Her demand on pupils for repeated solution of problems has gradually increased, and her guidance for them in studying is growing stricter.

Her painstaking efforts led to the daily enhancement of the pupils' academic performance, and thus they achieved successes at each annual academic contest.

Last year students of 4-3 ▶

A lesson is given to suit the students' mental quality.



Brisk Mass Sports Activities

THIS YEAR, LIKE IN LAST year, attention is paid to the development of mass-based sports activities as well as that of specialized sporting techniques, and efforts are made to the end in Korea. A Korea Today reporter had a talk with bureau director Pak Yong Il of the Ministry of Physical Culture and Sports of the Democratic People's Republic of Korea on the matter.

At present brisk mass sports activities are under way imbuing people with optimism and delight, I think.

You're right. As you see, people have gotten increasingly interested in sports as never before. Everywhere in the country you can see sports activities done in various forms and ways.

Previously people used to spend holidays and weekends visiting pleasure grounds or scenic spots, enjoying amusements or going to theatres together with their relatives. But now they spend those days going to see a football match or going to a stadium, a wading pool or a sports park to conduct such sports activities as table tennis, volleyball, basketball, tennis, badminton or swimming.

They also enjoy folk games such as a tug of war, *ssirum* (Korean wrestling), seesawing and swinging.

In any city, farm village, industrial establishment or school people, young and old, men and women all alike, spend their leisure time, as well as the aforesaid days, conducting sports activities.

Sports facilities are ubiquitous and they provide people with better conditions for sports activities. Among the facilities are the Masikryong Ski Resort, the Mirim Riding Club, the People's Open-air Ice Rink and the Thongil Street Fitness Centre, which imbues the whole country with a craze for skiing, riding, roller-skating, volleyball and basketball. Thus the whole land is filled with enthusiasm for sports activities.

Mass sports activities are under way on a nationwide scale as well, I think.

Right. Making sports massbased and a part of everyday life is the main content of the DPRK's sports policy. In order to make sports activities those for the sake of the people and their own, the state designated January and February, July and August and August and September of every year as months of winter sports, maritime physical culture and national physical strength examination respectively. It sees to it that a vigorous movement is under way to win the titles of Model Sports Unit and Model Sports County and pays constant attention to the work to conduct mass-based sports activities on the second



Pak Yong II.

Sunday of every month designated as day for sports.

Every year also witnesses the Paektusan Prize Sports Contest of Officials of National Agencies, the National Schoolchildren's Sports Contest for Jongilbong Prize, sector-specific sports contests and other sports contests, and the National Interprovincial Games, all firing the entire country with greater enthusiasm for sports.

Thanks to the mass sports activities full of optimism and delight, the public climate of helping and leading one another is further strengthening, bringing a more enjoyable life day by day and imbuing the whole country with an animated spirit.

Pak Thae Ho

 class, which she is in charge of, won first place at a municipal academic contest.

Whenever hearing her nickname, she says, "The true image of teacher is represented in the pupils' achievements."

New Generation

It is only several years since Hwang Ok Gum began to work as a teacher. She is always with an admirable determination to add lustre to her hometown and the school. After graduating from a teachers training college, she volunteered to work at the school, her alma mater.

Though poor in experience and career, she is so enterprising and enthusiastic that she enjoys the confidence of pupils.

Not long ago she drew at-

tention at a municipal teaching contest by presenting a 3-D technique-based multimedia program.

At the time she said, "I want to tell my pupils through my practice that it means patriotism to love and add lustre to one's hometown and alma mater, and that it is just what the rising generation should do."

Kim Hyon Ju

32 KOREA TODAY No. 4, 2019 33

Woman Instructor's Desire



Kim Nam Hui.

IN KOREA THERE ARE LOTS of educators who devote themselves to Taekwon-Do education, an orthodox martial art of Korea. Among them is Kim Nam Hui, woman instructor of the Taekwon-Do circle, the Pyongyang Students and Children's Palace.

Originally Nam Hui was regarded as a promising Taekwon-Do practitioner for her good strength and balance and high technique. She, however, became an instructor of the Taekwon-Do circle in June 2013, because she couldn't act as a Taekwon-Do practitioner any longer with her serious injury in training.

At that time she made up her mind to train her pupils well so that they could achieve what she failed to do. Since then she started her career as an educator.

But there were not only success and delight in life. Some of her pupils gave up afraid of the intensive training which she put them through. And parents of some pupils had their children transferred to other schools knowing that she failed to succeed as a Taekwon-Do practitioner.

Still, she was not disappointed but devoted her energy to the training of her charges. She made special efforts to arouse their interest. In general, chil-

dren are responsive to all that is new, enterprising and react rapidly to all matters and phenomena, but lack staying power.

So she educated them by the method of explaining the contents of videos, illustrated technical books and the experience of high-level practitioners.

She also attached importance to approaching everything in an innovative and creative way. She understood practitioners could not achieve due success in contests and that their future could not be guaranteed with an isolated way of thinking and diagramming of tactics application.

So she boldly employed innovative tactics like those of power distribution between rounds recently introduced in the world boxing circle. In addition, she had the pupils select fortes suited to their constitutional characteristics and preparedness and steadily practise them,

and organized various training matches in different virtual circumstances so as to improve their courage and consciousness for competition.

