

Immortal exploits shining in history of building of revolutionary armed forces

By Ri Sung Ik PT

It has been 75 years since the founding of the Korean People's Army was proclaimed.

The 75-year history of the KPA is unthinkable apart from the immortal exploits of President Kim Il Sung and Chairman Kim Jong Il who made a new history of building the Juche-oriented revolutionary armed forces and led it along the road of brilliant victory.

General Kim Il Sung, who put forward the policy of founding a regular revolutionary army on August 20 1945, five days after Korea was liberated from the Japanese imperialists' military occupation on August 15, solved the problems arising in building the army in an original way and declared the founding of the KPA as a regular revolutionary army on February 8 1948.

The country, which had no experience in and foundation for building a regular army, built the regular revolutionary army in a little over two years despite the difficult conditions under which everything was in short supply soon after liberation. This was a miracle unprecedented in history and a brilliant fruition of Kim Il Sung's original army building idea and theory and his outstanding leadership.

The most prominent achievement he made for the building of the revolutionary armed forces was that he made the KPA truly an army of the people.

The KPA is boundlessly loyal to the ideas and leadership of the Party and regards the Party's



General Kim Il Sung standing on the platform of the first military parade of the Korean People's Army in February 1948.

leadership as its lifeblood. Herein lies the fundamental key to its having consolidated its matchless military strength to firmly safeguard the country, revolution and socialism as a genuine army of the people and resolutely repulse the aggression and provocations of hostile forces.

The 75-year history of the KPA is a course of victory and glory in which it has always emerged victorious under the leadership of the

peerlessly illustrious commanders.

Under the leadership of Kim Il Sung, the KPA won a great victory in the Fatherland Liberation War in the 1950s that can be claimed to be a showdown between a rifle and an atomic bomb and recorded only victory in its annals decade after decade.

Chairman Kim Jong Il, who opened up a new era in the development of the revolutionary armed forces with his outstanding

commanding art and steel-strong courage, developed the KPA into an army strong in idea and faith that can be found nowhere else in the world by remarkably promoting the single-hearted unity of the whole army based on the revolutionary outlook on the leader.

With the firm faith that the independent dignity of the nation, peace and victory of socialism depend on invincible arms, he further strengthened the KPA

politico-ideologically and in military technique, thus firmly defending the socialist country during the Arduous March and forced march and providing a powerful military guarantee for defending the sovereignty of the country and for achieving eternal prosperity of the nation.

Today, the KPA is in its heyday as it is led by the respected Comrade Kim Jong Un.

He put forward the line of modelling the whole army on Kimilsungism-Kimjongilism as the general task in the building of the army, providing a great immortal programme by which the KPA can firmly maintain its original revolutionary features.

He put forward ever-victorious strategies and tactics and the line of developing the revolutionary armed forces into an elite and strong army, kindled in the army the hot wind of such mass movements as the Guards Units Movement and the movement to become crack shots, gave strong impetus to establishing military discipline, and organized and guided actual war-like drills and training competitions, thus making sure that a revolutionary turn was effected in completing combat preparedness of the army.

The KPA is now demonstrating its dignity as a powerful revolutionary army which is superior politically and ideologically and has great military capabilities.

Invincibility will shine as a priceless honour of the KPA as the DPRK upholds Kim Jong Un as the supreme commander of its armed forces.

Space exploration continues

By Jong Hwa Sun PT

It has been seven years since the DPRK launched its first earth observation satellite Kwangmyongsong 4 on February 7 2016.

It was thanks to the wise leadership of the respected Comrade Kim Jong Un that the country succeeded in launching the earth observation satellite four years after the successful launching of its first application satellite Kwangmyongsong 3-2 in 2012.

In mid-January 2016 he repeatedly visited the spaceport despite the winter

cold to give guidance over the preparations for launching the satellite all day long. And he sent his autographic characters Kwangmyongsong to be inscribed on the satellite and showed warm affection to the space scientists and technicians who were assembling the satellite.

Later, too, he frequented the place to encourage them while giving guidance over the erecting of the carrier rocket in the biting cold.

Thus the earth observation satellite was successfully launched.

A solar synchronous polar orbit satellite,

Kwangmyongsong 4 was launched in the biting cold of winter, a weather condition under which a successful satellite launch is regarded as difficult, without affecting neighbouring countries.

