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Order of the Welwitschia Mirabilis 1st Class

Kim Jong Il
The Most Ancient Order of the Welwitschia Mirabilis
(1st Class)
this 24th day of August 2002

Chairman Kim Jong Il received the Order of the Welwitschia Mirabilis 1st Class, the top order of Namibia, from the President of the Republic of Namibia in August 2002.

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Photo by Ra Ju Hyok

Back Cover: At the Taedonggang Combined Fruit Farm

Photo by Ri Chung Ryol

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Banner of Self-reliance and Self-development

IN RECENT YEARS THE DEMOCRATIC People's Republic of Korea has achieved amazing things in the spirit of self-reliance and self-development which is the driving force of its advance even in the unprecedented military pressure and economic sanctions of the US and its vassal nations.

Last year, the Korean people wrought one miracle after another in the revolutionary spirit of self-reliance and fortitude while crushing the challenges of the hostile forces resolutely.

On January 1, 2016 the multi-functional Sci-Tech Complex went online after it had been completed in a little over a year. With a total floor space of over 106 600 square metres, it largely comprises indoor and outdoor exhibition divisions and a scientists' lodging house. In the complex, there are bulky sci-tech data, video materials, models and laboratories for simulation. The inauguration on the first day of the year clearly showed the determination of the country to step up the building of a socialist power by giving priority to science and technology. Supreme Leader Kim Jong Un attended the inauguration ceremony of the complex and cut the tape, reiterating the will of Korea.

Now it is usually visited by as many as 50 000 people per day. In particular, a great network has been formed across the country centring on the complex and new sci-tech data are distributed every- ►

The Sci-Tech Complex.

The earth observation satellite *Kwangmyongsong 4* was launched successfully in February 2016.

where through the network, so the comprehensive sci-tech potentiality of the nation is improving rapidly.

On January 6, 2016 Korea succeeded in its first H-bomb test. After succeeding in several nuclear tests, it successfully carried out the H-bomb test, earning a clear profile as a nuclear power.

Regarding this issue, the nuclear powers of the world said that the Korean nuclear and hydrogen bombs are advanced models developed in the Korean style, instead of US or Russian ones, that Korea is one of the six H-bomb-armed states and that its first successful H-bomb test is demonstration of its powerful military capabilities dealing a telling blow to the US that is pursuing the policy of aggression and war in the Korean peninsula and the rest of the world.

At 9 o'clock, February 7, 2016 the earth observation satellite *Kwangmyongsong 4* was launched successfully in Korea. The press and specialists in south Korea spoke of north Korea as the tenth self-reliant satellite launching nation, and the space powers of the world voiced that Korea had launched the earth observation satellite *Kwangmyongsong 4* successfully and that Korea rose up to the position of a space power.

In the difficult situation where obstructive moves of the hostile forces were prevailing, Korea launched a number of artificial earth satellites successfully after it put its first satellite *Kwangmyongsong 1* into space successfully in August 1998 with its own efforts and technology. As it placed another satellite named *Kwangmyongsong 4* in orbit correctly, Korea showed well that it is making rapid progress in space development against continuing challenges from the hostile forces.

In March last year Korea was in a supertension of touch-and-go situation. The US and its allied imperialist forces, frightened at Korea's nuclear test for self-defence and satellite launching, ran amuck as never before to suffocate the DPRK.

At this juncture, Supreme Leader Kim Jong Un proclaimed the construction project of Ryomyong Street. In recent earlier years, Korea had built a new street a year, including Changjon Street and Mirae Scientists Street. The Ryomyong was the largest project with latest facilities in terms of scale and standard, compared with earlier street projects.

The south Korean press reported that the DPRK answered the severe sanctions of the international community with its construction of large-scale Ryomyong Street ridiculing the UN resolution by breaking through the sanctions head-on. Foreign

A scene from the Pyongyang citizens' mass rally and procession in celebration of the Seventh Congress of the Workers' Party of Korea in May 2016.

media reported that the project meant a political opportunity to show the spirit of Korea that is determined to advance steadfastly in any extreme pressure and sanctions, and that the reality of the country in which great changes were happening in the effort to improve the living standards was just a miracle.

In April last Ryomyong Street was completed as an energy-saving and green street in the 21st century demonstrating Korea's unfathomable power of self-reliance and self-development. It showed clearly that no pressure or sanctions could check the advance of Korea.

In April last year, Power Plant No. 3 of the Paektusan Hero Youth Power Station went into operation in the northern highland of the country. The young workers, who had built Power Plants Nos. 1 and 2 in the biting cold in which even the birch freezes up to break, finished the Power Plant No. 3 project in less than half a year, demonstrating the indomitable spirit and mettle of the Korean youth.

Supreme Leader Kim Jong Un said that he was very glad that the electricity problem was solved in Samjiyon County, and that what made him happier was that the Korean youth had prepared themselves as heroes of the time and giants of creation as Chairman Kim Jong Il had wished.

In May last year, the Seventh Congress of the Workers' Party of Korea was held in a meaningful and splendid way as a grand political festival. The congress proudly reviewed the WPK's glorious history of leading the Korean people wisely to victory crushing all the challenges of history in the previous years, and unfolded an ambitious blueprint for building a socialist power. The historic congress and its celebration events were the icon of the image of the WPK that is leading all the service personnel and people to the final victory under the wise leadership of the supreme leader and the spirit of single-hearted unity of the country.

In June and August 2016 Korea succeeded in the test-fire of ground-to-ground intermediate-range strategic ballistic rocket *Hwasong 10* and the test of sub-launched ballistic missile *Pukguksong*.

The south Korean press reported it as success of successes, victory of victories, arguing the north has got the best nuclear weapon in the hand, and featuring the re-rise of the theory on needlessness of THAAD. From the US came such voices as that north Korea's nuclear weapon was an immediately serious threat, that north Korea was posing an unusual and special threat to the US's security and economy, and that no anti-missile system could check north Korea's nuclear and missile strikes.

The US had no other choice but to acknowledge the reality in which its mainland and its bases of aggression including the Pacific operating area fell in the striking sphere of the DPRK, and that the strategic structure of the US-DPRK confrontation had changed completely.

In September 2016 Korea succeeded in a nuclear warhead blasting test.

Unable to cope with the extremely tough, hardline countermeasures of Korea the US Joint Chiefs of Staff chairman lamented that at present the war with north Korea would develop into a complicated form different from what it would be when the US had mapped out a contingency plan 15 years ago, and that it would assume the super-regional, multi-territorial and multi-functional aspect. And the puppet south Korean authorities screamed describing the warhead blasting test as an immediate threat, and north's nuclear threat on the loose. The major world media widely reported it as the countermeasure against the US's hostile policy and final verification of the power of the standardized nuclear warhead, saying the DPRK is now able to manufacture as many different kinds of powerful nuclear warheads as it wants.

The test of sub-launched ballistic missile *Pukguksong* was carried out successfully in August 2016.

A fierce gale and heavy rain ever seen since the country was liberated in August 1945 flailed the northern areas of the DPRK from August 29 to September 2 last year, bringing uncontrollable disasters. The hostile forces, availing themselves of the situation, gleefully spoke of the DPRK's "crisis," ratcheting up their political and military pressure on and economic sanctions against the country.

At this juncture, Supreme Leader Kim Jong Un saw to it that the main thrust of the 200-day campaign was changed to the efforts for recovery from the flood damage and unfolded a grand plan for restoration, saying that there is no emergency greater than the people's pain and no more important revolutionary work than the work of alleviating their sufferings. Thanks to his guidance houses for as many as 11 900 families, dozens of new streets and villages went up in a matter of a little over two months. The restoration effort fully demonstrated the WPK's climate of making selfless, devoted efforts for the good of the people and the image of Korea whose Party and masses are merged into a harmonious whole.

In December 2016 the 200-day campaign came to a successful end and the First Conference of Chairpersons of WPK Primary Committees was held splendidly. During the 200-day campaign, the industrial sector hit the target of industrial output value at 119%, and thousands of factories and enterprises across the country carried out or overfulfilled their assignments envisaged in the national economic plan ahead of schedule, thus laying a solid foundation for implementing the five-year strategy for national economic development.

The first conference of primary Party committees marked a new turn in strengthening the WPK into a party with an indomitable spirit and an optimistic and militant quality and in inspiring all the service personnel and people to an all-out campaign to carry out a grand plan of building a socialist power.

Working miracles one after another in 2016, the Korean people built up their own capacities radically with their own efforts, technology and resources—this is promising sure victory of a bright future.

Ri Jong Nam

Opening up Era of Mallima

TODAY THE MOVEMENT FOR MALLIMA Speed of the building of a thriving socialist nation is in full swing in the Democratic People's Republic of Korea. Standing in the van of this campaign is Supreme Leader Kim Jong Un. He has inherited the arts of leadership of President Kim Il Sung and Chairman Kim Jong Il who led the revolution and construction to victory by developing the might of the popular masses into the powerful driving force. With a determination to thoroughly implement the decisions of the Seventh Congress of the Workers' Party of Korea by dint of the movement for a new speed of the time and proudly declare the complete victory of socialism, he encouraged all the people to dash ahead at Mallima Speed.

In January last year the supreme leader visited the Pyongyang Kim Jong Suk Textile Mill. There he earnestly said that the Party members and other working people should emulate the fighting spirit and mettle of their predecessors who had performed miraculous merits answering the question *Are You a Chollima Rider?* He advised that they should live and struggle as proudly as to answer the question *Are You a Mallima Rider?*

In 2016 the Korean people waged the 70- and 200-day campaigns. Those campaigns were a massive struggle of creation that gave birth to a new Mallima era, smashing to smithereens the imperialists' vicious schemes to isolate and suffocate the DPRK and bringing about a turning point on all fronts where a powerful socialist country is being built.

Last year the anti-DPRK sanctions and moves of isolation and suffocation reached the extreme. Even in the manifold hardships Korea did not give up at all. On the contrary, it got stronger. It achieved one success after another in consolidation of the defence capability; it conducted the first H-bomb test, test-firing of various means of strike and nuclear warhead test successfully to cope with the imperialists' nuclear war threats, which were growing more wicked day by day, and briskly developed state-of-the-art military hardware. Following the successful launch of the earth observation satellite *Kwangmyongsong 4*, the country succeeded in the static firing test of new-type high-thrust motor of the launch vehicle for a geostationary satellite. By doing so, Korea opened up a broad avenue to the exploration of outer space.

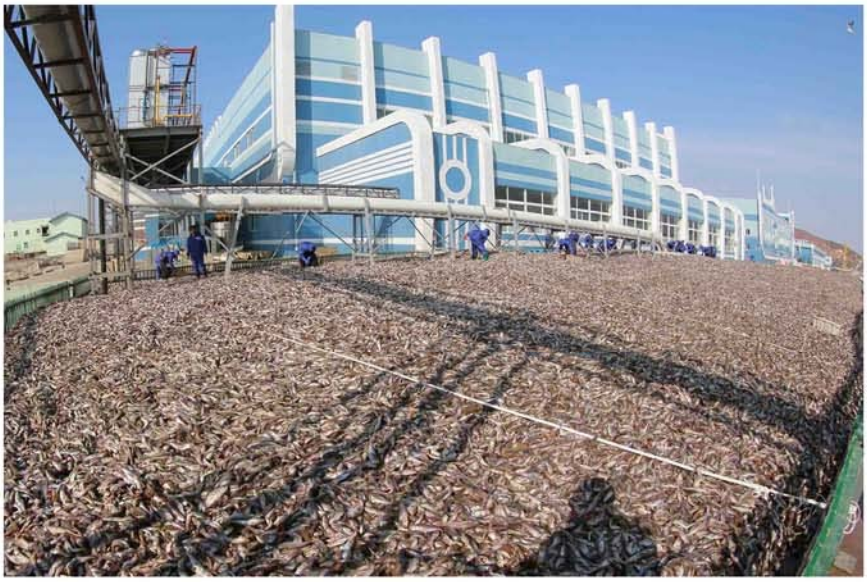
Numerous industrial establishments and cooperative farms registered the success of surpassing the peak-year level, and the People's Army stood in the vanguard in adding lustre to the history of "gold seas." And a miraculous success was made in the restoration of some areas in North Hamgyong Province which were devastated by a sudden natural calamity. Amidst the flames of creating a legendary construction speed Power Plant No. 3 of the Paektusan Hero Youth Power Station, the Medical Oxygen Factory, the Ryugyong General Ophthalmic Hospital and the Wonsan Army-People Power Station were built.

When he visited Power Plant No. 3 of the Paektusan Hero Youth Power Station on its completion in April 2016, Supreme Leader Kim Jong Un took the relevant officials by their hand one by one, saying that the laudable young people of Paektu had finished the construction of the power plant ahead of the WPK Seventh Congress, that it was four months earlier execution of his order, and that a new legendary tale of heroic youth was created in the Paektu area. Three power plants went into operation in a little over a year in the area. Kim Jong Un inspected the construction site of the power plants four times during the period to indicate ways and methods of work. And he named the fighting spirit of the young people displayed at the construction of the power plants Spirit of the Paektusan Hero Youth, putting it forward as the spirit of the time symbolizing and representing the Mallima era.

One day the supreme leader visited the Pyongyang Kim Jong Suk Silk Mill. After looking round the mill he highly appreciated that the factory is the best one among those factories he had visited recently, saying that the manner of work was really different perhaps because it had been under boundless trust and care of President Kim Il Sung and Chairman Kim Jong Il. Then he expressed his expectation and conviction that the managers and workers of the factory would rush forward while giving full rein to the Mallima the Party had provided, as their predecessors had done astride the Chollima given by the President and the Chairman to advance vigorously running against time, and that the factory would become a model for the whole nation to emulate in the Mallima era as it had done in the Chollima era.

His trust kindled burning flames in the heart of not only the employees of the mill but also all the officials and workers across the country, bringing about steady improvement in production.

The campaign for Mallima Speed initiated by Kim Jong Un is well underway in the fishing sector. In November 2016 he visited the August 25 Fishing Station of the Korean People's Army. Noting that the fishing station, which had written the first page of the history of "gold seas," had deep kinship with him, the leader gladly grasped the scales-covered hands of fishermen and gave pep talks to them. He carefully listened to their opinions and told that they, with a ►



Amazing things are achieved in different sectors of the national economy in the flames of the campaign

► pride and self-confidence in working at the hometown of fishing boat *Tanphung*, should make their fishing boats provided by the Party prove effective. He encouraged them to always lead the struggle to catch fish. Sitting on the edge of a fish-salting tank permeated with the smell of fish, he said satisfactorily the tank was filled with fish. He remarked that a legendary fish-catching story came into existence now because the officials and fishermen in the fishing sector of the People's Army had made up their mind and made painstaking efforts to implement the Party's policy at the cost of their lives.