Her efforts bore fruit. Won Ok, one of her charges, participated in the 11th World Juvenile Taekwon-Do Championships and the 6th World Veteran Taekwon-Do Championships held in Tajikistan in August 2014 and won two gold medals by winning an individual second-grade pattern event and a 46kg-category individual sparring event, thus giving her pleasure for the first time.

Later, Won Ok, and her fellow practitioners Kim Jin A, Sin Kuk Hwa and Kang Chol Ok won consecutive victories at the 12th and 13th World Juvenile Taekwon-Do Championships and the 7th and 8th World Veteran Taekwon-Do Championships to the delight of the instructor.

The medals her charges

have won number more than 250 in total including over 170 gold medals from international and national games. Kim Jin A became a Merited Athlete in December last year.

The instructor is slender with double eyelid eyes and a shapely nose. At a glance, she looks like an artiste rather than a sportswoman. She is both an enthusiastic sportswoman and an overcautious wife and tender-hearted mother who loves her husband and daughter.

Besides, she is fond of music very much. Once, as a young girl, she sang very well with her singular voice, and a music teacher of a music school followed her for more than a week with a design to train her into a famous vocalist.

Still she is devoting efforts for the younger generation along with the traditional martial art Taekwon-Do as she did before.

Choe Sol Mi









Popular Nutritive Food for Athletes

 $F_{\text{jelly is very popular with athletes in Korea.}}^{\text{UNCTIONAL APRICOT}}$

The jelly effective in relieving athletes' fatigue and adjusting their weight was developed by Pae Kyong Chun, a medical researcher at the Hamhung Railway Bureau Sports Club.

With a goal of using materials richly available in Korea to make a functional food capable of helping athletes develop their techniques, he began to study into the me-

dicinal value of apricot over 20 years ago.

The fruit has long been widely used as a Koryo medicine and folk remedy. Its flesh, leaves and stone are all highly efficacious medicinal materials. In particular, the flesh contains citric acid, racemic acid and malic acid, several vitamins A, B₁, B₂, B₆, C and PP and minerals such as iron, calcium and potassium, and thus it is very good for rationally controlling protein metabolism, carbohydrate metabolism.

lism, nucleic acid metabolism and so on in the body.

Pae used flesh collected from yellowish underripe apricots to make the functional apricot jelly which helps athletes quickly recover from mental and physical fatigue and adjust their weight.

The food was introduced in many other sports clubs and proved efficacious. It was rated as the best at the nutrition event of the 19th National Sports Sci-tech Achievement Exhibition held in 2015.



34 KOREA TODAY No. 4, 2019 35

Kumsanpho Products Grow Popular

TN OCTOBER LAST YEAR Lthe Kumsanpho Specialities Shop was opened on Ryomyong Street. It sells the products from the Kumsanpho Fish Pickling Factory on the west coast of Korea. Pickled fishes made by putting salt and spices in fishes or their intestines and fermenting them at a certain temperature belong to the side dishes that the Koreans have long used in their dietary life.

Some time ago I visited the shop. What Ho Myong Suk, head of the shop, told me enabled me to have an understanding of pickled fishes.

Their country being seagirt on three sides, the Korean people have had access to rich marine resources of all kinds, and have developed pickled fishes especially. With special tastes and smells pickled fishes have long been called

"appetizers." They are rich in varieties of peptides, amino acids and calcium, and digest well. It is largely thanks to pickled fishes, kimchi's essential ingredient, that the dish is known as health food worldwide. Previously pickled fishes were made manually. Then, after its construction, the Kumsanpho Fish Pickling Factory succeeded in producing the side dishes by industrial method. This may be why people pay special attention to the aforesaid shop and the Kumsanpho products.

I now found the shop selling various pickled fishes made with fishes from the West Sea of Korea. An old man, while counting the variety of pickled fishes, marvelled that different things could be made with one kind of fish, and a woman was buying pickled fishes different in salinity and pungent taste. And some people said even the sight of their packaging brought water to their mouths.

Among the people was Jang Yong Man, a researcher of Kim Il Sung University. Jang said that the Kumsanpho pickled fishes tasted better than those his wife made, so he dropped in at the shop before going on an official business. Taking cans of 30g and 50g in his hand, he asked a shop assistant their shelf life. The girl answered it is one year in a refrigerator. Pleased to buy quality pickled fishes he continued to say that he would make a strenuous effort to successfully solve sci-tech problems arising at industrial establishments.

I also met a woman who was busy choosing pickled fishes. She was Cha Su Jong, a newly married woman living

in Taedonggang District. She said, "A few days ago I bought pickled shellfish and pickled green peppers and tiny shrimps and my father-in-law said, 'Well, how do you know my taste so well?' Then he ate enough for two. So I'm going to treat him to different ones every day."

Kim Song Sil, an elderly woman standing beside Cha, said, "Pickled fishes were previously made in small quantities at home. But now the industrial production of them enables us to taste those of different kinds with ease."

Besides pickled fishes, the shop was selling sand eel sauce, anchovy sauce and tiny shrimp sauce which were popular with customers for their unique tastes mixed with the fishes' original tastes.

The head of the shop said, "Almost every day fresh products from the factory arrive at my shop so as to meet the people's demand and convenience. In each district in Pyongyang there are kiosks selling products from the factory."

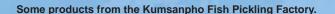
The factory is far from the city, but its products grow popular with the citizens.

Rim Sang Jun















Believe in Yourself

(Continued from the last issue)

Football Does Not Depend on Height Alone

KYONG HWA AND KUM SUK ENTERED the April 25 Sports Club and received and wore uniforms on the same day.