The DPRK made and launched it with local intelligence, technology and effort 100 percent.

Today the Korean scientists work hard to develop space science and technology in order to carry out the tasks advanced by the Eighth Congress of the Workers' Party of Korea.

Space sci-tech workshops, exhibitions and space sci-tech exchange activities

are briskly conducted and academic and social interest in space development is growing.

Last year the presentation of space science and technology-2022 was held on the theme of "Space exploration and enhancement of national prestige". There were heated debates in the presentation on significant issues arising in the development and application of artificial earth satellites, including manufacture and test technology of satellite devices, satellite navigation, composition and attitude control technology, development technology

of satellite camera, satellite communications and observation technology and space environment and basic science and technology.

The Sixth Plenary Meeting of the Eighth Central Committee of the WPK, which advanced tasks for this year, pointed out that the National Aerospace Development Administration of the DPRK would launch the first military satellite of the country at the earliest date possible by pushing ahead with the full preparation for a reconnaissance satellite and its vehicle in progress at the final stage.

Through rounds of major tests, important technical indices have been fixed, including the operating characteristics of high-resolution cameras, the reliability of the image data transmission system, camera operating technology and data processing and transmission capacity of communications devices in the space environment and the tracking and tuning accuracy of the ground control system, and other tests have also been made successfully according to sections and systems.

The DPRK's space exploration continues.

Working people's organizations hold enlarged plenary meetings

KCNA

An enlarged meeting of the Seventh Plenary Meeting of the Eighth Central Committee of the General Federation of Trade Unions of Korea (GFTUK) was held on January 31 through video conferencing.

It was attended by members and alternate members of the Central Committee of the GFTUK.

Present there as observers were officials of the GFTUK Central Committee and those of provincial, city and county trade union committees.

The meeting discussed such issues as of thoroughly implementing the decisions of the Sixth Plenary Meeting of the Eighth Central Committee of the Workers' Party of Korea.

Pak In Chol, chairman

of the GFTUK Central Committee, made a keynote speech.

He analyzed and reviewed in detail the successes, experiences, deviations and lessons gained and revealed in the trade union work in 2022 for the implementation of the decisions of the Eighth Congress of the WPK and referred to the ways to improve the work of the union in this significant year in a revolutionary manner to give full play to the spiritual strength of the heroic working class, thereby making a substantial contribution to opening up a new phase of national development.

Speeches were made at the meeting. The enlarged meeting adopted a relevant decision based on the study of its

draft.

An enlarged meeting of the Seventh Central Committee of the Socialist Women's Union of Korea was held on February 1 through videoconferencing.

It was attended by members and alternate members of the SWUK Central Committee.

Present there as observers were officials of the SWUK Central Committee and those of provincial, city and county women's union committees.

The meeting discussed such issues as of thoroughly implementing the decisions of the Sixth Plenary Meeting of the Eighth Central Committee of the Workers' Party of Korea.

In her keynote speech Kim Jong Sun, chairwoman

of the Central Committee of the SWUK, analysed and reviewed in detail the work of women's union organizations to implement the important tasks set forth at the Eighth Congress of the WPK and plenary meetings of the Party Central Committee and referred to the measures to enhance the role of the women's union in the struggle of this year.

Speakers expressed their resolve to notch up tangible successes by fully displaying extraordinary revolutionary enthusiasm and patriotic devotion in the struggle to bring about a turning point for a new upsurge in socialist construction, cherishing the trust of the Party which projects the women as a powerful force pushing one

of the two wheels of the revolutionary chariot. A relevant decision was adopted at the meeting.

An enlarged meeting of the Sixth Plenary Meeting of the Ninth Central Committee of the Union of Agricultural Workers of Korea was held by way of videoconferencing on February 1.

It was attended by members and alternate members of the UAWK Central Committee. Present there as observers were officials of the UAWK committees in Pyongyang and local areas.

The meeting discussed such issues as of thoroughly implementing the decisions of the Sixth Plenary Meeting of the Eighth Central Committee of the Workers' Party of Korea.

Yun Chol, vice-chairman of the UAWK Central

Committee, delivered a report in which he referred to the successes officials and members of the UAWK achieved in the struggle to open up a new phase of national development by turning out in implementing decisions of the fourth and fifth plenary meetings of the WPK Central Committee and making strenuous efforts, and pointed to the need for the UAWK to fulfil its mission and role as the pathfinder and vanguard in the efforts to carry out the Party's programme of the rural revolution in the new era.