The supreme leader had sent modern fishing boats to the fishing station and named them *Tanphung*, wishing for a big haul of fish like a bumper harvest of crops in autumn. Personally calculating the amount of fish needed to be sufficiently supplied to the soldiers, he appealed to catch a large quantity of fish and supply it to the soldiers, and said that it was rather his request than his order as Supreme Commander. He earnestly asked the general manager of the fishing station to write him a glad letter if they caught 4 000 tons of fish. His ardent love for the soldiers and people brought about a huge catch of fish.

Now in Korea successes are made one after another reducing ten years to one and changing the appearance of the country by morning and by evening, thanks to the wise leadership of the supreme leader who believes in the infinite mental strength ►

The Pyongyang Bag Factory.

The Ryongaksan Soap Factory.

to create the Mallima Speed in the building of a socialist power.

► of the people and encourages them to perform miraculous feats. This year he visited the newly-built Pyongyang Bag Factory, the quilt production process and workers' dormitory newly built at the Pyongyang Kim Jong Suk Silk Mill, and the Ryugyong Kimchi Factory. By doing so, he roused all the people to the vigorous all-people, general offensive for continuous advance and innovations and fresh achievements.

In February last the supreme leader guided on the spot the test-fire of ground-to-ground intermediate-range strategic ballistic missile *Pukguksong 2*, a new Korean-style strategic weapon system. There he said that the precious history of struggle of the Korean rocket industry, which has recorded the brilliant successes and annals of significant victories in the face of the worst trials and hardships, clearly proves once again that no force can break the indomitable faith and revolutionary will of the Korean army and people who carry out to the letter whatever they decide to do even if they are faced with folds of hardships, and that no force can check their advance towards a bright future.

The Korean people keep a conviction deep in their mind that they have a rosy future as they march forward under the guidance of Supreme Leader Kim Jong Un.

An Chol Ho

A quilt production process was newly set up in the Pyongyang Kim Jong Suk Silk Mill.

Inspiring Spirit of Self-development

New Base

ONE DAY IN OCTOBER 1979 PRESIDENT Kim Il Sung visited the Namhung Youth Chemical Complex. At that time the complex was accelerating preparations for operation of an orlon plant after it successfully carried out a trial run.

Getting off the car the President was satisfied that the plant was in good appearance, and began to look round it. After making the rounds of the production site he sat on a simple chair in the corridor of the fibre workshop, and asked the managers what they had to do for the operation of the plant. One of them answered that they were going to import catalysers, some gauges for automatic facilities and some parts needed to run the orlon, high-pressure polyethylene and urea fertilizer plants.

At this the President asked them to take the import into serious consideration, and noted that it was undesirable to depend on import when they had built a good plant, and that if they always relied on other countries for raw materials and parts of equipment consistently, they might lose the spirit of self-reliance. Then he instructed that all problems should be considered in detail on the principle of self-reliance.

True to his instructions the complex turned out as one to solve the problems of catalysers and parts using domestic materials. Thus, they built a base in a short span of time which could produce a lot of catalysers, parts and materials.

What He Appreciated

In 1998 Chairman Kim Jong Il visited a machine-building factory. Entering a shop with a buzzing sound of machines he enjoyed the scene of running machines. After looking round several workshops he praised highly that the factory had manufactured a lot of machines in the spirit of self-reliance.

His praise reminded the managers of the factory of his painstaking efforts for 40 years—he had often inspected the factory over the years.

In 1958 when the Chairman visited the factory, he dropped in at the rock drill workshop to see the products. He told to make and supply rock drills in numbers to collieries and mines. He continued to say that only when a large quantity of rock drills were supplied would they be able to develop the extractive industry and produce and supply more ores and coal needed for development of the national economy as a whole. Then he set forth the task to produce highly efficient rock drills in greater numbers with their own effort and technology.

Seeing several kinds of automobile parts such as piston and ring he stressed that they had to always rely on their own strength, and that if they did so they could make any kind of precision machines.

Later, when he inspected the factory and saw automobile and tractor parts, the Chairman said confidently that one who relies on one's own strength can always win, and that if they maintained self-reliance with the belief in their own effort, they would be able to perform their tasks however difficult they might be.

Recalling the past the managers of the factory renewed their determination to further modernize production processes and steadily increase production, holding high the banner of self-reliance as they had done.

Changed Appearance

In June 2013 Supreme Leader Kim Jong Un visited the Pyongyang Condiments Factory.

He was very satisfied to see the equipment made by the factory itself. They could update the production processes as they wanted with the equipment made by the Korean scientists, technicians and workers, he said. So it would be unreasonable to import whole sets of equipment from other countries. Then he instructed that they had to buy materials from other countries and make relevant equipment with their own wisdom and technology as the condiments factory did, instead of importing complete sets of necessary equipment, when they set up new production processes.

Looking round several production processes set up by the factory itself, the leader said that all people had to get rid of the over-reliance on imports and try to make equipment themselves as the factory did. He praised over again that the factory made the equipment with its own technology and wisdom by encouraging scientists and technicians.

Stressing that the modernly equipped condiments factory had to keep the buzzing sound of normal operation, he gave specific tasks and indicated the ways to implement them.

Kang Hye Ok

Korea's Might

IN RECENT YEARS THE KOREAN PEOPLE have achieved amazing things one after another in the economic construction and the improvement of the people's living standards.

Last year alone, in honour of the Seventh Congress of the Workers' Party of Korea (WPK), the Korean people increased the industrial production 1.6 times compared to the same period of the previous year through a 70-day campaign of loyalty, and hit the target of total industrial output value at 119% by launching a 200-day campaign after the Seventh Party Congress. In addition, in the last months of last year they erected new houses for as many as 11 900 families in a matter of a little over two months in the flood-afflicted northern areas. By April this year they completed the gigantic project of modern Ryomyong Street. Modern production bases have risen in quick succession including the Pyongyang Bag Factory and the Ryugyong Kimchi Factory.

These wonderful achievements have never come in a peaceful environment. Recently the reckless and tenacious moves of the imperialists and its vassal forces to vanquish the DPRK through war and sanctions reached the extreme. Worse still, the country suffered tremendous natural disasters last year.

The mystery power that brought about all the miraculous successes lies just in the single-hearted unity of all the service personnel and people, and in their great capacity for self-development. With the strength of single-hearted unity, the Korean people set up the socialist Korea and have been developing it victoriously. The WPK and Korean people are united closely behind their national leader in ideology, purpose and moral obligation, and their single-hearted unity is based on their trust in their leader.

In November last year, a Korean fishing boat, while escaping from a high tidal wave, was wrecked on a rock off Ansok-ri, Onchon County, and all the seamen died. But the portraits of President Kim Il Sung and Chairman Kim Jong Il in their cabin were found intact completely safe from water.

The ardent and devoted trust is based on the politics of love for the people and the benevolent politics administered by the President and the Chairman all their life, and on the politics of affording priority, respect and love to the people administered by Supreme Leader Kim Jong Un who has inherited the intention of the great leaders.

Through the edifices built in recent years—modern streets built year after year, the Masikryong Ski Resort, the Mirim Riding Club and the Pyongyang Old People's Home built on the principle of prioritizing convenience and aesthetic beauty on the highest level—the Korean people feel more keenly the politics of love for the people, the politics executed by the supreme leader who is working hard to provide the most cultured and the happiest life to the people.

The leader devotes his all to the happiness of the people regarding them as the most sacred being, while the people keep absolute trust in their leader and defend him at the cost of their lives—herein lies the stability and might of the Korean socialism.

Self-reliance and fortitude is just the traditional mode of struggle of the Korean people, and based on the spirit of self-development, they are now defending the sovereignty of their country and developing their economy vigorously.

In January last year the Koreans carried out the first H-bomb test successfully to cope with the US's increasing manoeuvres for nuclear war. In February this year they also succeeded in the test-fire of ground-to-ground intermediate-range strategic ballistic missile *Pukguksong 2*, thus demonstrating the might of their self-reliant defence industry.

Now they manufacture and launch artificial earth satellites with their own efforts and technology, and build latest production processes—like the one of acrylic paints production—relying on their own scientific and technological potentials.

In recent years Korea has made a rapid development in science and technology, which is strengthening the capacity of self-development radically. Having set a grand plan to build a sci-tech power in the near future, Korea is putting efforts in improving the conditions to attain greater sci-tech potentials; a nationwide sci-tech dissemination network was established centring on the Sci-Tech Complex; a distance education system is in operation in which people can learn while working at their jobs; and a universal 12-year free compulsory education is provided. In particular, scientific researches and a mass-based technical innovation campaign are stepped up in order to ensure the domestic production of raw materials, fuel and equipment and thus place the economy on a highly Juche-oriented and self-supporting basis.

In recent years the national economy is making a rapid progress even in the cruel and severe sanctions the hostile forces are applying to endanger the existence of the Korean people, to say nothing of their development. This is eloquent proof that the DPRK's self-supporting economy relies on solid material and technical foundations.

It is undeniable that the faster the building of a sci-tech power is accelerated in Korea, the greater its might will be, decisively prevailing over all the challenges of the hostile forces.

Kim Won Sik

Unusual Scene of Kimchi Making

KIMCHI IS NOW FAMOUS AS ONE OF THE FIVE essential health foods of the world.

From of old Koreans usually prepared plenty of kimchi by households in late autumn. At present in the Democratic People's Republic of Korea one can see such a scenery at a place all the year round. That is the Ryugyong Kimchi Factory which produces ▶

► kimchi in an industrial way.

The factory, occupying a total floor space of over 16 130 square metres, is composed of three storeys—one underground and two on the ground—and equipped with processes of making kimchi, *kkaktugi* (cubed radish kimchi) and other pickled foods.

An integrated production system is in operation, which enables the factory to arrange production, manage business activities and ensure quality control on the basis of IT and science at a high level. Workplaces are all germ- and dust-free and all production processes automated and streamlined. Cabbages and radishes are supplied by lifts and a vertical conveyor belt from underground to the automatic feeder, which carries them to cutting, pickling and washing processes. And materials go through the spicing, fermenting, maturing and packaging courses.

Noteworthy is that the production needs no manual labour except the spicing process since all jobs in the production processes are done by robots.

Besides the whole cabbage and cubed radish kimchis, the factory produces special kimchis according to demands of the people and changes of seasons. It also makes a variety of pickled vegetables and various kinds of fermented fishes.

The factory has furnished the experiment and analysis lab with a general kimchi analyser and other latest analytical facilities to fully ensure the quality and hygienic safety of products.

Furnished with a sci-tech learning space and a technical training room as well as a general control room and an experiment and analysis lab, it puts great efforts into the making of more nutritious kimchi suited to different palates of the people.

The products of the factory—thousands of tons of kimchi and pickled foods and lots of processed mushroom on an annual basis—are winning more and more popularity for their attractive packaging as well as original flavour.

Kim Un Jong

The pickling process.

The maturing room.

The experiment and analysis lab.

The general control room.

Key to Success

THE TAEAN HEAVY Machine Complex exclusively produces generating and other equipment on orders of different sectors of the national economy. Generating Equipment Processing Workshop No. 1 is leading the complex. Not long ago a *Korea Today* reporter visited the workshop for news coverage.

When the construction of the Paektusan Hero Youth Power Station was in full swing, the complex made careful arrangements to produce necessary generating equipment for the power station. Generating Equipment Processing Workshop No. 1 was given the task of processing parts of the relevant equipment in a short span of time. Thanks to the high enthusiasm of the workers the completed items of various sizes were churned out.

One day there was an emergency discussion on the spot to solve the problem of materials. The point was how to obtain the main material for the rotator. Getting the material from another enterprise would take a long time to finish the equipment. The unanimous opinion of the managers and workers of the workshop was to make the material by themselves. *Success does not always depend on favourable conditions, and when we have confidence that we can break through the bottleneck by ourselves, there is no difficulty we cannot overcome*, they agreed.

However, it was an untrodden path. Obtaining the material of a mammoth size was hard, and though they had the material, no one had experience in cutting it. Different suggestions were made on how to get the material, while many workers volunteered to process it. At last a processing team was organized headed by Kim Kyong Yong, operator of the 6-m copying turning lathe, and his father Kim Hui, a veteran worker at the complex, was also employed. The team buckled down to find out a rational processing method and worked day and night. The technical staff of the complex offered active support. In the sci-tech learning space a course was given on a higher level to let the skilled workers assimilate modern science and technology. Sometimes heated discussions continued till late at night. In those days many skilled workers contrived original processing methods, which were introduced into reality directly.

At last the material (its outside diameter was over three metres) for the rotator began to make its appearance. The workers made a remarkable success of processing two pieces in a week. All the employees of the complex congratulated them for their breakthrough in the processing of the generating equipment. The shop processed the brake plate of the rotator and the structural frame in some days instead of several months estimated, and sent them to the construction site of the Paektusan Hero Youth Power Station.

Besides, the shop processed a lot of generating facilities and supplied them to power stations, including the Orangchon Power Station, the Ryesonggang Youth Power Station, the Hungju Youth Power Station and the Wonsan Army-People Power Station.

Kim Song Jin, leader of the workshop, says, "It's an old manner of work to propel production by dint of experience. We have got practical experience that science and technology are the motive force of increased production, and that that is a shortcut to the building of a thriving socialist nation. The key to success lies in science and technology, we know."

Ri Chung Ho

Standard of Pass

TODAY THE *MAEBONGSAN*-BRAND footwear produced by the Wonsan Leather Shoes Factory is in great demand. Some time ago I visited the factory for news coverage. Greeting me gladly General Manager Jang Sung Ho guided me to the designing office, where I found a discussion of designs of a type of shoe and an estimation of products going on. When I praised that the shoes were well-designed with diversified shapes and colours, Jang told me the following story.

Several years ago the shoes of the factory were not in great demand for their poor shapes, colours and weights. For this problem Jang had a heavy heart. *There is a saying that a journey of a thousand miles begins with one step, and it means success is preordained before production*, he thought.

At that time it was generally thought that the shape, colour and pattern of shoes were a concern of some people in the technical preparation section or the designing office alone. So, the workers were satisfied with the making of shoes according to the designs. This conception had to be changed in order to make new models of shoes. In the serious discussion to solve the problem the management shared the view that the discussion of designs of the type of shoes and the estimation of products had to be the concern of the whole factory.