About 15 girls, who were 11 to 15 years of age, belonged to the trainees' group of the club's reserve women's football team. Kyong Hwa was the youngest and smallest of them. She, however, assiduously competed with Kum Suk in training unnoticed by others.

First of all she trained much more than the latter. After the end of the routine drills, she never failed to practise kicking and dribbling scores of times every day, rain or snow. She differed little from Kum Suk in training and technical movements but did in stature. She kept her diary of training reviewing her day while thinking where she was good and where she was weak.

One day coach Kang Ryong Un observed her in training and examined her diary. Then he advised her on her training, saying, "It seems that you train too hard. Take it easy. Otherwise it will be bad for growing tall at your age. From tomorrow you'd better reduce the volume of your early morning exercise, and stop your private exercise you have done every evening after the day's training. And it is advisable for you to mix yourself with your friends in having a good time. Remember it might help you grow tall."

From then on Kyong Hwa adjusted the volume of her training, and was brighter and fonder of joking than others during breaks of their training or at an evening recreational party.

Some time later, a state inspection of the sports club started. Members of the juvenile reserve team were no exception from the understanding and examination of football and all other players.

In a week the inspection of the reserve women's football team began. A stern-looking man in charge of the inspection team started to understand the morning routine of the team. While observing the players running to the wash-cum-bathroom in a line, he was amazed to see Kyong Hwa. A laughter leaked from the corner of his mouth. Looking at one of his men approaching him, he almost shouted, "Is that small girl a reserve footballer? I want you to ask about her—how old is she? And who has brought her here?"

The next day the chief inspector started his examination of the reserve team as planned.

The director and the vice-director in charge of technical affairs of the sports club and members of its training department were also out to watch the examination.

While examining all members of the reserve team, the inspector paid more attention to Kyong Hwa. During the 30-metre, 100-metre and sixminute runnings, indices for measurement of physical preparedness, Kyong Hwa passed the first two, but not the last. And she passed the dribbling and correct kicking tests.

"Mr. Director, that player's got a good kicking power and technique. But football is never possible without physical preparedness, isn't it? She is too small for her age, so she lacks endurance, I am afraid." said the man.

"So am I," the director said. "I thought she would not do if she is not tall enough even in a year."

"Who has brought her here?" the inspector asked again.

"Kang Ryong Un selected her. He is the best coach in selecting reserve players, so I trusted him," replied the director.

"In view of the current trend in the development of football, a low height is a big problem. After all, it seems that there is a problem in your system of training reserves. Send for your senior coach Kang Ryong Un," the inspector demanded.

The director obeyed him.

The senior coach went to the room where the chief inspector was waiting.

He immediately recognized Kang, welcoming him. Both of them had been football players around the same time.

"Ryong Un, I am afraid there is a problem with the selection of reserves you're in charge of. Kyong Hwa is too small for her age. There was a strange factor that made you select her, wasn't there?" asked the senior official.

"No. I selected her because I was confident that she would be able to become an excellent player. And as her parents are tall, I thought that she would surely grow tall if she was brought to the club," Kang explained.

"But what's the result?"

Kang was now struck dumb.

"She has failed to pass the test of endurance. What then can you expect of her?" the question continued.

"You do not need to decide hastily now because of her age. I brought her only after observing her in many matches. In particular her kicking is correct

▶ and strong. So I became confident that if she grows tall in future she will surely be able to make a brilliant figure," Kang insisted.

The inspector, however, was stiff and unbending in his attitude.

"But in my opinion she is too small. She won't do. Even if you wait and see any longer, it's obvious. And you, too, know well that football is impossible only with technique apart from physical preparedness," he persisted.

Kang said no words.

"This time she should be sent back," rang the concluding voice.

The words were so decisive and stubborn that Kang could not talk back to him any more.

That evening Kang went to see the director. "Mr. Director, I'm here because I worry about Kyong Hwa's matter. She should not be sent back," Kang entreated.

"You're wrong. I, too, think you have mistaken Kyong Hwa. She has no prospect of growing tall." said the director.

"But football does not depend on height alone, I think. Outstanding kicking, dribbling and speed are also good merits. I believe Kyong Hwa has got them," Kang went on to persist.

"Your opinion is based on assumption alone. Anyhow, I agree with my seniors' opinion," the director concluded.

Later that evening Kyong Hwa was called to the director's room. Looking at her the director gave a heavy sigh before saying, "It's one year since you joined my club. But you've not grown any taller, and you have failed to pass the state inspection. So we've decided that you are far from our hope. So, you're discharged. But don't be disappointed. As you're still young, keep training in football. If you grow tall and develop, other sports clubs might take you. So brace yourself up. Now you are dismissed."

His words were as good as a definite order. Kyong Hwa returned to the lodgings helterskelter. And in bewildered astonishment she fell forward bursting into tears as she unexpectedly found her great hope reduced to noth-

The following day Kyong Hwa bade farewell to her coach and members of the reserve team.

Kang said to her, "Kyong Hwa, brace yourself up. You should never be disappointed or give up. I want to ask you to perfect your technique of mid- and long-distance shot and put special efforts in growing tall. Remember this exactly."

Kyong Hwa only nodded at his words.

Leaving Pyongyang by train she firmly made up her mind to rise again to surely succeed though she was rejected by the second national sports club as well for her height.