An enlarged meeting of the Eighth Plenary Meeting of the Tenth Central Committee of the Socialist Patriotic Youth League was held on February 2 through videoconferencing.

Young people volunteer for housing construction in Pyongyang

KCNA

Young people in different parts of the country continue to volunteer with a single mind to repay the trust of the Central Committee of the Workers' Party of Korea which entrusted the Socialist Patriotic Youth League with the honourable task of building a new street in the capital city.

Those in South Phyongan, Kangwon, North Hamgyong and Ryanggang provinces and Nampho, Rason and Kaesong cities have joined

the ranks of volunteers for the capital city housing construction.

Officials of youth league organizations at all levels in South Phyongan Province, including a vice-chairman of the Phyongsong City committee of the youth league, volunteered to work at the housing construction site and young people in Sunchon City and Songchon County, too, put their names on the list of volunteers.

Included in the volunteers from Kangwon Province are commanding officers

and members of its youth shock brigade and youths of Wonsan City and Ichon County.

In North Hamgyong Province, young workers of the Kim Chack Iron and Steel Complex signed their names on the list of volunteers and youth league officials and members of Kyonghung and Orang counties and the Chongjin Steel Works expressed their resolve to live up to the trust of the Party Central Committee in practice.

Young people in Ryanggang Province

and Nampho, Rason and Kaesong cities, too, volunteered to work at the housing construction site in Pyongyang.

At the meetings of young volunteers held in different parts of the country, speakers expressed their will to perform feats in the housing construction, bearing in mind the noble intention of the respected Marshal Kim Jong Un.

Officials, youth and students of provinces, cities and counties gave bouquets to the volunteers to congratulate them.



Young people in South Phyongan, Kangwon, North Hamgyong and Ryanggang provinces and Nampho, Rason and Kaesong cities volunteer for housing construction in Pyongyang.



HOME NEWS

Kim Jong Un sends birthday spread to centenarian in Kumya County

The respected Comrade Kim Jong Un sent a birthday spread to Ri Tong Wol, a centenarian living in Kuman-ri, Kumya County of South Hamgyong Province, on her 100th birthday.

After receiving the birthday spread, Ri expressed her gratitude to Kim Jong Un for bestowing great favour on the ordinary old woman though he was very busy dealing with all state affairs.

Sci-Tech Complex focuses research on improving information service

True to the decisions of the Sixth Plenary Meeting of the Eighth Central Committee of the Workers' Party of Korea, officials, scientists and technicians of the Sci-Tech Complex redouble their efforts to make progress in improving the country's information service.

They developed a general information service system for provincial sci-tech library and applied it to libraries in some provinces. And preparations are well under way for establishing a system for getting electronic data for server in ministries and national agencies.

Emulation drive of fruit farming sector in 2022 reviewed

A meeting of reviewing

the socialist emulation drive of the fruit farming sector in 2022 was held on January 31 through videoconferencing.

It was attended by Ju Chol Gyu, vice-premier of the Cabinet and chairman of the Agricultural Commission, Ri Tu Song, department director of the Central Committee of the WPK, officials concerned and those of the Agricultural Commission, the Union of Agricultural Workers of Korea and the units participating in the emulation drive.

They watched a video, which was followed by the announcement of the rankings.

And official commendations and rotating pennants in the joint name of the WPK Central Committee and the DPRK Cabinet were conferred on Pukchong County, the Onchon Fruit Farm and Toksong Apple Farm respectively.

Speeches were made. Speakers noted that with the determination to hit the fruit production target put forward by the Party, they produced high and stable yields despite unfavourable weather conditions last year by establishing a food production cycle combining fruit and livestock farming and managing the nutrition of fruit trees in a scientific way, including taking thoroughgoing blight extermination measures, while producing plenty of manure to increase soil fertility.

KPA's 75-year history replete with victories

By Pak Song Min PT

The 75-year history of the Korean People's Army is the brilliant chronicle of victories achieved under the leadership of great leaders.

The KPA performed military miracles in the 20th century by humbling the US imperialists in the Fatherland Liberation War (June 25 1950-July 27 1953), which was decisive of the destiny of the country, under the leadership of General Kim Il Sung.