When the task of contriving a design of a type was raised at first, the managers as well as workers buckled down to the studies—some of them personally made shoes according to their own designs. Although their models were clumsy, they had something clever about it, and they were associated with each worker's special merit. The examination of those shoes was done strictly to find out if they could meet needs and aesthetic taste of the people and suit the constitutional and psychological qualities of each age. Now everybody was concerned about what kind of colour and shape the people loved.

When the campaign made progress on a full scale, the employees swapped opinions and learnt from one another. In this way their technical attainments and skills improved remarkably, putting the designing on a scientific footing. Meanwhile, the zeal of the producers ran high, and they made exact demands on

themselves. They strove to make their shoes the greatest possible favourite of the consumers.

Last year they contrived 250-odd designs; over 100 of them were directly introduced into the production. In the course of this an infrared lam was installed over the shoemaking flowline so as to save power and increase the intensity of adhesion 2.5 times, and a laser cutter was set at the uppers workshop. The factory also developed a foot size measuring device and realized order service. The shoes produced with their sincere effort were highly appreciated at the 27th national consumer goods show last year, and ranked high at the high-repute products and commodities exhibition hosted by the Footwear Industry Management Bureau under the Ministry of Light Industry.

General Manager Jang Sung Ho says, "When our shoes are preferentially favourite with the people, we stamp a 'pass' on our mind."

Ri Chung Ho

In Support of War for Liberation of Northeast China (3)

Role of "Home Front"

IN THE EARLY 1946 THE reactionary Kuomintang launched a blitzkrieg to take Northeast China at a stroke by mobilizing huge troops and sophisticated equipment backed by the positive support and covering of the US imperialists. As they took control of a great area including Jinzhou, Shenyang, Changchun, Meihekou, Jilin and Jiaohe and cut off the traffic between southeast Manchuria and north and south Manchuria, the Communist army abandoned the Dandong and Tonghua areas in the rear—there was no other alternative. As a result the wounded soldiers, families and supply personnel of the Communist forces in south Manchuria lost their route of withdrawal.

Since the Nationalist troops occupied the trunk railway line from Shenyang to Changchun in 1946, the Communists could no longer transport food and coal from the northeastern region, and foodstuff, clothes, medical supplies and industrial materials from Dalian. This created a grave situation both in the front and the rear.

As the traffic in Northeast China was cut off in the middle, it was of critical importance to take a proper and immediate measure for transport. At the moment Kim Il Sung, leader of the new Korea, took a resolute measure to let the Chinese Communists use the northern region of Korea for a corridor to connect south Manchuria with north Manchuria and China proper. He made sure that in view of the existence of the Soviet-US Joint Committee in Korea and the existing effect of the Yalta Agreement, an exclusive office was established as a standing organ which, under the internal name of "Korea-resident office of the Northeast Affairs Bureau" and the external signboard of "Pyongyang Interests Agency," would work by proper combination of functioning methods for transport of materials and personnel and exchange of materials needed for the operations to liberate Northeast China.

The office existed from July 1946 to February 1949, and its work was successful. During its existence of a little over two years and a half it worked basically in the following five directions.

First, it engaged itself in taking measures for safe treatment of the wounded and transfer of strategic materials. For instance, when the Communist army was withdrawing from Dandong and Tonghua faced with the Nationalist offensive against south Manchuria, as many as 18 000 wounded troops, family members and supply personnel went over to the Korean territory. Meanwhile the Communists moved more than 85 percent of their strategic materials to the east bank of the Amnok River, that is, inside Korea.

Secondly, the office made arrangements for transport of the Chinese materials and personnel in Korea. To make it easy to receive and send back the materials and personnel across the boundary four sea and land routes were used in Korea. One of them was a land route from Dandong, Northeast China, via Sinuiju and Namyang, Korea, back to Northeast China, and another one was also a land route from Tonghua and Jian, Northeast China, via Manpho, Korea, to Tumen, Northeast China. These two played the role of connecting the northern areas of Korea with north and south Manchuria, Northeast China. A colossal amount of strategic materials and personnel were carried along the land routes during the war for liberation of Northeast China. The other two were sea routes; one from Dalian, China, to Nampho, Korea, and the other from Dalian to the then Rajin, Korea. As Nampho and Rajin ports are free from freezing even in winter, it was convenient to transport materials by directly connecting the route with railway lines. In order to make a successful use of these sea and land routes the Provisional People's Committee of North Korea concluded an agreement with the Chinese side on transport of materials in September 1946.

Thirdly, the office purchased and provided a lot of strategic supplies as requested by the Chinese Communists. For instance, the Chinese obtained 12 carloads of materials when Zhu Lizhi personally requested the Korean leader, 24 carloads when Liu Yalou did it, and 110 carloads when Zhu Rui did it.

Fourthly, the office worked to establish and improve friendly ▶

► and cooperative relations between the two parties and peoples of Korea and China. Through the office the Korean and Chinese sides, on the basis of sufficient negotiation, concluded some 20 agreements on joint operation of navigation along the Amnok River, use of the electricity generated by the Korean Suphung Power Station, cooperation in postal and communications service, and other matters. The payment for materials was decided to be done once a year according to the trade agreement.

The materials Korea supplied to the Chinese Communists included food, salt, anthracite, aquatic products, daily necessities, medicines, cloth, footwear and war materials.

One spring day in 1946 Kim Il Sung received Chen Yun who was on a visit to Pyongyang to convey the request of Chairman Mao Zedong of China. At the moment Chen Yun was the head of the organizational department of the Central Committee of the Communist Party of China.

Later, recollecting his reception, Kim Il Sung said that Chen Yun had visited Korea to ask for weapons and that on the occasion of his reception of Chen he promised to give the Chinese comrades all the weapons Korea had taken from the Japanese during the war to liberate Korea.

What was the most important of the requests Chen made in the name of Mao was the one for weapons. The weapons problem was also a difficult task for Korea, too. Hearing Chen's request seriously, Kim Il Sung approved of the suggestion for assistance as Chen wanted.

After the Chinese returned, the Korean leader summoned relevant officials. He said that the Chinese revolution was undergoing an ordeal, that as internationalists the [Korean revolutionaries] were not allowed to sit idle, and that he had decided to give free aid to China. Understanding the storage of weapons and ammunitions— which had been taken from the Japanese imperialist aggression forces—in the arsenals, he proposed to give China weapons and equipment enough to arm 100 000 soldiers.

Along with the supply of as many as 100 000 small arms Kim Il Sung sent guns as well to Northeast China. Later in August 1946 and June 1947 he supplied the Northeast Democratic Allied Army of China with a good deal of guns and other weapons.

While offering war supplies, he took measures to organize an artillery regiment— equipped with the guns captured from the Japanese imperialist aggressors—and an engineering unit and dispatch them to the northeast front of China. The artillery armed heavily with guns and the engineering unit always made a decisive contribution to the making of a breakthrough in every battlefield in the war to liberate Northeast China.

Kim Il Sung also sent a lot of dynamite to China. The yellow dynamite, which earned fame in every bloody battle during the war to liberate the whole China as well as the northeastern region, came from Korea. Premier Zhou Enlai, on a visit to Korea years later, personally went to the factory which had produced the dynamite, and expressed heartfelt thanks to the workers for their support of the Chinese people in their past revolutionary struggle. And later Kim Il Sung kindheartedly made sure that a statue of the Chinese leader was erected on the spot where he had gave an address to the Korean workers.

During the war for liberation of Northeast China the channels from China proper to the northeast and from south Manchuria to north Manchuria were all once blocked by the Kuomintang army. In autumn 1946 when Xiao Hua's unit of the Communist Liaodong Military District commenced an attack to take Anshan and Haicheng, the No. 184 Division of the Nationalist army stationed there rose in revolt against Chiang Kaishek and was trying to join the Communist forces. Hearing that the division commander Fan Shuoduan had revolted, Chiang called Du Luming on the phone to order him to remove the revolting units mercilessly. Du's northeast forces pounced upon the No. 184 Division. Through ferocious attacks on the ground and in the air Du drove the rebels up to the shore of the Amnok River. Fan's unit was cornered into a fix, with the gunpoint aimed at them behind and the big river before them. They almost abandoned themselves to fate.

Kim Il Sung recalled later, "**Zhou Bao-zhong sent Chinese representatives to our country one after another to discuss the measures to rescue the rebel unit. Wang Yi-zhi also visited Ranam as one of those representatives. In the end, we allowed the unit to enter eastern Manchuria via our territory.**"

The soldiers of the unit, who entered the Korean territory with a narrow escape from the jaws of death, shed tears of relief and pledged they would remember the solicitude of the Korean leader to the last moment of their life. ❑

Pride of Plasma Researchers

ONE DAY IN 2014 A small plasma cutter was put on the table of Paek Un Yong, head of the Nano Physics Institute of the Kim Chaek University of Technology. It had been brought by O Yong Nam, researcher of the plasma section, from abroad, and one of its main elements had been broken by a trifle change in voltage.

Recalling the time Paek says, "I thought a lot about what kind of influence the import of facilities has on the development of the country's economy as a whole. I decided there was no other way for us scientists than self-development."

The research project of the section was not from scratch at all. They had already made plasma cutters. But their idea was to develop a completely new cutter instead of the old types of cutters which were big and heavy and consumed much power. There were many obstacles and hardships. Since the manufacture of the tiny cutters was monopolized by some developed countries, there were no designs or reference data available for the researchers, and, furthermore, there arose a lot of technical problems, and the lack of materials. In such conditions the researchers performed simulations in the laboratory and application tests in the field of manufacture successively.

Repeated failures became rather good occasions for them to have a broader scientific insight and solve knotty problems. Month by month, thanks to their painstaking efforts, the pilot circuit, the driving circuit and various kinds of guard circuits were completed in an original way to suit the actual conditions of the country.

The hardest task was to design a rational PI controller for a new impulse width modulation control system. Since their earlier cutters had no such device they were faced with difficulties from the designing. Such being the situation some people were fearing the failure and others "advised" not to waste time.

But the researchers always replied, "To devise in our own way and create with our own hands—this is our motto. We accept it with conscience rather than responsibility." With the faith one of the researchers introduced the mode of air cooling, instead of water cooling, to the plasmatron while another ensured the stability of the plasma arc despite a wide-range fluctuation in the input voltage. O Yong Nam, the main developer, made a breakthrough in the designing of a PI controller, thus opening a shortcut to the general designing.

The research work was intensified, and thus in 2016, only two years after they started the project, they completed a portable inverse-converting plasma cutter relying entirely on their efforts, technology and wisdom in the whole process from designing to manufacturing.

Now factories and enterprises in the country including shipyards and machine factories came to use simple and precise high-efficiency cutters that save lots of manpower and electricity.

Recently an article about the plasma cutter was contributed to an EI-class international magazine and published. Another was sent to an SCI-class magazine and passed an editorial board examination and several rounds of experts' deliberation.

Paek says, "Now we feel very proud. The feeling is not only attributable to the fact that the cutter we developed has been recognized by the world's scientific circle for its merits both in engineering and scientific theory and in practical capacity. We are happy that we researchers have contributed to the treasure of our country."

Kim Kwang Myong

Ambitious Target

ONE DAY IN JULY 2016 TWO PEOPLE were looking round a thick mulberry grove wiping sweat with their handkerchief in the scorching sun. They were Kim Hae Sun and Son Kwang. The former was the head of the sericulture section of the technical preparation centre under the Bureau of Sericulture and Silk Industry and the latter was a researcher of her team. They were now on a visit to the Anju Cocoon Production Company in Anju, South Phyongan Province to know how the *Sangphung* fertilizer they had developed was being introduced. Their faces were all filled with smiles.

It was two years ago that they started the research on the *Sangphung* fertilizer. At the time cocoon farms were using an amino-acid microelement fertilizer which was made from the protein extracted from hair of domestic animals. It was to improve the leaf quality. But protein content of the

fertilizer was not enough for the growth of silkworms. This required a research.

Now Kim and her researchers paid attention to the silkworms' excrement. Silkworms absorb pectin from mulberry leaves but cannot digest all of it, excreting a good deal. Through a number of experiments on silkworm excrements, they managed to extract organic substances which control the growth of crops, microelements including nitrogen, phosphorus and potash, substances used as vegetable growth activator, substances promoting growth and antibiotic materials capable of preventing viruses.

They found out that they could get over the demerit of the amino-acid microelement fertilizer by mixing the substances with various additives.

The introduction of the material at some farms turned out very successful.

Kim Hae Sun says, "We applied the fertilizer directly to mulberry leaves and the result was very good. Farm workers said that cocoon production was increasing remarkably because the mulberry leaves were very big and nutritious. The fertilizer is in increasing demand now."

The researchers were not content with the achievement. They decided to develop a sort of protein nutrient for silkworms considering the worms demand an exceptionally large amount of protein. Through months of research they succeeded in developing a sort of protein nutrient from waste fibres coming from the silk reeling and weaving processes, unlike earlier feed additives including soya milk and goat milk.

Manager Jang In Su of the Hanggu Cocoon Production Company in Nampho says, "We also use the protein nutrient developed by the researchers of the sericulture section of the technical preparation centre under the Bureau of Sericulture and Silk Industry. When it is sprayed on feed, the silkworms get enough protein nutrient and grow rapidly, and they become stronger against pests remarkably." And he says the nutrient will bring about a greater increase in cocoon production.

Now the researchers are redoubling their effort to develop a much more effective fertilizer.

Sim Chol Yong

Inventors' Class

I KNOW IT WOULD BE difficult to assimilate all contents of different lectures and carry out all the daily assignments at college. When I heard all members of a class received certificates of invention, I could hardly believe it. So, I headed for Kim Il Sung University to see the inventors, who are in the fifth grade at the faculty of life science.

I Should Stand in the Van

Jong Kwang Jin is an ex-serviceman. For his lively, cheerful and friendly personality he is liked by his classmates. He is relieved only when he finds himself in the van of everything. Thus, he is at the top of the invention rankings in his class.

He developed a method of chlorophyll extraction. He began to be interested in natural pigments when he had a lecture about chlorophyll. At that time there already existed methods of extracting pigments from algae including brown seaweed and tangle. The methods required lots of enzyme for dissolving protein, and it even depended on import. He decided to surpass the old methods of using enzyme. Instead of using enzyme he applied a method of heat treatment. The method attracted the attention of judges, for it makes it possible to add natural pigments, good for human body, to medicines and foodstuff.