(To be continued)

National Intangible Cultural Heritage (29)

Kite Flying

IN KOREA EVERY YEAR THERE TAKES place children's kite flying from late autumn until the end of the cold season the next year. It is at its peak in the first 15 days of the lunar new year.

It is a game of flying a kite high into the sky by dint of wind.

Kite is pronounced *yon* in Korean. The word is believed to come from the fact that the toy flies as high as a bird of kite—*yon* shows the pronunciation of an ideogram that means the bird.

The game came into being in ancient times, and continued to be played widely. This can be proved by what the historical books *Chronicles of the Three Kingdoms* and *History of Koryo* describe about the game.

And it is said that during the Imjin Patriotic War late in the 16th century, when Japanese invaders occupied the Walled City of Pyongyang temporarily, patriotic Korean woman Kye Wol Hyang used a kite to inform General Kim Ung So outside the city of the enemy movements, thus making a contribution to retaking the city.

The toy was made with paper, thin strips of wood and thread.

The game has long been divided mainly into high flying, skilful flying and kite fighting.

High flying is done by jerking the thread a bit and loosening it. Children fly the toys into the sky until they look like white dots.

Skilful flying is done by using the kite string to do various tricks.

Kite fighting is done by making the strings of kites entangle and waiting and seeing which string endures long.

The game is still one of folk games the Korean children like best.

The current kites include three-dimensional ones and those shaped like birds such as swallow, wild goose, hawk and eagle, which make the game more interesting.

Unlike those in the past kites are now made with plastic or varieties of thin and durable cloth.

On many occasions such as folk holidays there take place schoolchildren's kite shows and their kite flying, skilful kite flying or kite making competitions across the country.

The game is steadily improving thanks to the constant thinking and earnest efforts of schoolchildren who are the most sensitive to the new.

Kite flying has thus been registered on the list of national intangible cultural heritage.

Rim Ok

38 KOREA TODAY No. 4, 2019 39

Songdo Restaurant

IN MORANBONG DISTRICT, Pyongyang, there is the Songdo Restaurant, which serves Kangwon provincial specialities made with marine products from the East Sea of Korea.

Kangwon Province is a coastal region with Wonsan Port. The local sea has over 600 sorts of sea creatures including migrating fishes such as anchovy, saury, sardine, mackerel, herring and sailfin sandfish, and non-migratory fishes such as Alaska Pollack, flatfish and left-eye flounder, bivalves such as ark shell, mussel and oyster, octopus, trepang and sea cucumber.

It is a long way from Pyongyang to Wonsan.

A long time ago the country saw to it that a seafood restaurant was opened in the capital city of Pyongyang so that the citizens could eat varieties of dishes made with such marine products without taking the trouble to go to the sea.

The marine products contain plenty of not only protein, vitamins, minerals, microelements and other nutrients but also substances that have pharmacological effects like diuretic, antidote and anticancer agent.

Especially, an ark shell dish and an ear shell dish offered by the restaurant are helpful in producing blood, protecting the liver and promoting blood circulation respectively.

Shellfish dishes are very popular with the customers of the restaurant.

It also serves an assorted steamed dish consisting of 20 kinds of shellfish including *Mactra veneriformis*, scallop, *Modiolus modiolus difficilus*, mussel, large clam, wreath shell and mud snail. The dish garnished with vinegary soy or vinegary soybean paste tastes savoury and toothsome to the admiration of anybody.

To see people eating Alaska
Pollack, Spanish mackerel, mud
snail and other hot fish casseroles while keeping blowing on
the dishes, the beholders, too,

feel their mouths watering.

Capable of accommodating over 200 people at a time, the restaurant also serves boiled rice and fish soup, dishes of sliced raw fish and starch noodle with seasoned slices of raw fish. And according to customers' requirements it provides birthday parties as well.

Kim Kyong Hui, an official of the restaurant, says that a dish of raw abalone slices and trepang soup it serves are great favourites of the customers.

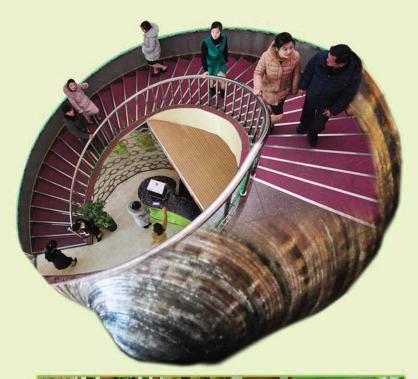
Now, in order to make various seafoods nutritive and medicinal so as to make a contribution to the improvement of people's dietary habits and health, the restaurant often organizes a dish show and technical study, thus helping its cooks further enhance their technical knowledge and skills. And they are striving to develop new cooking methods so as to increase the menu.

Sim Chol Yong





Dishes of the restaurant.







Mt Kumgang (2)

Outer Kumgang (1)

UTER KUMGANG IS A scenic spot covering the area between the central peaks ranging north and south with Piro Peak, the main peak of the mountain, as the central one and Sea Kumgang along the east coast.

Outer Kumgang, which embraces a vast area from the Paekjongbong district in the north to the Unsondae district in the south, presents a combination of very beautiful sights—a mixture of a good many peaks with imposing magnificent qualities befitting mountains, fantastic rocks of myriad shapes, big and small waterfalls and pools.