After frustrating the enemy's armed invasion with immediate counterattack, the KPA liberated Seoul on June 28 1950, three days after the start of the war, and completely annihilated the "Smith commandos" in a battle in the Osan line, the first showdown with US troops.

Heroic KPA combatants achieved brilliant war results as they mercilessly mowed down the enemies by applying such original tactics as tunnel warfare, anti-aircraft team movement and mobile artillery operation initiated by Supreme Commander Kim Il Sung.

The 2nd Infantry Division of the KPA performed great feats in the battle to defend Height 1211 by foiling and crushing the enemy's "summer and autumn offensives" and is still distinguishing itself as a Guards Unit.

The sailors of the KPA sank the heavy cruiser USS Baltimore and destroyed a light cruiser with a displacement of 17 000 tons and 12 000 tons respectively with only four torpedo boats in early July 1950. Such a military achievement is still recorded as a miracle in the world history of naval warfare.

The history of the Fatherland Liberation War includes facts about the coast artillerymen on Wolmi Island who delayed the landing of 50 000 enemy troops with many warships



Scenes of the KPA military parade held in celebration of the 90th anniversary of the Korean People's Revolutionary Army.

and airplanes in Incheon with three days and a 19-year-old soldier of the KPA captured Dean, commander of the US 24th Infantry Division, which had been called an "invincible division".

In the postwar period, the KPA also dealt merciless blow to the enemies who acted rashly, being oblivious of the bitter lesson of the 1950s.

It captured the US

armed spy ship Pueblo and shot down the large-size reconnaissance plane EC-121 in the 1960s. And a US attempt to ignite a war was foiled at Panmunjom in the 1970s.

In the decade between 1993 and 2003 when the hostile forces went to extremes in their moves to stifle the DPRK, a bulwark of socialism, the KPA resolutely thwarted the US imperialists' over 2 000 acts

of military provocation on the ground and in the air and sea.

On December 17 1994, a KPA non-commissioned officer shot down with a single fire the OH-58A/C observation and reconnaissance helicopter which had intruded deep into the DPRK airspace. On July 16 1997, the enemy's pillboxes and artillery emplacements which were involved in the acts of war

provocation while firing guns at the demilitarized zone of the Military Demarcation Line were reduced to ashes by the instant self-defensive counterattack of the KPA in a moment.

In 1999 alone, it frustrated hundreds of acts of the enemy's reckless military provocation.

The naval battle on the West Sea of Korea in June that year and the aerial fight in which a fighter

upholding the slogan of "a-match-for-a-hundred" in the new century of Juche era.

The KPA, which has remained loyal to its mission and duty in the struggle for resolutely smashing the aggressive moves of the US imperialists with revolutionary armed forces and ensuring the continuous advance of socialist construction in the face of the anti-socialist moves of the imperialists for 60 years since the slogan was put forward, will invariably hold up the slogan and achieve only victory.

made to build up its defence capability. And the slogan "A-match-for-a-hundred" was coined at that time.

On February 6 1963, he who visited an outpost of Mt Taedok, where soldiers were levelling their guns with the enemy, instructed that all the service personnel of the Korean People's Army should prepare themselves as a-match-for-a-hundred combatants.

Soldiers of the outpost carved the words "Ilitangbaek" (a-match-for-a-hundred) on a natural rock of the outpost.

jet of the KPA made enemies thunder-struck by approaching 15 metres close to an advanced strategic reconnaissance plane which intruded into the sky over economic waters of the East Sea of Korea in March 2003 demonstrated that the DPRK did not give an empty talk when it declared that it would smash enemies without mercy in case they invaded the DPRK's air, ground and sea even 0.001 mm.

Along with the change of generations and advance of the revolution, the KPA has always won victory after victory.

The artillerymen reduced the enemy's Yonphong Island to a sea of flames after they fired shells to the territorial waters of the DPRK in November 2010.

In the new century of the Juche era, the KPA has responded with heavy blows to the US acts of military provocation against the DPRK with its invincible capabilities which has been increased more daringly and at a faster pace.

In response to the US-south Korea combined air drill code-named Vigilant Storm in November 2022, the DPRK's armed forces staged intensive drills of units for the operation of tactical nukes, flying corps and long-range artillery sub-units on the front.