He often talks to himself: I must stand in the van of improving the people's diet as ex-serviceman.

Even the Youngest Member

Ri Hyon A is the youngest in the class. She comes from Sari- ▶

won, North Hwanghae Province. Her parents indulged her as she was their only daughter. So, bidding her farewell on her way to the university, they were worried how she could attain her years of discretion. However, it turned out to be an idle fear. Ri took first place at an invention show for her work "Introduction of oiled lactic bacteria to swine and poultry feed additives." She was so glad that she wrote a letter to her parents, which read: "Dear father and mother! I have learned at university that a person who knows the value of time will be able to take a scientific fortress and that the success in research can be achieved only with burning enthusiasm and persistent efforts. Though I am called the youngest in my class I will remain the eldest on the road of scientific research."

Recollecting the Time

Cha Kwang Song belongs to a speculative character. He often recollects his past years. Once he visited one of his secondary schoolmates at his home during his first-year vacation at university. Over the dinner his friend's father working at a foodstuff factory asked Cha, "What is the reason that the activity of proteinase is weak? What kind of methods are there to improve the activity of the dissolving enzyme?"

The question was asked because Cha was studying life science. But he could not answer readily because of lack of knowledge. *Knowledge is power. I can fulfil my dream only when I'm knowledgeable*—he thought. He was ashamed that he was going to spend his vacation idling around, satisfied with what he had learned at university. Now he studied harder and harder. Everyone was surprised at his stout speculation and practice. At a meeting held to congratulate him on his development of a bacterium that produces proteinase, he said, "I feel really ashamed of the time. Yet it was the motive force for me to launch into a programme of life science."

Vice Versa

Kim Chol Jin is attractive for his extraordinary and peculiar manner of thinking and studies. He thought of a depressant of proteinase when others were studying an activator. Once he thought: *It is attributable to melanin that the face burns in the sun. Whitening material was already developed to inhibit the production of melanin. Then what about patients of cancer? What about a depressant that resists the enzyme caused by the cancer cell?*

Now he decided prediction of the activated area was a primary problem. So, he developed a system to predict the activated protein area. Different from existing manual methods, his system has a wide range of fast prediction. When his friends praised him, Kim said, "Knowledge is the shortcut. I merely found the shortcut earlier than others."

All their successes were achieved in a matter of six months for a national inventions exhibition of university students held last year on the occasion of the 70th anniversary of the foundation of Kim Il Sung University. With this, the class was honoured with the title of "Inventors' Class" in September 2016.

Ri Chung Ho

The student inventors are engrossed in scientific research in good cooperation.

School Bell Sounds Aloud

THE PHYONGSONG MIDDLE SCHOOL for Orphans in Phyongsong, South Phyongan Province was built in less than a year and opened in November last year. With a plottage of over 49 000 square metres and the total floor space of some 14 000 square metres, the school consists of an instruction building, a dormitory, an outdoor football ground and a gymnasium.

It provides two three-year courses—junior and senior—and students learn general basic knowledge and cultivate their talent to their heart's content. All classrooms are put on a multi-functional and IT basis, and over a dozen laboratories for experiment and practice are well arranged. In the ►

► natural science hall students acquire general basic knowledge while conducting biological, physical and chemical experiments by grades, and in the industrial basic practice hall they learn the knowledge of coal, chemical and cement industries.

The IT learning room and the automobile practice room are the greatest attractions to the students. According to an instructor in the IT learning room they acquire the ability to use office-programs and make multimedia by themselves. The automobile practice room with several computer-simulation cars is always crowded. Kim Song Il, a student of Senior Class 3-A, says that he is fond of the automobile practice and that he will work hard to learn an excellent driving skill.

In the music and dance dissemination room students develop their artistic talent to the full. A music teacher says that the performance of the members of the art circle is on a high level in the province. Pictures hanging on walls to give general knowledge of nature and math formulas are easy to understand, and help the students extend the realm of their knowledge. Besides, the bedrooms, the dining hall, the barber's shop and the clinic are well arranged on a modern footing to suit the children's mentality.

Kim Chun Yong, headmistress of the school, says that the school staff will redouble their effort to prepare all the students into reliable pillars of the country, true to the policy of the Workers' Party of Korea to bring them up healthily and cheerfully without any sorrow of parentlessness.

Sim Hyon Jin

Distance Education Comes Closer to Reality

Kim Il Nam.

SOME TIME AGO A KOREA Today *reporter had an interview with Kim Il Nam, rector of the Online College, Kim Chaek University of Technology. Excerpts:*

You started distance education in your university in 2010, didn't you?

Sure. The history of our distance education is not so long, but over the years radical progress has been made in the content and method. In particular, it has overcome a number of difficulties arising from its peculiarity, and approached the reality a step closer.

I'd like to know more about it.

In the past distance education was mainly given through non-real-time lectures. In other words, students attended lectures by watching the recorded materials. Now real-time lectures take a greater proportion than non-real-time ones. It accords with the desire of students who want to learn a solution of their questions immediately at lectures through direct dialogue with teachers.

However, real-time lectures also had a limitation, that is, students could not watch again the scenes once they failed to see them. For example: when they failed to see all what the teacher wrote on the whiteboard, teacher went on with his explanation and, accordingly, the video moved to show the projector or relevant objects, causing troubles in students' understanding.

So we decided to change the teaching mode from the style where the students had to follow the teacher's course of instruction to the one of student-oriented real-time lectures. For this, we developed programs that display images showing the overall course of lecture and providing special images needed for the lecture in the meantime. As they can select videos as they like while hearing the explanation of the teacher, the attendants unanimously say that they feel as if they were seated in the college.

I think a remarkable progress has been made in the teaching content.

Surely. We let the students plan the content of their learning themselves. By this I mean they choose subjects to learn for themselves. In the past the attendants were given lectures consisting of almost the same subjects, whether they were from the condiment or sporting apparatuses factories. Such a kind of education could not satisfy the students' desire to become well-informed about their relevant sectors. To solve the problem we drew up new curriculums in which students choose the subjects suited to the nature of their production activities. This lets them preferentially learn the essential knowledge in conformity with their individual occupations and field conditions and thus become able sci-tech personnel as early as possible.

Regarding the matter of whether the students can correctly accumulate knowledge and build up proper abilities after they finish compulsory subjects and subjects they choose, and whether they can possess professional qualifications based on it, competent teachers in the university thoroughly discuss and take relevant measures. In this way we keep our distance education close to the production field in the teaching content.

Today distance education is closely connected with the daily life of the people, I dare say.

Right. Now most people are endeavouring to improve their knowledge. In keeping with the reality we have built a system which enables them to have online education through smart phones and tablet computers. We call this an implementation of the distributed course, a concentrated education management system. A large number of people have joined the system. The online education is expanding its realm by consistently approaching the reality. ❑

Thirty Odd Years with Traditional Medicine

THE PYONGYANG MUNICIPAL KORYO Medicine Hospital has a doctor who has been engrossed in Koryo treatment for over 30 years. He is Kang Myong Il, a department chief. He is famous for his wonderful diagnostic ability—one look at a patient is enough for him to notice what he is suffering from—and analytic prescription and prudent art of treatment. The story he told us about his past, however, was very simple.

He is from Kimhwa County, Kangwon Province. As child he enjoyed accompanying his grandmother to mountains to collect edible herbs. His grandmother used to tell him much about edible herbs and medicinal herbs among them. Using the medicinal herbs she and the boy had collected, she treated villagers' diseases.

Seeing his grandmother command respect from all villagers, Myong Il felt proud of himself as well thinking he had also done something for them. At the moment he would imagine his future as a doctor.

Kang Myong Il.

So when he applied for college he chose the then Wonsan College of Medicine without hesitation.

During the college days he steadily intensified the research on the effect and methods of using various kinds of medicinal herbs found in the country. The Korean rhubarb constipation tablet he developed on the basis of his deep knowledge brought him a State patent and reputation at home and abroad in the 1990s. It was in his early years in the Pyongyang Municipal Koryo Medicine Hospital soon after he was appointed to work there by the State.

When engaged in clinical practice, he noticed that the Koryo medicine-based treatment was too long in period and the time of their apparent effect was different from person to person.

He decided to try first to find a way to enhance the effect of Koryo medicines for treatment of constipation which is of the considerable case rate. Through hardships, he managed to develop a highly-effective Koryo medicine, which can remove constipation in three or four days, by establishing a new mixing rate and a new manufacturing method. Little content with his primary achievement, he redoubled his effort with tireless inquiry and enthusiasm.

In those days he newly produced tens of techniques such as rational blending of Koryo medicines and health foods for treatment of diseases in the digestive system, physical conditions of chronic hepatic diseases and their treatment, and acupuncture therapy appropriate for each of varying physical constitutions.

The principle he adheres to in treatment is to choose a correct and suitable treatment on the basis of correct analysis of physical constitutions of patients. His original and scientific applications based on well-balanced combination of Koryo medicines and modern medicines according to specific constitutions of individual patients even when they are of the same kind of disease, have cured a lot of people of different kinds of diseases such as chronic gastritis and gastric ulcer.

In recent years he developed a new therapeutic technique of treating illnesses in accord with seasonal climate changes and introduced it into clinical practice. Earlier he had often found cases who did not get well but rather became severer even though they were treated according to their physical constitutions. And the effects of medicines of the same kind had been different from season to season even though they were applied to cases of the same constitution. Paying attention to such problems, he broadened his studying field from simple medicine to meteorology and astronomy. In the course of his long-term research work, he finally convinced himself that the condition of the human body is largely related to seasons and climates.

On the basis of the achievement he developed a scientific program of prognosis according to seasonal and climate changes, and established a new Koryo treatment method to prevent diseases relying on the program and enhance the effect of treatment of various kinds of diseases related to digestive, circulatory, respiratory and other human organs.

When I said that he had done quite a lot for a long time, Kang Myong Il replied, "I don't know how time goes because I'm only interested in seeing patients recover from diseases and regain vitality. Now I'm sure Koryo treatment is an excellent art full of secrets. Looking back on my past days I feel anew that I still have a lot of things to do."

Kim Chol Ung

Patient's Note

SOME TIME AGO I, AS A Korea Today *reporter, visited the Ryugyong General Ophthalmic Hospital. There I read a note written by Kim Un Sim, a worker at the Commission of State Inspection. It reads as follows:*

Last year I volunteered to work in Musan County in high response to the militant appeal of the Workers' Party of Korea to achieve a miraculous success in restoration of the flood-afflicted areas in North Hamgyong Province. While working there I became blind unexpectedly—I didn't know why. I had a headache and an intolerable pain in the eyes for some days, and finally lost my sight—it was really a bolt from the blue.

Some days later, the news reached our construction site that Supreme Leader Kim Jong Un had inspected the newly built Ryugyong General Ophthalmic Hospital. My fellows were much happier than me.

Soon I was one of the first patients at the department of glaucoma at the hospital. Staying in the palatial hospital, I was really moved to tears feeling the warm care of medical staff for my treatment. I felt as if the hospital were there just for me. I was examined several times a day with modern facilities. I have no idea how expensive the medicines I got were. Every day the hospital administrators came to see me and asked about the state of my treatment and took specific measures. Han Yong Sin, head of the department, and Ri Song Guk, doctor in charge, devoted all to my treatment, sometimes staying by my bedside till late at night. According to my nurse, they held dozens of consultations on my case.

Even though I was blind I could feel beneficial care of the WPK in the attendance of the medical staff. My case history file is as thick as a novel.

One day when I told Han not to overwork, she said that we are all of a single family in the bosom of the WPK, telling me to ask her for anything at any time regarding her as my sister. She advised me to concern myself with my treatment alone. I could not but shed tears.

A week later, when I recovered my right eye the hospital administrators and doctors and nurses in the department were happier than me. I could feel the deeper love from the administrators than my own blood relations when I heard them ask the doctors earnestly to give another round of intensive treatment of my left eye. Thanks to the devoted efforts of the doctors, I recovered my left eye in ten days so I could see the blue sky and the green land of my country again.

I received immeasurable care from the hospital staff, officials and workers of the Commission of State Inspection and my neighbours. I saw on TV our Supreme Leader Kim Jong Un on a tour of continuous field guidance for the sake of our people, exactly the way our great leaders President Kim Il Sung and Chairman Kim Jong Il did.

I cannot forget how devotedly the doctors worked to bring sight back to me.

I eagerly want to shout at the top of my voice: I am greatly thankful to Supreme Leader Kim Jong Un, the eternal sun of my life. Long live the Workers' Party of Korea.

Sim Chol Yong

The staffs of the glaucoma department have brought sight back to Kim Un Sim.

Patriotic Song and Sweat

PLAYERS OF THE Democratic People's Republic of Korea shed tears when they stand on the dais of honour at international tournaments. They sing the *Patriotic Song* to the playing of the music as the national flag rises. Koreans fondly call them proud sons and daughters of their nation. Among them is Kim Kuk Hyang, woman weightlifter.

Sustenance

Kuk Hyang who was to leave her country to participate in an international tournament could not give up looking at an old letter. "The whole country is watching you. I hope you will make our *Patriotic Song* ring aloud across the world by winning a gold medal…." It was the last letter her mother had sent to her a few years before.

Kuk Hyang, born in Jangyon County, South Hwanghae Province, became interested in weightlifting in her childhood influenced by two of her mother's sisters who had been weightlifters. In those days her mother and aunts enjoyed singing *Patriotic Song*. Singing the song the child learned weightlifting skills.

When she won honour in a provincial juvenile sports school weightlifting contest, she was carried away by excitement. She idled in happiness and played with friends all day. Her mother scolded her saying that if she would be self-complacent she could not make a successful career, and that she had to be determined to glorify the country by winning international games. Now she took her to the training ground.

Her training continued, and Kim moved to a central sports club in Pyongyang to develop her talent fully. She found Pyongyang beautiful, indeed. The appearance of the capital she saw out of the car window came to her as the image of her beautiful country.

In the words of her new coach on her first day of training and in the voices of gold medalists she felt anew the significance of *Patriotic Song* her mother and aunts had enjoyed singing. She always worked hard in training with a resolution to be a weightlifting champion by winning gold medals in international contests.

Kim Kuk Hyang, one of the ten DPRK players of the year 2016.

Kuk Hyang grew up like this, and won three gold medals in the first World Junior Weightlifting Championships where she made a debut. When she was standing on the platform, the DPRK flag rose high, and the *Patriotic Song* was played aloud in the stadium. She felt that she became a world-famous weightlifter as she lived in the country that valued her dream and honed her talent.