It is divided into Onjong, Manmulsang, Kuryongyon and other districts according to its regional characteristics and sightseeing course.

The Onjong district except the east is surrounded by steep peaks like Mae (hawk) Rocky Mountain, Talgal (egg)

Rocky Mountain and Munphil Peak. The Onjong Stream flows through the centre of the district forming blue ponds here and there, adding to the surrounding scenery together with thick forests of pine and pine-nut trees on the shore of the stream and recreation and service facilities.

The Mae Rocky Mountain (255 metres in height) located in the northwest of Onjong-ri has fantastic rocks shaped like hawk, cat, bird, terrapin, seal and so on. The most famous of them is the Mae Rock resembling a hawk flying down just now to look from side to side. On a broad and flat rock across from the south side of the mountain there is the Talgal Rocky Mountain with an enormous, oval rock mass. The egg-shaped rock tells a legendary tale that a warrior once cut to death a snake climbing up to take an egg. Before the rock stands an elongated rock looking like a severed snake.

In the Sujongbong district are Sujong (crystal) Peak and

Pari (bowl) Peak where one can see a special landscape as they have natural crystals different from other peaks in Mt Kumgang. In addition, there are some noted places like the Sujong Gate, Kangson Rock and the Kumgang Cave. Sujong Peak consists of granite containing clear and white crystals. In olden times the whole peak was said to be glistening like a large jewel. It is a big rocky peak and its surface is smooth as if it is polished artificially. On the ridge of the peak are Jara (terrapin) Rock, Pidulgi (dove) Rock and other rocks of fantastic shapes. On the way up to the peak there is the Sujong Gate, one of the biggest natural stone gates in Mt Kumgang. On the top of the peak are countless rocks, including Kwanum Ryonbong, Kangson Rock where it is said fairies descended to play, and a place where one can enjoy the beautiful scenery of the East Sea of Korea.

▶ of Sujong Peak is the widest rock in the mountain. It looks like a round bowl with no angles lying upside down, hence the name Pari. All other peaks in the mountain are fastigiated, but Pari Peak is round and flat along with another Pari Peak in the Paekiongbong district. On the top of the wide rock are hollows of different shapes filled with rainwater, in which frogs and salamanders live. The rock is also called Chima (skirt) Rock

a skirt when it is seen from below. Beside the way to Pari Peak is Kumgang Cave, and there is a clear spring called Kumgang Spring in the centre of the ground at the end of its inside.

In the Manmulsang district there are precipices symbolizing the natural beauty of Mt Kumgang and other fantastic rocks resembling all shapes of things, showing a unique scenery. There are also noted places like Hanha Valley, Mansang Valley and

> its foggy scenery. And it boasts both the natural beauty of mountains and that of valleys.

The Kwanum Ryonbong is jagged. As it has fantastic rocks like Jangsu (general) Rock, Kom (bear) Rock and Stone Gate, it is a spot typical of magnificent natural beauty of mountains in Mt Kumgang. Here is Kwanum Falls, 37 metres in height.

On the cliff at the middle edge of Kwanum Peak is a rock resembling a bear which has its forelegs stretched out to avoid falling down from a cliff and its neck craned to look down the valley. So it is called Kom (bear) Rock. It is 10 metres in height and 6 or 7 metres in width. At the foot of the peak is the Munju Pool. The bottom of the pool is covered with beautiful and round small stones. The rock has a tale about a stupid bear anx-

A range of peaks in Outer Kumgang.

in the crystal-clear water of the Munju Pool while roaming in search of food. As it was very hungry, it took them for acorns that had fallen the previous year. He jumped down the cliff, eager to take them at once, but was caught in the middle. He tried to stand up and jump down again to the pool where the "acorns" were. But he failed to take his forelegs out of the rock and finally settled into a rock as time passed.

(To be continued)

Pari (bowl) Peak to the east

The Kuryongyon Valley.





because it looks like pleats on Manmulsang. ious to eat acorns. The tale goes: Once there As the widest of valleys in the mountain lived a one-thousand-year-old Hanha Valley has a bear in the Piro Peak area. One large open field to vision, day, soon after hibernation, it and is characterized by saw something small and round

KOREA TODAY No. 4, 2019 43

Painter Sin Saimdang

SIN SAIMDANG WAS A FAMOUS WOMAN painter in the 16th century. She was also a fine mother who brought up her four sons into able men.

Born the second daughter of an aristocrat's family in Kangnung in 1504, Sin wrote a good hand in her childhood. And she was a woman good at doing feminine things, including needlework and embroidery. Her painting skill in particular was unmatched.

One autumn day she attended a wedding ceremony held in her relative's home. She happened to see a woman worriedly fingering her skirt in the corner of a room while all others were in a festive mood. When she came to know that the woman was worried that her skirt was stained as she had spilt meat soup from a bowl. Furthermore, the skirt was a new one she had borrowed from her neighbour to wear for the ceremony.

"Don't worry. I'll erase those dirty spots," Sin assured the woman. Then she immediately took up a brush and drew some bunches of grapes on the skirt. The grapes looked so lifelike, as if fresh from the vine

Now, giving the skirt back to the woman, Sin said, "I think you can barter this easily for another good one at the market." When the woman took the skirt to the market, wealthy ladies scrambled to have it, bidding up the price. So she sold it for a price several times higher than its original cost. Then she bought red silk and made a new skirt with it, which she gave to her neighbour. And she took the remaining money to Sin. Refusing to receive the money, Sin said she had learned drawing not to make money. Seeing the woman out, she told her to buy a skirt for her with the money.