The military operations of counteraction including a large-scale all-out combat sortie operation of the air force, firing drills of units for the operation of tactical nukes that showed off the actuality, combat efficiency and actual war capabilities of the national nuclear combat forces, and the firing drills of long-range artillery sub-units on the front and flying corps clearly demonstrated the invariable will of the KPA to drive provokers into the dead end of ruin by countering nukes with nukes and head-on confrontation with all-out confrontation on the principle of power for power and head-on contest.

'A-match-for-a-hundred', eternal slogan of KPA

By Kil Chung Il PT

In the early 1960s, the US imperialists created a danger of war in the region of the Caribbean Sea to challenge Cuba and all other socialist countries.

To cope with such a situation, Comrade Kim Il Sung put forward the line of simultaneously promoting economic construction and defence upbuilding at the Fifth Plenary Meeting of the Fourth Central Committee of the Workers' Party of Korea and made sure that big efforts were

made to build up its defence capability. And the slogan "A-match-for-a-hundred" was coined at that time.

On February 6 1963, he who visited an outpost of Mt Taedok, where soldiers were levelling their guns with the enemy, instructed that all the service personnel of the Korean People's Army should prepare themselves as a-match-for-a-hundred combatants.

Soldiers of the outpost carved the words "Ilitangbaek" (a-match-for-a-hundred) on a natural rock of the outpost.

Since then, it has constituted the slogan of the KPA.

Chairman Kim Jong Il led the KPA to play the pioneer role with honours in both national defence and socialist construction as he implanted the slogan in the hearts of the KPA soldiers in the 1990s.

Today, the KPA led by the respected Comrade Kim Jong Un is ushering in its heyday as elite revolutionary armed forces and creators of the people's well-being while conducting training more intensively through such drives as the crack shot movement,

New-type mixed gas compressor produced

By Han Jong Ho PT

Last year, the Ryongsong Machine Complex produced over 100 compressors and large ventilators, including several extra-large high pressure compressors, and dozens of mobile rice threshers and car dumpers.

which has been installed and on a trial run at the Hungnam Fertilizer Complex. It was two years ago that the machine complex started to make the new-type mixed gas compressor, which can be said to be a leap forward in developing the country's machine-building industry. At that time, the complex had few machine makers

with a good knowledge of the machine. It decided to make a mixed gas compressor in an innovation-driven way to suit the actual conditions of the country instead of copying the imported one. Relevant discussions continued for several days. "Our predecessors had made an eight-metre turning lathe and 3000-ton press

through bold designing and processing in the postwar days. So I thought that if we worked like them there would be no problem in making a large compressor as well," said Jon Chol Ho, worker of the complex. With a determination to make the mixed gas compressor in their own way and in an innovation-driven way, designers produced

original and creative designs of all its parts. Many technical innovation plans reflecting the novel ideas of workers and technicians were introduced into making the compressor. The complex successfully processed the ten-metre-long body of the compressor by making rational use of a 200mm borer. It also broke with the concept that the

combustion model-based casting process was unable to produce a material weighing over one ton and succeeded in casting the one weighing more than four tons. Now the complex produces various kinds of part materials necessary for the production of custom-built equipment by dovetailing the moulding, drying and casting processes.



RODONG SINMUN

Workers speed up the production of custom-built equipment at the Ryongsong Machine Complex.

Innovations introduced to boost productivity, save labour, materials

By To Kyong Chol PT

The Pyongyang Construction Machine Factory has introduced innovation plans into practice to increase the production efficiency and save labour and materials, including one for a marking-off jig for steel plate bending machine. A typical example is the elevating box production process. In the past, fixing steel plates alone required two workers and even welders. Technicians of the factory devised rational jigs for assembling and welding bottom frames of boxes and introduced them into production so that they could reduce labour to one worker while increasing the productivity by four times and ensuring the product quality. They also devised and introduced a new jig used in the elevator winch

Technicians discuss how to raise the operation rate of equipment at the Pyongyang Construction Machine Factory.