Sweat

During the days when Kuk Hyang trained herself hard to attain the higher goals she set herself, she keenly felt how difficult it was to glorify the *Patriotic Song* though it was easy to sing. Her coach Kim Myong Ho says, "The total weight of the sweat Kuk Hyang worked up in training would be as heavy as her mind to have the *Patriotic Song* played at international tournaments."

Kuk Hyang once collapsed in high-intensity exercises. At the moment what reached the perspiring girl was far from her coach Kim Myong Ho's order to stand up. It was the sound of a song from a music player her coach was holding in the hand. That was the *Patriotic Song* which she used to sing with her mother and aunts, the song which she had sung in tears on the dais of honour at international contests. She resolutely got to her feet. Mastering up courage she took the barbell and overcame ordeals one by one.

Having steeled herself like this singing the song by heart, she won gold medals in a number of international competitions, and sang it again and again in happy tears. She became a Merited Athlete in April 2016. At the Asian Weightlifting Championships 2016 she came first in jerk and second in snatch in women's 75 kg category, thus taking first place in total with two gold and one silver medals. A foreign weightlifting expert highly appreciated her, saying that he saw the DPRK's spirit and image in Kim's performance.

The country designated her as one of the ten DPRK players of the year 2016. At present she is redoubling her effort in the training with a burning desire to glorify her country.

Kim Hyon Ju

Officials Seal Ties with Tennis

LAST YEAR OFFICIALS FROM THE Kyonghung Guidance Bureau took first place in the tennis event at the games of civil servants of national agencies. They are already famous over the country for their good contribution to improvement of material and cultural standards of living of the people through well-arranged business operation based on an accurate strategy. Now they got a reputation for good sports activities. Then, how?

Exceptional Meeting

One evening five years ago officials of the bureau were called into the bureau director's office for an urgent matter. Entering the office with the thought that the meeting would review their work, they were surprised, though, for they saw sports uniforms of different colours, tennis rackets and balls put in good order on the table.

Recollecting the time, Kim Kwang Il, head of a department, says, "We could easily foresee what plan our bureau had."

In fact the officials of the bureau carried on sports activities except tennis. It was their weak point. That was why the bureau ended up in third place in the tennis event at the games of civil servants of national agencies that year.

The meeting proceeded in a heated atmosphere. They all agreed that they should lead the campaign to arouse enthusiasm for mass-inclusive sports activities. The bureau decided to increase the number of sports events and carry on sports activities actively and in a diversified way in accord with the actual condition.

Now the bureau added tennis to the weekly and monthly schedule of sports games.

Charm of Tennis

League matches between departments were carried out fiercely, involving anyone called out on the list of staff. The players had a high level of techniques like quick judgment, swift movement and powerful smash.

Kim Chol Ryong, head of an office, who never misses first place in the bureau tennis games, says, "Every official in my bureau has got considerable attainments in tennis. Learning tennis, we have got further attached to our workplace and much more united. And we earned a greater competitive spirit. Tennis is charming, it is one of our most favourite sports events."

Unusual Appearances

It is spectacular to see women officials play tennis fairly well with male rivals in the bureau. They are relieved only when they win. They always head for the tennis court after their daily work. It is difficult to win the pair of Pak Yun Ok, head of a department, and staff member Kim Hyong Ae, the male officials say. The two are good match—one as the up player and the other as back player—as they are in their work. Their confident playing is impressive for their taking correct positions, quick reaction to their rivals' powerful strokes and decisive shot from high pass.

Kim Hyong Ae says, "As a matter of fact, I was little interested in sports activities as I was busy with household chores. I thought they would waste my time and effort. But when I saw a lot of sports facilities set up everywhere and more and more people enjoy sports all over the country, I began to think we women, too, should join sports, and I stepped into the ground."

Pak says, "I have got healthier, and my digestive troubles have gone since I played tennis. We share good teamwork both at work and in games. We enjoy discussing tactics and playing games in good harmony."

Kim Myong Hun, chief of the bureau, says, "Today my bureau has a high passion for work as for tennis."

Kang Hye Ok

New Feature of Taedong River

SOME TIME AGO SOLAR-powered excursion boats *Okryu 1*, *Okryu 2* and *Okryu 3* started their service on the Taedong River in the capital city of Pyongyang, Korea, giving pleasure to the people. Guide Kim Kuk Hyang says, "Our excursion boats carry the people on their way to and from work between Kim Il Sung Square and the Tower of the Juche Idea. And we also give sightseeing service along courses from Kim Il Sung Square to May Day Stadium, from Okryu Bridge to Taedonggang Bridge, and from Kim Il Sung Square to the Sci-Tech Complex."

All the components of the boats, which can carry over 50 people each at a time, were flawlessly built, including the cabin, deck and service facilities. Jon Kyong Hui, a librarian at the Grand People's Study House, says, "I go to work and come back home by this boat every day. Words fail me to express my feelings when I enjoy the scenery of the Taedong River on this excellent boat with kind service—this helps me relieve fatigue." Kim Kum Sok, department head of the Okryu Vessel Management Bureau of the Ministry of Land and Maritime Transport, says, "Our boats are all solar-powered, so they are favourable to the environment protection, and free from noise with little vibration. Actually, many people give a good comment on the boats after using them." He told a story.

One day last year Kim Ho, an official of the management bureau, was lost in thought while seeing the changed appearance of the Taedong River. Now he decided to build solar-powered excursion boats with his bureau's own effort and technology and pushed ahead with the project. (He personally took in charge of the completion of the design and supply of materials.) Senior officials of the ministry also turned out to help them. Soon the boats took shape and the interior facilities were arranged well as required by the design. However, the manufacture of the driving gear in the power unit did not proceed as planned.

Kim had discussions with researchers day and night, but the result of the repeated experiments was undesirable. The development team lacked experience and technical data. One day he was walking along the street while thinking about the earlier completion of the driving gear, when he happened to hear the whistle coming from the Pyongyang Railway Station. At the moment he thought of the new-type underground train made by the Kim Jong Thae Electric Locomotive Complex. *The electric locomotive also has a driving gear*, he thought.

He immediately went to see the research team of the complex for consultation. Thanks to their selfless assistance a number of technical problems arising in the building of boat as well as driving gear were solved in a short time. His bureau successfully built solar-powered excursion boats on the occasion of the Seventh Congress of the Workers' Party of Korea. Yun Hyok, captain of *Okryu 1*, says, "Today the public interest in our boats is growing with each passing day. The captains of other vessels are envious of me. In the future, too, I'll serve the people faithfully."

Using the boats on their way to and from work and enjoying the new scenery of the river people express their gratitude to the WPK which provides them with better and more civilized life. Now the happy boats are sailing the river pleasantly, writing a history of good care for the people.

Kim Myong Sim

Our Home

LAST JANUARY WORKERS of the Pyongyang Kim Jong Suk Silk Mill moved into a new dormitory. (It was the first of its kind in 2017.) The girl workers living in the dormitory fondly call it *our home*.

"Today Is Our Birthday"

January 13 is the birthday of Pak Won Bok, 19, and Jong Hyon Ok, 22. Their friends congratulated them, saying that they were blessed as their birthday fell on the day of removal to the new dormitory. However, they were not the only girls enjoying their birthday feasts. It is a common practice to give a party on the occasion of house-moving. That day a banquet was given in the dormitory on the bank of the Taedong River to the wonder of its residents. Several days before, Supreme Leader Kim Jong Un had looked round the newly-built dormitory with satisfaction, when he promised to give a banquet in the dining hall, which was just like a banquet hall, on the removal day. Now he kept his promise.

It was so impressive that all the girl workers regarded that day as another birthday of theirs. On the day they sang *Ode to Motherland* over again.

This is the motherland
Where the beloved mother
helped me toddle
In the yard of the dear
native home.

The lyrics of the song felt as if they had been made for the girls in the dormitory. They said in unison: "We come from different places and we are of different ages, but this palace of workers is a dear home to all of us silk reelers numbering hundreds. We will remember for ever this house which implanted in our mind the true care of our motherly Party, the pride of the worker and the worth of girlhood."

Heroes of a Promise

In the family parents make more efforts to furnish their daughter's room. Like this all the things in the dormitory are permeated with that motherly love. When the girls entered their rooms they were struck with wonder—the colour of wallpaper ▶

► to their liking, the wardrobe in which they can hang their *chima* and *jogori* (Korean women's costume), a bookshelf, a wall mirror and the bed drawer that can keep clothes neatly. All the items were a favourite of the girls. Sports and amusement rooms as well as the cooking practice facility were arranged in the dormitory.

The girls had photos taken to send them to their parents and friends. Some of them flocked to other rooms if there were rooms better than theirs. But it was useless because scores of rooms in the seven-storeyed building were all the same. They knew it was Supreme Leader Kim Jong Un who had paid close attention to their life—he was worried that there was no fridge in the cooking practice facility, and he even put on the tray rice and soup bowls, a cup and a dish to make sure there was no slightest inconvenience in their use of the facility.

In the evening after the leader's visit the girl workers wrote their emotions in the diary. Kim Il Ok, a silk reeler, put down in her first dairy in the new dormitory as follows: We cannot express our feelings because we are too tearful—wetting our soft quilts. I cannot choose correct words appropriate for my feelings though I consult the comprehensive Korean dictionary. The only word I'd like to say is that *we* ordinary workers just enjoy this sublime civilization and happiness.

Supreme Leader Kim Jong Un, in his New Year Address 2017, swore that he would work with devotion to ensure that the past era when all the people used to sing the song *We Are the Happiest in the World* does not remain as a moment in history but is re-presented in the present era.

The workers at the silk mill are enjoying the reality the leader promised the people.

Pak Yong Il

Veteran Professor's Memories

UN JONG SOP, RESEARCHER AT THE College of Literature, Kim Il Sung University, is an academician, professor and doctor. He is nearly 80 years old now and often looks back upon his life.

Un, born in a coastal village in South Hwanghae Province, was five when his country was liberated (August 15, 1945) from the Japanese imperialist military occupation. With a great joy of national liberation, he learned to read and write Korean at school. He often told stories to his friends, who listened to him carefully all night.

In his middle school days, Un used to write down his impressions after reading a book and make compositions. When he was a leader of the literary group at the senior middle school, he read a lot of books. His writings attracted the attention of his literature teacher, who led the boy with unusual interest in literature to the world of literature. The teacher told him about the literary works written before national liberation and how to depict the life of the Korean people after national liberation. In this course, Un could develop a mind of love for the country and decided to become a literary man to glorify the motherland.

Later he entered the then literary faculty of Kim Il Sung University as he wished. In his university days, he had a clear awareness of the truth that the excellent qualities of the nation would be admirable only when they have a genuine country.

After finishing the university, he became a teacher and engrossed himself in comprehensive studies of the history of literature which he had been studying from his university days. While studying the literature created in the period of the anti-Japanese revolutionary struggle that had been organized and waged by the national leader Kim Il Sung, he got a clear understanding of the indomitable fighting spirit of the anti-Japanese guerrillas, their noble patriotism and comradeship. Based on his research, he compiled the history of the anti-Japanese revolutionary literature the kernel of which was that the revolution will emerge victorious when there is a loud sound of revolutionary songs.

His book was favourably commented upon by specialists and lots of people because it clarified a new phase of the anti-Japanese revolutionary literature.

Recollecting those days, Un said that he had been moved deeply from the fact that the guerrillas had defeated the Japanese imperialists singing and dancing in any harsh conditions and circumstances ever known in history and achieved national liberation at last.

Later Un discovered one lost work after another and compiled them in such books as *Korean Modern and Contemporary Literature Vols. 1* and *2*, *Korean Modern Fictions* and *Selected Contemporary Korean Literature*. These books made a great contribution to the education in literature as they provided a new analysis and assessment of the history of Korean literature before the liberation on the principle of fidelity to historical truth.

Un worked as a department head and rector of the College of Literature and is now devoting his all to the research of the history of literature as a professional researcher. His children also have become literary experts of high standing. Now his dream and ideals have become true. Finishing his story, he says that in his country all people can realize their dreams and ideals.

Un lives in a flat in an apartment block exclusively for teachers of Kim Il Sung University, and he often sings the song *Ode to Motherland*.

Our national flag will be fluttering
in the sky for ever.
All dreams will come true in this land.
I will support thee for ever.
Shine, Korea, the People's Republic.

Kim Hyon Ju

Worker Inventor

IN JULY LAST YEAR A worker of the Mangyongdae Electric Equipment Repair Shop was awarded a diploma of approval at an intellectual product exhibition held in the Sci-Tech Complex, like many other scientists and technicians. He was Kim Chun Gol who invented a natural multi-nutritious activator *Jinphung* with materials richly available in Korea. Earlier he had received a patent of invention for a new type of welding machine which can work at any place with a lower unit of power consumption.

Multi-nutritious Activator *Jinphung*

Kim began his research to develop the fertilizer five years ago. At that time he was a supply service worker, and one day he happened to visit a coastal village for business. Seeing the rich harvest of all crops he judged that there was a secret for it. He analysed the soil of the local area. The soil consisted of remnants of marine things such as sea fish, shellfish, crab, lobster and microorganisms, which had long been fossilized by the geophysical actions. He obtained correct data on the analysis of the soil in close connection with scientists at a relevant unit.

Based on it, he made an experiment in non-cultivating plots, but the result was not so good as he had expected. In the course of analysing the fertility of the soil, he found out that it was due to the incorrect ratio of combination of the fertilizing materials. Next year he confirmed his conclusion. At last, he succeeded in developing a multi-nutritious activator that conforms to the current trend. He named it *Jinphung*, meaning bumper harvest.

According to him the fertilizer contains over 10 kinds of microelements, over 300 kinds of physiological activators needed by plants, and other natural bactericidal elements. Its application can lead to a bumper harvest, protect environment and prevent the damage from drought as it helps plants strike their root 1-2 m deep, while saving water. And it can double the length of the root, leaf and stem while cutting the growing period of rice by 15-20 days, potato and barley 5-10 days, and vegetable 10 days, thus making it possible to introduce double-cropping. The fertilizer provides strong resistance to the high and low temperature with the rate of extermination of harmful insects at about 70% and the rate of germination at nearly 98%. Two-odd-year application of it, with less or no application of chemical fertilizers, showed that it improves the fertility of soil as over ten tons of organic fertilizers are formed in soil over the period.