One day Sin painted a picture of butterflies and grass worms which were so vivid that chickens came up and picked away at the picture. They had taken the butterflies and worms on it for living things.

Her paintings were characterized by feminine softness, correct expression, delicate stroke and clear harmony of colour.

Carp, one of her paintings, depicts each of the fish's scales so vividly as to make any person feel

as if he or she were looking at a living carp. Her other famous paintings *Wild Duck*, *Mandarin Fish*, *Wild Goose* and *White Heron in Lotus Pond* are still popular.

When she was 19, Sin married Ri Won Su, a government inspector in a middle rank living in Seoul, and had four sons. Ryul Gok, the third of



them, was the cleverest. So, when he was three, she began to teach him written and spoken Korean, and taught him to understand why painting should not be apart from reality and to realize keenly the charm of noble art.

When he was 13, Ryul Gok entered into government service, and held different posts for over 30 years proposing lots of reform plans and distinguishing himself as a great scholar.

Ri U, the youngest son of Sin, succeeded to her technique of calligraphy and became a famous calligrapher.

Sin energetically created noted paintings and brought her sons up into fine men before she died at the age of 47.

Rim Ok

Japan's Old Crime of Sexual Slavery Revealed (3)

Issue of Japan's Responsibility for Crime of Sexual Slavery

JAPAN MOBILIZED ALL SORTS OF STATE mandate including the military power to establish the sexual slavery system for its army.

The international women's war crimes court 2000 clearly exposed through many circumstantial evidence and the victims' testimony that Japan had mobilized military and government power in establishing the sexual slavery system for its army. A typical example is the "Matter of recruiting the comfort station staff for the army" (written notification) sent by Umezu Yoshijiro (1882–1949), the then Japanese Vice-minister of War, to the chiefs of staff of north China directional army and central China directional army on March 4, 1938. The notification clearly shows who directly ordered the establishment of the sexual slavery system for the Japanese army and ran the system.

The document was sealed by Imamura Hitoshi, the ordnance department head of the Ministry of War, and Umezu Yoshijiro under the authority of Sugiyama Hajime (1880–1945), the Minister of War. It is pointed out in the document that the disorganized recruiting of "comfort women" injured the "prestige" of the Japanese army, impeded military operations and created an unfavourable atmosphere for the "security" of the stationing places. The following are part of an order specified in the document.

- "① Recruit 'comfort women' thoroughly under the control of the expeditionary force.
- ② In case of mobilizing professional civilian pimps, select them carefully.
- ③ Recruit 'comfort women' in connection with and with the help of the local gendarmerie and police forces."

According to the order there was held a joint meeting of the Ministry of War, the Ministry of Foreign Affairs and the Ministry of the Navy at the Japanese consulate general in Nanjing on April 6, 1938 in the presence of the quartermaster general of the Ministry of War, the consul general and the naval attaché to the consulate general. At the meeting they discussed the principle of managing "comfort stations" and the issue of increasing them in the future, and agreed on the following articles:

"① The consulate general has nothing to do with the 'comfort stations' exclusively for the ground forces under the condition that they are directly controlled or run by the military.

- ② The control of the civilian managers of the 'comfort stations' shall be done by the consulate general, and the control of the soldiers and army civilian employees frequenting the stations shall be done by the gendarmerie.
- ③ When it is considered necessary, the gendarmerie can make an official inspection of 'comfort stations.'
- The expeditionary army shall gradually change civilian brothels into its 'comfort stations.'
- ⑤ In case the expeditionary army allows civilians to establish 'comfort stations' for the army, it shall inform the consulate of their legal residence, addresses, names and age."

In September 1940 the Japanese Ministry of War notified its military units that it was necessary to pay attention to "comfort" facilities, that "sexual comfort" greatly influenced soldiers and that especially, "sexual comfort" had a great effect on the "enhancement of soldiers' morale," the "maintenance of military discipline" and the prevention of "crimes" and "venereal diseases." Besides, it also took a measure for the military to exercise direct control over the sexual slavery system and permanently maintain it. This was the proposal presented by the ministry's rewarding department head, which was made public through the "department head's report" on March 26, 1942.

The proposal suggested that permanent "comfort" facilities are established for noncommissioned officers and their juniors with the "defence fund" donated by the citizens. On the basis of its examination the military authorities decided to readjust the "comfort stations" established and run by civilians and establish the "comfort stations" managed and run directly by the military.

In March 1942 soon after the start of the Pacific war the military revised Emperor Hirohito's "Royal ordinance No. 300" for the worse to include the affairs relating to the "comfort stations" in welfare work. And in April that year the Ministry of War designated the rewarding department of the personnel affairs bureau as the department responsible for taking by force and transporting sexual slaves, and managing and operating "comfort stations." As a result, a management and operation system of "comfort stations" was set up from the higher strata of the Japanese army to the affiliated units, and the crime of sexual slavery was committed on a large scale under unified control.

The Japanese military regarded Korea as a source of sexual slaves. And the Korean Govern-

ment-General and the Command of the Japanese Korea Army directly commanded and carried out the abduction, kidnapping and taking by force of Korean women. When the Japanese military issued an order, the Police Bureau of the Korean Government-General dictated it to each provincial police department. Then the provincial police departments dictated it to each county, and the counties dictated it to each sub-county. And sub-county heads themselves took women out or mobilized subdivision or village chiefs to do so. This was a measure taken for the military to directly control and maintain the sexual slavery system permanently. All the facts prove that Japan's past crime of sexual slavery was an extra-villainous inhuman crime directly organized and committed by the military under the positive concern of the government.