RYU KWANG HYOK / THE PYONGYANG TIMES

installation beam. The introduction increased the production speed three times, reduced the workload by half and improved the assembling precision. According to Ri Son, head of the technical development division, they used this tool to assemble elevators during the construction of 10 000 flats in the Hwasong area, thus finishing within five days the assembling work

which used to take fifteen days. In the meantime, they newly built different kinds of vacuum compactors, motor-driven self-lifting tread and mortar mixing machine. These building machines are regarded as highly effective in saving labour and materials in the work dealing with concrete mixture. Besides, the factory took

up an idea for removing gas from the process of injecting molten iron into casting moulds and successfully put it into practice. In order to strengthen its own technical forces, it now sees to it that dozens of workers are enrolled at the online education faculties of Kim Chaek University of Technology and Pyongyang University of Mechanical Engineering, among others.

Factory develops CNC electrode-processing facilities

By Ri Sang Il PT

The Kusong Machine Tool Factory developed CNC electrode internal and external screw processing machines. The machines are designed to raise the actual extract rate of electrode more markedly than previously by ensuring the accuracy of electrode screw to the maximum. "If the screw of electrode and nipple is not so high in accuracy, the connecting part will be destroyed by electric arc in line contact, not surface contact, when great electric current passes, to cause electrode loss and suspend the melting in electric furnaces. But the CNC facilities for exclusively processing electrode can precisely and efficiently process the

internal screw of graphite electrode and external one of nipple so as to prevent the solution of electrode and reduce waste in the melting course of electric furnaces," said chief engineer So Ju Yong. After finding out rational methods conducive to raising the screw precision of electrode, the factory concentrated its attention on improving the scientific level of machines. Technicians made and completed the hydraulic pump and safety valves of hydraulic power units needed for biting materials and conducted motion simulation and structural analysis for all designing objects in keeping with field conditions. The CNC facilities are contributing to improving the quality of electrode at the electrode factory.

Footwear producer remodels production processes into labour-saving ones



Employees introduce an automatic guided vehicle in the shoemaking process at the Ryuwon Footwear Factory.

JON KWANG HUN / THE PYONGYANG TIMES

By Yun Kyong Il PT

The Ryuwon Footwear Factory, which is widely known for producing diverse kinds of trainers, is channelling efforts into remodelling equipment and production processes into labour-saving ones. The factory made a printer automatizing the printing and cutting processes of shoe size table, thereby economizing on labour and materials and raising

the modernization level of production processes. The table is a tag attached to the lining to show the production place and size of shoes. Technicians of the factory conceived the structural elements of the printer and solved technical problems. "The printer, which was introduced into the printing workshop and has proved effective, was highly appreciated in the autumn national footwear exhibition-2022 for its great

economic effectiveness," said Ryong Chong Hae, a staffer in charge of technical development. Besides, the factory automated the semi-automatic hydraulic cutting machine of the shoes cutting process to ensure the automatic operation of the cutting machine without a cutter, once a necessary program is installed, and developed and introduced an automatic guided vehicle in the shoemaking process to treble productivity.

Development of new products promoted

Pyongyang Leather Shoes Factory turns out over 100 new products.

By Kim Il Jin PT

The Pyongyang Leather Shoes Factory makes efforts to develop new products. "The factory has developed and produced over 100 kinds of new products including leather shoes for men, women and children and slippers so far since last year," said Ri Un Ju, chief of the technical preparation office. The development of new products has been turned into an undertaking of the whole factory and it has arranged new products shows in various forms and ways. The new products presented at the shows have gone through strict technical examinations and public evaluation followed by the announcement of their rankings. This has raised the employees' interest in the development of new products. Designers of the design office presented dozens of kinds of leather shoes

for children and those for men and women made on the basis of the scientific calculation of types of outer rim of shoes and quality of materials for soles for the development of leather shoes that meet the modern aesthetic tastes and people's improving tastes and sentiments. Now, in midwinter, women's short leather boots for winter developed by the factory draw the attention of users. New-type leather shoes for men from the factory are popular with both young and old men as they are unique in the style of uppers and convenient for exercise. The shoes are highly serviceable and put less kinetic burden as they were made in full consideration of the characteristics of force inflicted on feet according to age, sex and use.



PAK KWANG HUN / THE PYONGYANG TIMES

Technicians pool ideas to develop new products at the Pyongyang Leather Shoes Factory.