Jinphung gives rice and corn a glutinous quality. It also makes vegetables softer and fruits more colourful and tasty. It can be applied to cereals, fruits, industrial crops, green plants, medicinal herbs, gardens and forests. Five hundred grams of this fertilizer can process seeds needed for a hectare of land and is enough for threefold application for the same area. It has been introduced to over 100 units for about five years up to now, resulting in favourable things. There has been no abnormal effect, and the yield grew 20-50% higher than the average amount.

Natural Activated Water

Kim Chun Gol also developed natural activated water. In the course of analysing *Jinphung* he got an idea that he could make the water good for health and longevity from fossilized materials. Later he found out the content of healthy water, and succeeded in developing a kind of water that is the best for health and longevity.

According to the result of ▸

► analysis in comparison with other kinds, it is far better than ordinary mineral water and even those found in villages with a lot of macrobians. Kim says that the newly-developed water contains essential amino acid and scores of different kinds of microelements necessary for human body. Considering the reality in which chemical products are in wide use the water takes waste materials and harmful heavy-metal substances out of the body, promotes circulation of blood through resonance of cells, and accelerates the growth of cells and their activity.

Two or three months' application of the water—either drinking or applying it on the surface—removes or considerably relaxes serious headache, insomnia, neuralgia and cardioneural diseases. It not only relieves the women of diseases resulting from body chill and irregular menstruation but also improves their physiological function. It cures hepatic cirrhosis, dropsy of liver, chronic hepatitis, hepatic abscess, and other liver diseases or brings about a radical improvement in the treatment.

It also improves the function of metabolism, reduces the content of cholesterol in the blood vessel, retains youthfulness, retards ageing, and inhibits or prevents different kinds of diseases. Besides, it treats eye troubles, nasal catarrh, pleurisy, bronchitis and other tuberculous-related diseases, enhances the action of exterminating parasites, and is effective in the treatment of kidney disorder and cystitis. And it is effective in treating diabetes, heart diseases, dyspnea, anxiety, hypertension, hypotension, cerebral haemorrhage, and the aftermath of cerebral thrombosis, and in improving children's growth and kinetic function and the function of brain. It energizes passion to live in a fresh mood full of vigour, softens and lubricates the skin, and is effective in curing different kinds of skin diseases. Meanwhile, the water is efficacious in treating alopecia and turns the grey hair white gradually.

The users of this natural activated water favourably commented that they had a better action of heart when they attach on the heart area a strip soaked in the water. Putting a piece of cloth soaked in the water before going to bed kills the pain on the aching spot. And they have a sound sleep when they put their head on the pillow filled with the water in bed.

The water can be used to make different kinds of medicines, and the foodstuff prepared with the water is conducive to health improvement. When added to the animal fodder, it improves the quality of livestock products and the productivity.

Many people say in unison that it is "wonderful and unusual water." The water is now in great demand.

Kim Chun Gol is still working hard to find and carry out new projects for economic development and improvement of living standards.

Sim Chol Yong

Fuel Additive Newly Developed

TEACHERS AND RESEARCHERS of the University of Sciences have developed an effective fuel additive. This additive attracts the public attention as a green chemical material in the 21st century as it is nonpoisonous chemical substance. It is an organic-liquid fuel additive which is now acknowledged and widely used around the world.

The teachers and researchers of the chemical faculty of the university made profound studies and analysis of structures and working properties of different kinds of fuel additives that are under development or in use in the world as well as their supply of raw materials. Based on it they chose chemicals produced at large chemical industry bases in the country for raw materials, and developed a perfect method to synthesize an organic-liquid fuel additive at a high actual extraction rate in the atmospheric condition. This additive costs low and needs a simple production process.

Add this new additive to the fuel for locomotives, vehicles and generators at the rate of 0.05-0.1%, then you can save over 5.9% of gasoline and 7.1% of diesel. Its users favourably comment that it prevents the engine from rust, does purification and increases the life span of the engine while considerably reducing the amount of harmful substances in the exhaust.

Sim Yong Jin

Kangso Mineral Water

KANGSO MINERAL WAter comes from Yaksu-ri, Kangso District, Nampho. The date of its development is unknown, but it has been widely used for hundreds of years. There is a legend that hundreds of years ago, seeing the cranes flock to the spring site every morning, people felt strange and dug the place, when the spring water began to flow out of the ground.

It gushes out from the depth of 130 metres through layers of biotite and mica bedrocks of the substratum formed in the Proterozoic era several hundreds of millions of years ago. It is 100% natural carbonated mineral water beneficial to health and longevity as drinking water and medicinal water for the treatment of various diseases. As it has tens of kinds of microelements in the natural state, there has not yet been any artificial of it.

Kangso Mineral Water performs the function of cleaning the tissues and cells in the body. The association of ordinary drinking water molecules is 13~14 and it is 0.46 in kinetic velocity, but the association of Kangso Mineral Water molecules is less than 9, so it is great in kinetic energy and velocity.

Accordingly, it helps stomach and small intestines to accelerate the absorption of various mineral matters and nutritive substances faster than ordinary kinds of drinking water. It easily percolates in the blood and lymphatic vessels to supply nutritive substances and mineral matters to cells and promotes the function of diuresis to accelerate the removal of gallstone, waste matters, poisonous substances and drug-induced poisoning produced in the process of metabolism in the body.

It also replenishes blood so as to lower the viscosity of blood and check its concentration, thus it is good for preventing thrombus. It is efficacious for prevention and treatment of metabolic diseases including arteriosclerosis, hyperlipemia and diabetes as it has effects on the process of metabolism of protein, fat and sugar. It has special virtue for the treatment of gastric and duodenal ulcer, chronic gastritis, chronic hepatitis, chronic pyelitis, obesity and ovarian dysfunction. Especially, it has been regarded as a life-giving water ideal for health of women in pregnancy and in childbed, and the growth of an embryo for its proper amount of microelements. It also supplies calcium to the children and pregnant women, and prevents old persons from porous bones. Its poultice and bath are widely used for treatment of diseases like chronic cardiac insufficiency and autonomic imbalance.

Kangso Mineral Water was registered by the state as Natural Monument No. 56 in 1982 and received certificates of origin both from the DPRK and the World Intellectual Property Organization (WIPO) together with SGS certification.

Since its development in the 1960s, the quantity and quality have showed little change. It is of acid carbonate spring water, its temperature is 13℃ all the year round and the daily yield is 400 m^3.

At present, Kangso Mineral Water is enjoying popularity among clients at home and abroad. Beside the mineral water spring stands the Kangso Mineral Water Processing Factory, which is producing lots of bottled mineral water and regularly supplies it to Pyongyang and provinces while exporting it to different countries.

Pak Yong Il

Legendary Tale about Chollima Football Team

ON JULY 12, 1966 THE opening ceremony of the 8th World Cup Football Championship was held at Wembley Stadium in London amidst the concern of the world football fans.

The football team of the Democratic People's Republic of Korea (DPRK) arrived in Middlesbrough where Group D league matches were to be held. Middlesbrough is a seaside town in the northeastern part of England, 400 km away from London. Making good use of its harbour with deep water, the locality developed chemical and steel industries from long ago, so it retained a strong plebeian character, whose citizens were mostly workers. The DPRK football team checked in at a hotel some 20 km away from the Middlesbrough Stadium.

The debut of the DPRK team in the World Cup produced different responses and feelings in the football world. FIFA thought it an enigmatic team of the Orient, and some people made light of the team for their short height and, worse still, some other people sneered at the Koreans attributing their debut to the leaky system of preliminaries.

As Korea had once remained long in the darkness of an eclipse on the world map, they had little knowledge of the heroic Korea that had broken the myth of the "powerful US" in the three-year-long Fatherland Liberation War (1950–1953)—none of them could understand how it had emerged from the ashes.

The situation at the moment can be understood by a simple glance at the possibility of the winning lottery tickets bet on consequences of the matches during the football season. The winning rate of lottery tickets was 9:2 for England, 11:2 for West Germany, 6:1 for Argentina, 6:1 for Portugal, 7:1 for Brazil, 10:1 for Italy, 16:1 for Uruguay, 40:1 for Spain, 200:1 for Chile, 500:1 for France, 1 000:1 for the DPRK, 1 000:1 for Bulgaria and 1 000:1 for Mexico. This meant the man who bought a lottery ticket at the cost of £ 2 with the prediction that the English team would win could get £ 18 when the English team won actually, and the man who bought a lottery ticket at the cost of £ 1 with the prediction that the DPRK team would win could get £ 1 000 when the DPRK team emerged victorious. In other words the possibility of the DPRK team's win was so much faint. Though the lottery-winning ratio was decided by the gambling organizer's prediction, it partly reflected the public appraisal and interest at the moment.

On July 13, 1966 the first match of Group D took place between the DPRK and the USSR in Middlesbrough Stadium. Most of the Soviet players were unknown except the keeper Yashin. At half past seven pm sharp, the referee blew the whistle to announce the beginning of the match. The match was often interrupted from the beginning by whistles of the referee because the Soviet players committed violations with the use of force, targeting the control of the mid-field.

Less than ten minutes after the beginning of the first half several forwards of the Korean team got seriously injured. But they could not be replaced as it was the rule at the time.

Senior Coach Myong Rye Hyon clasped his forehead with one hand, his head drooping. The Soviet team launched stronger, taller and more tenacious players rather than those who were experienced and well-known. They were aware of the DPRK team's composition of players and tactics. Consequently the Korean team lost the match 0-3.

Thus it became a very serious problem for the DPRK team how to cope with the match with the Chilean team, the second one in the group. In the exercises for the match Myong Rye Hyon put emphasis on application of the Korean-style tactic based on teamwork. The Chilean team had been beaten by the Italians 0-2, so they were making thorough preparations for the match since they could move on to the next stage as the second winner in Group D only when they beat the Koreans. ▶

► The Koreans had a meeting to discuss tactics the day before the match. Myong stressed one problem after another in detail about tactics and players' arrangement to be introduced in the match with the Chileans.

At half past seven pm, July 15, 1966 the match between the DPRK and Chile took place in Middlesbrough Stadium.

From the beginning of the match the Koreans were in high spirit and every movement of theirs was swift and valiant. Overwhelmed by the Koreans' tactics, the Chileans were at a loss how to cope with the situation.

In the battle to take the midfield command the Koreans were superior. They put their offensive area close to the goal area of the Chilean team, keeping a tight and well-organized collective connection, and conducted ever-changing fierce attacks.

The audience shouted "Bravo, Korea!" incessantly. They praised the Koreans for their ability, saying they were far from a poor team, and that they were unfolding a new scene of the football world.

The match got fiercer with desperate offensive and defensive battles. With the passage of time the Koreans' movement of snatching the ball became rough and they seemed to fall into violent mentality. At around 26 min of the first half the Koreans allowed an 11-m penalty kick since they failed to act properly according to circumstances while trying to check the opponents' attack. Thus the Chileans scored the first goal of the match.

Continuing the match in such an unfavourable situation none of the Korean players looked disappointed. The number of Korean attacks grew and breath-taking scenes unfolded in succession in the goal area of the Chilean team. Impressed by the performance of the Koreans, the spectators clapped for them drubbing and shouting.

The first half ended with the Chilean team's score. In the second half the Koreans showed the spectators the power of an all-out attack accelerating the attacking speed attractively. But they could not score a goal yet.

The Chileans changed their tactics. They put more efforts into defence than attack, stalling the game with the idea that they were leading by a goal. Such a playing mode was a general trend in the European and South American football circles at the moment. After scoring a goal, they attempted to win the game by dint of stalling.

As time went second by second urgency began to prevail the Korean players' mind causing apprehension over the possible outcome of the match. Such a psychological change was reflected in the players' management of the match—they lost patience and made haste, even missing a golden opportunity to make a shot in a situation when they were faced the opponent keeper man to man. Repeated shooting failures badly disappointed the spectators as well as other Korean players.

As the second half was coming to an end, the spectators even complained the Korean football was fresh but lacked the scoring ability. Some impatient people stood up and headed for the exits to leave the stadium before the exits were crowded.

At that moment Pak Sung Jin, half back of the Korean team, caught the ball with the left leg. He managed to rush into the back side of the opponents in cooperation with a forward nearby and shot the ball at once when he took it from the attacker. He was 20 m far from the goal—the distance was more or less far but the shooting angle was opened. He carried out his shooting so instantly that the Chilean keeper never reacted but watched the flying ball. When the ball flew into the left corner of the goal and kissed the net, the keeper collapsed.

Sounds of claps and shouts shook the stadium. It was the moment two minutes before the end of the second half. The Koreans conducted a fierce all-out attack for the two minutes. But that was too short a time comparing to ninety minutes.

The whistle sounded long to declare the end of the match. But the spectators would not move but shouted and sent enthusiastic cheers to the Korean team. The goal Pak Sung Jin scored was quite meaningful in that it was recorded in the FIFA history as the hundredth goal in the 8th World Cup, and that it was the first goal of the DPRK that was the first to participate in the World Cup finals in honour of Asia, Africa and Oceania.

(To be continued)

Original Charm of Koryo Celadon

Pak Ryong Un (*left*) **and Han Won Il.**

KORYO CELADON IS WIDELY KNOWN TO the world for their original attractions. Recently a Korea Today *reporter had a talk with teachers of the Pyongyang University of Fine Arts about the traditional celadon associated with the Korean nation's wisdom and talent. Excerpts:*

Will you tell me how Koryo celadon came into existence and developed?

Deputy dean Pak Ryong Un of the ceramics faculty: Born in the primitive ages the earthenware developed into pottery thanks to the high calcination technology which was established in the ancient times. Pottery developed into porcelain in the Middle Ages, and the world-famous Koryo porcelain came into existence during the time of Korea's first unified state of Koryo (918–1392). In particular, Koryo celadon was in its golden age in the 11th~12th century and continued to develop in the 13th~14th century keeping its advantage.

How do you classify Koryo celadon?

Teacher Han Won Il: Koryo celadon can be classified into pure celadon, engraved celadon and inlaid celadon. Pure celadon is a kind of porcelain which was made by heating clay pasted with celadon glaze without any ornament on the surface. It was produced in the early years of Koryo celadon manufacture. Engraved celadon was ornamented with patterns made in intaglio and relievo and openwork. Inlaid celadon was ornamented with patterns by cutting out the surface and putting in it materials of various colours different from that of the surface background.

I'd like to know more about the advantages of Koryo porcelain.

Pak Ryong Un: Koryo celadon has three kinds of advantages in style, colour and ornamental pattern.