The insular country, however, has never honestly reflected on and apologized for the crime. Instead, it impudently behaves justifying the crime. Today the country's attempt to deny its past crimes goes beyond the range of concealing and reducing, turning into overall distortion and denial. When the UN Committee on the Elimination of Racial Discrimination made public an inspection report, Japan grumbled angrily about the report. The Chief Cabinet Secretary and the Minister of Foreign Affairs complained that the "issue of the comfort women is not originally the object of application to the treaty of the elimination of racial discrimination," and that "if the issue of the comfort women is dealt with

continuously, it will be the one relating to the significance of the committee's existence." They mean that the issue of the sexual slavery is not the one to be discussed by the international community.

It is not known how many women killed themselves while groaning under the nightmarish sexual slavery by which they each had to suffer sexual violence by scores of lustful Japanese soldiers every day or tried to escape from the hell even at the risk of their lives but were captured to be disembowelled or dismembered.

When they neared their defeat (August 15, 1945), the Japanese imperialists, afraid that their crimes would be revealed, collectively shot, burned and buried to death the Korean women who had undergone all sorts of mental and physical sufferings as sexual slaves. As a result, most of the 200 000 Korean comfort women did not return home alive. Still unforgettable is the resentment of those who were buried in desolate alien lands after their dignity and chastity were mercilessly violated as the victims of the Japanese imperialists' crime of sexual slavery that would make even beasts blush with shame.

It is advisable for the Japanese politicians to know the history correctly before talking about politics, be faithful to it and bend their knees and ask for the pardon of the victims of the sexual slavery and their bereaved families, instead of visiting the Yasukuni Shrine.

Rim Hye Gyong

① Korean women are taken to barracks of the Japanese aggression forces. ② A Korean woman who was taken to the front to be forced into sexual slavery. ③ Korean women who were forced to serve as sexual slaves. ④ An interior of a room of a "comfort station" for the Japanese army.

Towards Peace, Prosperity and Reunification

ONE YEAR HAS PASSED SINCE THE publication of the historic April 27 Panmunjom Declaration. A year is not a long period of time, but the last year was the one of significance that inspired the Korean nation with a hope of its bright future.

With the beginning of the year 2017 the Korean peninsula was in a touch-and-go situation in which no one knew when a nuclear war would break out. The international community expressed a great fear that a war would break out in the Korean peninsula in 2018, and that it would plunge not only Northeast Asia but also the rest of the world into chaos.

At this juncture the DPRK government set forth a new line for making a great turn in north-south relations from the outset of 2018 and took broadminded measures consecutively, thus easing north-south relations which had been in a stage of severe confrontation, and opening up a new era of reconciliation and unity.

In April last year, amidst a growing atmosphere of reconciliation and unity, the Korean nation greeted a historic moment to be specially recorded in the history of its reunification movement. They saw scenes filled with ecstasy and hope taking place for the first time since the division of the nation at Panmunjom (the place where the armistice agreement was signed between the DPRK and the US on July 27, 1953), which, as the symbol of inter-Korean confrontation and hostility for long years, witnessed all sorts of pains and sufferings caused by national division. On April 27 the top leaders of the north and the south freely crossed the demarcation line to and fro, hand in hand, and it seemed that they broke down the forbidden line, the wall of division. Their meaningful meeting at Panmunjom served as an opportunity to inspire all the Korean people with a hope of their bright future once again.

They reached a consensus of views on the agenda items of their talks, and agreed to meet each other at any time in the future to have sincere discussions about pending problems and the crucial problems of the nation so as to carve out a new history of north-south relations wisely and to work together to promote the favourable trend towards peace, prosperity and reunification of the Korean peninsula.

The summit adopted the Panmunjom Declaration which would be a new landmark of epoch-making significance in re-linking the severed vein of the nation and hasten the future of common prosperity and independent reunification by achieving the overall and radical development in inter-Korean relations in keeping with the unanimous desire and requirement of the whole nation aspiring to peace

and reunification on the Korean peninsula.

The adoption of the declaration was a solemn statement to the entire Koreans and the world that there would be no more war on the Korean peninsula and a new era of peace was ushered in there.

At that time high-ranking figures, governments, organs and organizations of many countries expressed support to the north-south summit talks. The Finnish President appreciated the inter-Korean summit talks affirmatively, expecting such a trend to last, and the Brazilian President wished that the talks would lead to peace in the region.

Later there was a dramatic change unprecedented in the history of national division spanning over 70 years. Another two rounds of inter-Korean summit meetings and talks took place amid great expectations and interest of peoples at home and abroad, and this clearly showed that north-south relations entered a completely new stage.