In ceramics you can perceive, simply by the style of porcelain, the emotional quality, aesthetic sense, hobby and living customs of the manufacturing nation. Silhouettes of Koryo porcelains are gentle and rhythmic. And their styles are of variety and freshness. In particular, Koryo porcelains which are formed after certain objects look like real things and each of their elements is in good harmony with the structure of practical use.

Koryo porcelain is of celadon green colour, which is well known, or other mysterious ones rare to be seen in the natural world. Going by another name of emerald green porcelain, Koryo celadon is a symbol of Koryo ceramics. Our ancestors produced Koryo celadon which is unprecedented in the world by selecting an inherent and unique colour suited to the beauty of nature, the emotion and sentiment of our nation. The beauty of Koryo celadon which produces different colours according to angles is its inherent quality. Celadon can be seen as an artistically perfect colour which reflects the sentiment and taste of the Korean people who like bright, clear and sedate colours.

Ornamental patterns of Koryo porcelain were provided in forms of single pattern and a series of patterns of animals and plants which can be seen anywhere in Korea—in fields and mountains of the country. Like a quartz seen in crystal clear water, ornamental patterns producing sedateness through the glaze of the porcelain go well with the style and colour of the articles. There are a lot of ornamental techniques for inlaid porcelain, and yet the most usual is the one of painting flowers or cranes in circles to be arranged proportionately and ornamenting other spaces with patterns of clouds and wild chamomiles.

Since Koryo celadon became the crown of ceramics in the contemporary time for its style, ornamental pattern and colour which are in good harmony with one another, it is still a Korean specialty and treasure of human civilization.

Koryo celadon is precious cultural treasure of the Korean nation which shows the extraordinary artistic attainment and high sci-tech standard of our ancestors. It is further developing at present retaining its inherent features. ❑

Mt. Taesong

MT. TAESONG, 270M high above sea level, is situated in Pyongyang on the northeastern boundary of Taesong District adjoining Samsok District.

The mountain is called *taesong* (large fort) since it had a large fort built to repulse foreign invaders in the period of Koguryo (277 BC–AD 668). It was also called Kuryongsan or Ryongsan in the past. It has six hills— Kuksa, Somun, Jangsu, Ulji, Pukjang and Jujak—which adjoin one another to form a screen. Two broad and deep valleys extend southwestward along the ridge of Jujak Hill.

There are many groves of pines as well as oaks, oil- and fruit-bearing trees and lots of flowers and plants in the mountain. Since the mountain is covered with pine trees and thus remains ever-green all the year round, people called the scenery of the mountain *ryongsanmanchwi* which belongs to the eight famous views of Pyongyang. Various kinds of flowers of different colours in full bloom in harmony with ever-green pine groves elevate the beauty season after season.

In the mountain are animals including pheasants, migratory grosbeaks, orioles, woodpeckers, gray-backed starlings, roe deer and hares.

There are many historical remains of the Koguryo dynasty in the mountain. Typical of them are the Taesongsan Fort built in the 3rd–5th century AD, sites of over twenty gates, ponds, reservoirs, food storehouses, Anhak Royal Palace, and clusters of ancient tombs; a 200m-long fortress wall on Somun Hill, a pavilion on Jangsu Hill, Nam (south) Gate ▶

Nam (south) Gate in Mt. Taesong.

The Taesongsan Fort.

and Kwangbop Temple have been restored to its original state.

Mt. Taesong also consists in a large pleasure ground occupying thousands of hectares. In recent years in the mountain resort the Central Zoo was renovated in hundreds of hectares of area and the Natural History Museum newly went up. There is the Central Botanical Garden which occupies hundreds of hectares and shows all kinds of plants.

The mountain resort has a 16 km-long loop road, and artificial reservoirs including the Tongchon and the Michon, several ponds including Ingo and Sasum, and beautiful waterfalls.

A modern amusement park is to be found in the mountain, distributed in over 180 000 square metres of area and including many amusement facilities like roller coaster rail of which is 1 500 metres long, mono-rail car, Ferris wheel, rotary flower-shaped vessel, rotary plane, mad mouse and spaceship. There are also service facilities including a swimming pool, a boating ground, a folk game ground, restaurants, shops and cafes in the park.

In the mountain are living monuments including paulownia, *Eucommia uimoides*, *Abeliophyllum distichum* and *Wistaria floribunda* which are indigenous to Mt. Taesong.

The mountain is associated with a lot of interesting folk tales which reflect the patriotic struggle of the people, scenic spots and the Korean people's desire to enjoy happy life free from the feudal status system— *Kuryong Pond and Chadori* and *Sasum Pond and a Madam with Deer Legs* are typical of them.

Jujak Hill is crowned with a cemetery that keeps the souls of the anti-Japanese revolutionary martyrs who fell while fighting bravely for the liberation of the country and the people's freedom and emancipation. ❑

Armament Associated with Korean Nation's Wisdom

A model of armoured cavalryman.

FROM OF OLD THE KOREAN NATION made different kinds of weapons and military equipment suited to their constitution and physiographical conditions in order to boost the country's defence capabilities and repulse the foreign invaders. The weapons started from the flint arrowhead and stone axe used by primitive men for hunting and developed into means of national defence in the early period of Ancient Joson (early 30th century BC–108 BC). Typical of them were catapult, *pipha*-shaped dagger, narrow bronze dagger and bronze spear.

The catapult came into existence from the short bow. As mechanical equipment it was widely used in the position warfare for its high rate of hits. Seeing a catapult of Ancient Joson a foreign scholar said, "The unearthed catapults strike wonder into modern people for their simple and elaborate structure. They are very interesting as they work like today's rifle."

Koguryo (277 BC–AD 668), which maintained a high militaristic spirit, put greater emphasis on military equipment. During the period armour was put on not only soldiers but also horses, which turned out quite effective in battles against foreign invaders. The armour of warriors was made by connecting many iron plates (2-3 cm wide and 3-4 cm long), and those iron plates for horses were a bit larger. The iron-clad soldier on the iron-covered horse was called *kaemamusa*.

In the Koryo dynasty (918–1392) powder weapons took an important share. By developing the firing equipment that had been used since the 12th century they invented and introduced the technology of manufacturing gunpowder and powder weapons during the war against the aggression of the Japanese pirates in the latter half of the 14th century. Some weapons made at that time were *taejanggunpho* (*pho* means cannon), *ijanggunpho*, *samjanggunpho*, *hwapho*, *sinpho* and other guns, including fire ▶

***Pipha*-shaped daggers and a catapult, typical weapons of Ancient Joson.**

arrows such as *hwajon* and *cholyongjon*, and shells. Those kinds of weapons were installed on stout ships to be used in naval battles. They demonstrated their might in the naval battle off Jinpho to annihilate the Japanese pirates in 1380. At that time it was known in the world that small arms were set aboard the boat, but there was no record of using cannons on the boat like Koryo did.

During the feudal Joson dynasty (1392–1910) weapons were developed with diversified standards and powers. Different cannons, *sinkijonkihwacha*, turtle ship and *pigyokjinchonroe* can be cited. The turtle ship built by the patriotic general Ri Sun Sin was the world's first iron-clad ship that can be called as complex of offensive and defence weapons and auxiliary equipment. During the Imjin Patriotic War (1592–1598) the turtle ships displayed their power to the full in several naval battles, typically those off Sachon and Hansan Island.

The traditional weapons and military equipment are valuable cultural heritage of Korea that shows the nation's resourcefulness, talent and creativity.

Kim Un Sun

A turtle ship of the feudal Joson dynasty.

***Ryukhwasokpho* and *sinpho* of the Koryo dynasty.**

National Intangible Cultural Heritage (6)

Making of Mung Bean Pancake

PANCAKE IS ONE OF THE Koreans' favourite foods they cooked from long ago. Pancake, along with rice cake and noodle, was a must-have food on holidays and other festive occasions. Among different kinds of pancake the one made from mung beans is known as the most delicious one.

Mung bean, belonging to the bean family, is an annual crop and is effective in stimulating internal organs, improving eyesight and urination, relieving inflammation, hastening detoxification and preserving a clear skin. When they took Koryo medicines they were forbidden to eat mung bean foods because mung beans might neutralize the efficacy of the medicines as they have a stronger efficacy than that of the medicines.

The classic *Kyuhapchongso* gives a detailed account about mung bean pancake. It reads: Mung beans are ground into thick, wet substance and then fried with enough oil. Boiled chestnuts are mixed with a little amount of honey and then put on a heap of ground mung beans in the frying-pan. It is then covered with another layer of ground mung beans in a flower pattern to be fried with pine nuts and jujubes on it.

Usually they fried ground mung beans in oil in the pan, sometimes, mixing it with vegetables. In southern regions mung bean pancake was called *pindaettok*, which means food to be served to guests, or *pinjattok* which means food which costs so little that poor people often made for diet.

Mung bean pancake from Hwanghae and Phyongan provinces is famous for their simple cooking method and peculiar taste. In Hwanghae province they mixed ground mung beans with cabbages (or kimchi) and pork to improve its flavour, and in Phyongan province they enjoyed eating mung bean pancake with a slice of pork inserted in the middle. The kind of pancake was called *matbut* in Hwanghae province and *jijim* in Phyongan province.

They used to prepare the mung bean pancake, which is indigenous to the Korean nation, in honour of special ceremonies like wedding or for a usual diet. In Phyongan province they regarded placing high plates piled with pieces of mung bean pancake on festival tables as a traditional custom. Mung bean pancake was so important that a table without the pancake was rated as plain table.

The Koreans still like to eat the mung bean pancake.

Here goes the method of making mung bean pancake. First, mung beans are roughly crushed and left in water for 3~4 hours to let them steep. Then they are peeled off. Next, the mung beans are ground finely by means of a millstone and salted. One of the most important methods to make tasty mung bean pancake is to salt it properly. To put too much or too little salt will spoil the inherently sweet taste of the pancake. If the ground mung beans are left in water too long before frying, the pancake will lose its original colour. It is recommended to put 3 grams of salt per 200 grams of mung beans. Boiled streaky pork or fat is cut into pieces 3.5~4cm in length, 2cm in width, and 0.2~0.3cm in thickness. Pour oil on the heated frying pan, put a piece of pork on the pan, put a ladle of ground beans over the pork piece and spread it roundly. An important knack is to put oil once more before overturning the pancake in the pan. When the pancake turns yellow on both sides, take it out and serve it on a plate. The round yellow pancake with a square slice of meat in the middle makes your mouth water at a glance.

Kim Hyang Mi

Samgyethang

SAMGYETHANG WAS originally made by steaming chicken with wild insam (ginseng) in its belly. Later as insam was cultivated, they widely used insam and black chicken. The food has its own legend about a boy who practiced filial piety toward his sick mother by making and serving Samgyethang.

Its ingredients are 1.2kg of chicken, 50g of six-year-old insam, 100g of glutinous rice and 5g of salt.

To make the food: Chicken is washed clean and then boiled slightly. Glutinous rice is washed clean and put in water for two or three hours. Then, the glutinous rice and insam are put in the belly of chicken. The belly is stitched up and the chicken is put in an earthenware bowl. Then, it is boiled for an hour and half. The bowl is served along with salt. ❑

The Commander and His Mother

KIM SUK HUNG WAS a famous patriotic general of the Koryo dynasty (918–1392). His father, on his deathbed before Kim was born, left a will to his wife Ri, saying, "I am leaving this world, but I'm relieved you've my child in you. When it is born a boy, I hope you will bring him up well into a warrior to make up for my failure to perform a feat for the country as a soldier. Our ancestors were all military officers, and so if you rear him as a good warrior and pillar of the country, I'd rest in peace."

Bearing his words in her mind, the widow pledged inwardly to bring up her son into a good soldier. But her son was physically week and feeble-minded and was far from interested in his studies.

One winter day, Suk Hung felt very cold on his way home from the village school, so he cried loudly when he got home. His mother, Ri, took him to the well. To the wondering child she said, "Take off your clothes. I'm going to make you warm." Then she released a bucket down the well. Only then did the boy see what his mother was going to do. He took her by the wrist and entreated, "Mum, please don't undress me. I'll never cry again when I feel cold."

Ri said in a low yet grave voice, "Then stop crying and listen to me, will you?"

Suk Hung stopped crying and nodded his head.

Ri said, "On his deathbed your father asked me to raise you to be a respectable military commander for the country. But you cry in this bit of cold when you're a boy. If your father saw you, how bitter he would feel for me! Will you obey me from now on?"

From that day on, Ri was strict with her son and the boy was obedient. While teaching him to read and write, she saw to it that he never complained about the weather or his pain. She often told him, "Don't forget your father's last wish. Only when you get over all trials will you be able to become a brave commander."

However, when he was asleep the mother sat by his son's bedside, fixing the quilt on him, and shedding tears out of pity for him who was growing without his father's care. When the child was sick, she would go a long way even at night to get medicine.

At last, Suk Hung came out first in the military examination and was placed in command of a fortress, a point of strategic importance, in the northern border. Although he was now in charge of an important task of national defence, he always missed his mother who was living alone at home. So, he got a leave of absence and visited his home to celebrate his mother's birthday and hold a memorial service for his father's death. But his mother, refusing even to acknowledge his greeting, said sternly, "You are still a long way off the discretion."

Suk Hung stood silent unable to understand her, when she said in tears, "You're a general in charge of a fortress on the frontier. I'm afraid you might fail to perform your duty. I see you distracted when the foreign enemy will invade our country at any moment. How could we appease the soul of your father if we brought state affairs to ruin? Be a good commander if you want to be my son. If you are a laudable military commander, my heart will always be with you. So, you need not come to see me like a child."

Deeply moved by his mother's admonition, he immediately returned to his duty and defended the country with his competent command and bravery whenever the enemy made an inroad.

Kim Un Chol

Driving Force of National Reunification

THE KOREAN NATION'S desire to put an end to the tragedy of the national division as early as possible, develop the inter-Korean relations and open up a new phase of independent reunification is getting more fervent with each passing day.

This year the Democratic People's Republic of Korea made an earnest appeal to frustrate the challenges of the anti-reunification forces at home and abroad who go against the aspiration of the nation for reunification, and open up a broad avenue to independent reunification through a concerted effort of the whole nation. All the Korean people in the north, in the south and abroad should achieve solidarity, make concerted efforts and unite on the principle of subordinating everything to national reunification, the common cause of the nation. It is also important to revitalize the reunification movement on a nationwide scale. All this poses as an important task in the struggle to shatter the challenges of the anti-reunification forces.

The cause of national reunification itself is the one to re-link the severed veins of the nation and achieve national unity. Nothing is more important than the task of attaining great unity of the nation regarding the matter of bringing Korea's reunification to earlier completion.

The Korean nation has good experience in making united efforts to accomplish the common cause of reunification and carving out its destiny by dint of unity. During the June 15 reunification era they made a breach in the barrier of division which had existed for more than a half century, and changed the inter-Korean relations from mistrust and confrontation to reconciliation and unity, thus energizing the nation's reunification movement. The dialogue and cooperation got brisk, and national independence and mutual assistance constituted the main current of the times. Reunification-oriented events were held with splendour with the participation of delegates from the north, south and abroad. Amidst the chant "We are one!" echoing throughout the Korean peninsula all Koreans shared the same mind and intention.

The present realities demand that a nationwide struggle be waged to put an end to the moves for aggression and intervention by the foreign forces including the United States that is occupying south Korea and tries to realize the strategy for hegemony in the Asia-Pacific region, and thwart the moves of the traitorous and sycophantic anti-reunification forces that, failing to see clearly who is the real arch-enemy of the nation, are trying to find a way out in confrontation with the fellow countrymen.

The south Korean authorities, however, are turning a deaf ear to the appeal of the DPRK to hold a grand pan-national meeting for reunification. Instead, they are resorting to military provocations and sanctions against the north in collaboration with the foreign forces, committing shameful acts of treachery to the nation that desires independence and great unity. Regarding the north's call for pooling their will and efforts to usher in a heyday of nationwide reunification movement, the south Korean authorities labelled it as "a typical offensive of the united front." They also flatly rejected the suggestion to smash the challenges of the anti-reunification forces within and without, claiming that "it is the north's shifting of its responsibility for the frozen inter-Korean relations" and "provocative assertion and blackmail."

The puppet south Korean defence minister and other brass inspected military units stationed in hot spots, instigating frenzied confrontation and war by the clamour for "punishment and retaliation" and "readiness to go to war." Such moves of the south Korean authorities are none other than the mockery of the DPRK's patriotic, well-intended and broad-minded generosity, and the challenge against the nation's aspiration and wish.

Great national unity just means Korea's reunification and a reunified power. The foreign forces, who divided Korea into two and are fishing in troubled waters, never wish to see the Koreans become powerful as a reunified nation. The US must no longer cling to the scheme of hindering the Korean nation's reconciliation and unity and whipping up national estrangement by inciting war and confrontation among the Koreans. The south Korean authorities should stop all sorts of moves of joining the US in its anti-DPRK policy.

Today the inter-Korean relations are in a catastrophic state. It is regrettable that only the Korean people are living in the danger of war all the time, worse than mutual confrontation and antagonism, when all countries and nations in the world are seeking their way of development. It brooks no more delay to improve the inter-Korean relations, and it is unpardonable to leave, as it is, the current situation in the Korean peninsula that is on the brink of war. The nation's way out for prosperity and peace lies in the road of dialogue and unity, not confrontation or ►

Japan Commits a Fault

ONCE THE AMERICAN newspaper *The Los Angeles Times* carried an article about Japan's armed forces, pointing out that it has already got the elements of large modern military forces, that it has a huge naval force in the Pacific region next to the US in size, and that troops of Japan's Ground Self-Defense Force are larger than those of the British Royal Army and Royal Marines.

Then what is the need of Japan, a defeated nation, to have such a large armed force? It is a common knowledge that the natural resources of Japan, an insular country, are limited. That is why in last century Japan gathered wealth by invading other countries, robbing them of colossal underground resources. Korea and other Asian countries fell victims to her plunder.

Beaten in World War II, Japan, now a defeated nation, declared in and out under Article 9 of its Constitution that it would never go to war again. Nevertheless, after the war Japan has been rushing headlong for the goal of becoming a military giant. All the governments established in Japan after the war dashed forward likewise to become a great military power with the strategic object of taking revenge for its defeat and realizing its old dream of the "Greater East Asia Co-prosperity Sphere."

That's not all. In spite of its stigma as a defeated nation, Japan has been clamouring about the alleged "threats" from Korea in an attempt to cover up its crafty deeds. Japan adopted the "Outline of the Defense Plan" in 1995, the "Japan-US Joint Declaration on Security" in 1996, and the "Japan-US Defense Cooperation Guidelines" in 1997. In 2004 it adopted a new "Outline of the Defense Plan," working out a worldwide offensive military strategy on the pretext of "improvement of the international security atmosphere." And in 2015 Japan revised the Japan-US defense cooperation guidelines and adopted the law on security, extending the SDF's sphere of activity from around Japan to the whole world and opening the way to its military activities in any spot of the world on the pretext of military support to America and other allies.

In this context, selfish Japan abruptly signed the Japan-south Korea agreement on protection of military intelligence last year. Actually, the conclusion of this agreement came up for discussion in June 2012, but it fell through owing to the strong opposition of the south Korean public and the international community. However, when Park Geun Hye came into office, Japan took mean advantage of her flunkeyist tendency. In 2015 Japan reached agreement with south Korea on the "settlement" of the Japanese army's sex slavery issue, and advertised this as "final and irreversible settlement of the comfort women issue." In 2016 it enticed Park, now a mere vegetable, to conclude the south Korea-Japan agreement on protection of military intelligence. This agreement backs up Japan's exercise of the "right to collective defence."

What is serious is that it opens the way for the SDF's entry into the territory of south Korea on various excuses or allows Japan's "preemptive" strike against the DPRK. The Japanese media commented that the agreement would permit Japan to ask south Korea for information on the deployment of the south Korean troops, and on the airports and seaports for the evacuation of its citizens from the Korean peninsula in case of emergency. It is reported in south Korea now that the "Defence Ministry" of south Korea is proceeding to conclude an agreement on munitions support, following after the agreement on protection of military intelligence. In that case, the agreement on munitions support may give direct occasion to the Japanese SDF to make an entry into the Korean peninsula.

In 2015, the Japanese chief executive, in his statement on the occasion of the 70th anniversary of Japan's defeat in the war, remarked, "Calmly looking back on the past defeat, the path followed by Japan after the war, and the times of the 20th century, we should learn the wisdom from the lessons of history to move forward to the future." That wisdom means Japan's stratagem and conspiracy to realize its ambition of reinvasion of Korea and the old dream of the "Greater East Asia Co-prosperity Sphere." As fools rush in where angels fear to tread, Japan is thinking of fulfilling its sinister ambitions by the backing of the United States, but there is one thing it fails to know—Avarice blinds one's eyes.

Japan is second to none in craftiness, but still it is at fault in that even now it fails to see the high strategic position of the DPRK.

Rim Hye Gyong

► division.

The entire Korean nation should open up a broad avenue to independent reunification this year, marking the 45th anniversary of the historic July 4 Joint Statement and the 10th anniversary of the October 4 Declaration, by propelling the reunification movement through a concerted effort.

Mun Pong Hyok

Pipe Dream

IN FEBRUARY THIS YEAR the Democratic People's Republic of Korea had the successful test-fire of a ground-to-ground intermediate-range strategic ballistic missile *Pukguksong 2*, a new-type strategic weapon system. Many countries are judging this in their own way.

An American expert in the DPRK studies said: North Korea is successfully following the line of simultaneously promoting the two fronts despite the international sanctions. The US is faced with the reality in which the supreme leader of the DPRK has established a stable system for his leadership while achieving sustained prosperity, and changed his country into a nuclear state which is capable of attacking the US mainland.

The world media including those of Russia and China reported that missiles and nuclear tests carried out by the DPRK had made a greater progress than the experts anticipated, and that it turned out true that the DPRK is possessed of ICBM.

But, rejecting the reality, the US politicians are still clinging to the completely failed strategy with a habitual antipathy towards the DPRK, avoiding to see the reality squarely. What for? It is because they are still in the pipe dream of conquest of the world.

After the Second World War the American politicians concentrated their effort on the Korean peninsula in order to realize their plan to dominate the whole world. What kind of ambition the US ruling circles had pursued is clear from the following remark of MacArthur, US general:

"By occupying all of Korea we could cut into pieces the one and only supply line connecting Siberia and the south..., control the whole area between Vladivostok and Singapore. ... Nothing would then be beyond the reach of our power."

The US provoked the Korean war (June 25, 1950–July 27, 1953) but lost it. The US ruling circles should have known that it was impossible to realize their dream, but they became more outrageous. Truman who provoked the war and his successors threatened the DPRK with a possible use of nukes and by bringing a lot of nuclear weapons into south Korea.

After the Cold War the Clinton Administration tried to start a second Korean war while finding fault with the peaceful nuclear movement of the DPRK.

The US magazine of international relations *National Interest* revealed: The main documents the last three US presidents—Clinton, Bush and Obama—received from their predecessors before their presidential inauguration were related to the nuclear issue of the DPRK, and advices to do their best to stop the DPRK's nuclear armament. The US clung to the stalling tactics by mobilizing all means of negotiation and sanctions in order to bring the DPRK's nuclear development back to its starting point, but it ended up in all failure.

Unheard-of provocations and nuclear blackmail of the US pushed the DPRK constantly to accelerate its war deterrent and made it take more offensive and powerful actions. In 2016 the DPRK opened the anti-US confrontation with its first H-bomb test which was a high level of development of nuclear force, and dealt a direct blow to the US on the front, not in the rear, by succeeding in the test blast of a nuclear warhead. This year, too, the country is building up its self-reliant defence capabilities in terms of both quality and quantity against the US and other hostile forces.

Today US experts on the DPRK and mass media insist that it is the tradition and mode of existence of the DPRK not to surrender under any sanctions, and that the US should recognize and treat the country as a nuclear state.

In the 1950s the heroic Koreans brought about the beginning of the decline of the US by shattering the myth of its "mightiness," and are now pushing the US into the abyss of ruin.

The US must know that accepting the stark reality is better than keeping a pipe dream.

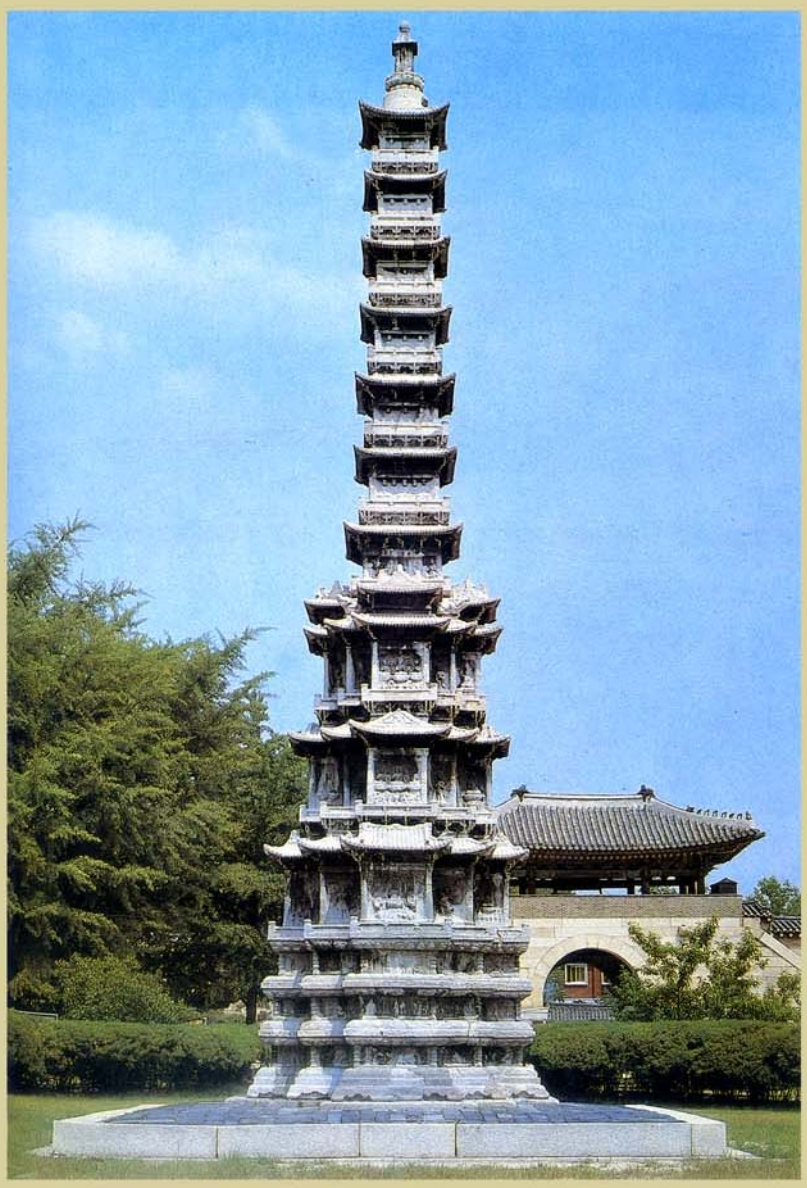
Kim Yong Un

Kyongchon Temple Pagoda

THE KYONGCHON TEMple Pagoda was erected in 1348 at the end of the Koryo dynasty which existed from 918 to 1392.

The pagoda consists of a three-storied pedestal, a ten-storied body and a head. It is 13.5 metres high and 3.12 metres wide at the pedestal. Each storey of the pedestal consists of a middle slab and a pad slab. The pedestal is supported by a foundation stone, and it is tapering upward but a little, so it looks like a single mass.

The body largely divides into two parts according to the shape—three-storied lower one and seven-storied upper one. Each storey consists of a corner stone, body stone and a roofing stone.



The pagoda is of high formative art with varieties of delicate engravings all over its surface.

The roofing stones retain an admirable artistic technique. Those of the first to third storeys are of a gable style in different shapes. The roof of the first storey is projected, and the gable of the second storey is protruded. The third storey has double roofs—the lower one shows the roofing part and the upper one the gable. The seven storeys have a square roof each, tapering gradually upward.

The roofing stones have patterns of circular and square rafters at the bottom. Peculiar is the dragon head-shaped sculpture engraved in the middle of the roof of the third storey.

The pagoda retains the true features of stone pagodas of Koryo. A lot of storeys, a great height and the square or polygonal body are the typical qualities found in stone pagodas at the Pohyon Temple in Mt. Myohyang, the five-storeyed pagoda at the Pulil Temple and the nine-storyed pagoda at the Woljong Temple.

In the early years of occupation (1905) of Korea the Japanese imperialists plundered the Kyongchon Temple Pagoda from Korea and took it to their country. Succumbing to the protest of the Koreans, they brought it back to Korea. However, they did not put it at the original place in Kaesong, but in Seoul, south Korea.

Jon Yong Il