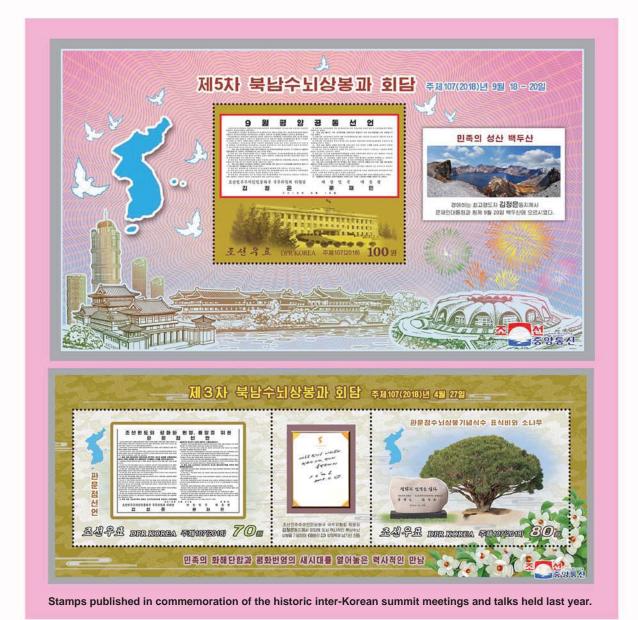
The Panmunjom Declaration, the September Pyongyang Joint Declaration and the north-south agreement in the military field, which were adopted by reflecting the firm resolve and will to usher in an era of peace in which war exists no longer on the Korean peninsula, are of great significance as a virtual nonaggression declaration in which north and south have committed themselves to terminating fratricidal war based on force of arms.

While sportspersons of north and south displayed the wisdom and strength of the nation by jointly entering international competitions, artistes came and went to Pyongyang and Seoul to fire the enthusiasm for national reconciliation and reunification. And the significant first step towards common prosperity of the nation was taken by promoting cooperation projects in various fields including railways, road, forestry and public health while resolutely overcoming manifold obstacles and difficulties.

The surprising changes which took place in inter-Korean relations last year convinced all the fellow countrymen that when they join minds and efforts, they can turn the Korean peninsula into the true home of the nation, which is the most peaceful and will prosper forever.

Though it was the initial step, north and south pooled intentions and wisdom to surely reverse inter-Korean relations in the utmost extremes of distrust and confrontation to those of trust and reconciliation and make in a short time eye-opening achievements which were unimaginable in the past. It convinced all the fellow countrymen that when they join minds and efforts, the precious dream will be realized in near future.

The time of Pyongyang and Seoul was set together, and inter-Korean cooperation and



exchanges were expanded and developed in an allround way so that national reconciliation and unity could be consolidated. And in January this year the DPRK put forward a new proposal whereby all the fellow countrymen can practically benefit from improved north-south relations. It expressed its willingness to resume the Kaesong Industrial Park and Mt Kumgang tourism without any precondition and in return for nothing, in consideration of the hard conditions of businesspersons of the south side who had advanced into the Kaesong Industrial Park and the desire of southern compatriots who are eager to visit the nation's celebrated mountain. This is of significance in making greater strides in the efforts to boost inter-Korean relations, achieve peace and prosperity and reunify the country.

It requires the north and the south to join hands firmly and rely on the united strength of the fellow countrymen. When they join minds and efforts, the north and the south will be able to open a broad avenue to national prosperity overcoming all sorts of external sanctions and pressure, and any challenges and trials.

North and south should not pass up the favourable atmosphere of today when all the nationals' interest in and aspiration for reunification are growing unprecedentedly, but actively try to find a peaceful reunification plan based on nationwide agreement and direct sincere efforts to this end. This will bring into reality the dream of the Korean nation very anxious for reunification.

Kim Yong Un

National Flower of Magnolia

 $\mathbf{M}^{ ext{AGNOLIA}}$ is the national flower of Korea.

Previously the flower was called *hambakkotna-mu* or *mongnyonhwa* in Korean.

One day in May 1964 President Kim Il Sung visited Mt Jongbang and saw a magnolia tree. He said that the Korean people had long given the suffix ran to fragrant and beautiful flowers, and that the flower had better be named mokran, meaning flowers blossomed on a tree. He added that the flowers of magnolia looked not only beautiful but also strong and yet simple and elegant, and that they seemed to reflect the spirit of the resourceful Korean people. From then on the flower was called mokran in Korean.

The flower tree grows well in a damp place like a valley or a hillside.

At present it is distributed not only in Korea but also in other parts of east Asia including Shandong in China and northeastern China, the Far Eastern Region of Russia and Japan.

The tree grows up to two or five metres, and its bark is light grey and relatively smooth.

The leaves are shaped like an egg upside down, and usually 12 to 14cm in length and 5 to 10cm in width.

In May and June white fragrant flowers bloom on fresh branches drooping slightly or facing sideways. They bloom in the order of growth of fresh branches, and thus the flowers can be seen on a tree for 50 or 60 days.

The plant is strong in resistance to cold, and can be cultivated in the temperature of 26°C below zero at the lowest. It can be propagated by seed, grafting, bent branch planting, division or cutting.

Indigenous to Korea the plant is superior in many aspects such as beauty, vitality and economic value. The flower is beautiful and fragrant, and the leaves and shape of the tree are good to look at. So the tree can be planted along streets, in parks, around enterprises or institutions and in a school campus.

Besides, if the tree is planted in a large park or pleasure ground along with other trees, it grows well and adds to the surrounding scenery. It also can be planted in a flowerpot to be placed in a room, on either side of the entrance to an important building, in a lobby or in a meeting place.

The flower is used as a raw material for the production of high-grade perfume, and the leaves are used for the treatment of hyperpiesia or vertigo after being picked before frost falls and dried in the shade.

Choe Sol Mi