Natural functional products prove effective in increasing crop yields

By Chae Hyang Ok PT

The Jinsim natural functional products factory occupies a small area in Rangnang District, Pyongyang. However, it turns out highly effective natural plant activator "Jinsim" which protects the ecological environment and helps increase the grain yield, making its name across the country. The factory's experimental plot is still covered with construction waste like broken blocks and bricks since it used to be a waste dump. However, according to manager Kim Chun Gol, the introduction of "Jinsim" into corn farming in such a barren land resulted in a yield of 7 kilograms in 25 plants per phytog with over two ears on one stalk, each weighing 280 grams. "Just 250 grams of this natural plant activator is enough to provide proper conditions for the growth of crops in one hectare," said Kim. The factory processes a locally abundant natural biogenetic rock to make the plant activator. Therefore, it contains over 80 kinds of nutritive elements including

minerals, amino acids, fatty acid and vitamins, which provide sufficient conditions for the growth of all plants. If the seeds of grain crops such as corn and rice are treated with the activator, the germination rate is ensured at around 98 percent. "Roots are the most fundamental part in all plants," said Kim. "The activator makes the plants grow faster and strike two or three times more root hairs deeper into the ground so that they become less vulnerable to drought, high temperature and rainstorm. It also keeps down weeds, which helps reduce much labour in weeding." "Kangnam County's soil is known to be unsuited for farming as it becomes boggy after rain and



Highly effective natural plant activator "Jinsim".

becomes too hard when it dries," said Kang Yong Phil, manager of the Janggyo Farm in Kangnam County, Pyongyang. "However, since we introduced the highly effective natural plant activator, we could overfulfill the grain production goals and our farm became a high-yielding farm." Several years of trials in many farms across the country confirmed that the activator raises the yields at least 1.5 times as it improves plants' resistance to drought, low temperature and rainstorm.

New footwear material developed

By Jong Hwa Sun PT

The footwear research institute of the footwear industry management bureau is making successes in the scientific research for the domestic production of raw and other materials. This elastomer has rubber-type elasticity like a thermoplastic elastomer and has much higher elasticity and resistance to slip than common vinyl chloride resin and lower deformation ratio. The research team completed the research into the production method of shoe sole suitable for winter conditions by using the new elastomer and fixed the technical numerical values of all kinds of soles according to seasons. "Our new shoe sole production method that does not rely on such previously used materials as crude and synthetic rubbers and vulcanizing agent has high economic effectiveness as it helps lower the norms for the consumption of materials per unit, reduce production processes and manpower and lengthen the lifespan of footwear," said Paek Yong Bin, director of the institute. The new sole production technology relying on domestic raw materials was rated highly at the autumn national footwear exhibition-2022 held late last year.

production method using the material, thus developing the cold-resistant vinyl chloride plastic elastomer while using no imported materials. This elastomer has rubber-type elasticity like a thermoplastic elastomer and has much higher elasticity and resistance to slip than common vinyl chloride resin and lower deformation ratio. The research team completed the research into the production method of shoe sole suitable for winter conditions by using the new elastomer and fixed the technical numerical values of all kinds of soles according to seasons. "Our new shoe sole production method that does not rely on such previously used materials as crude and synthetic rubbers and vulcanizing agent has high economic effectiveness as it helps lower the norms for the consumption of materials per unit, reduce production processes and manpower and lengthen the lifespan of footwear," said Paek Yong Bin, director of the institute. The new sole production technology relying on domestic raw materials was rated highly at the autumn national footwear exhibition-2022 held late last year.

New popular cartoons created

By Pang Un Ju PT

The Korea April 26 Animation Studio has recently produced many new cartoons including parts 70-72 of *The Clever Raccoon Dog*.



Artists of the Korea April 26 Animation Studio are involved in the making of a new sequel to *The Clever Raccoon Dog*.

The animation enables viewers to acquire broad knowledge through the interesting, witty and edifying stories about the three close friends—the raccoon dog, bear and cat.

“The Clever Raccoon Dog, which started to be created and released in 1987, is recognized as a popular work that develops intellectual faculties of children and gives them lessons of life for over 30 years,” said director Im Jong Son.

Last year the studio successfully completed the aforesaid parts of the cartoon thanks to the high zeal of its creators.

Mass literary correspondent Ri Kyong Im said, *“The Clever Raccoon Dog* is the cartoon I have favoured since my childhood. I was greatly pleased that my scenario based on the principle that electron ions in fruit can substitute for batteries was selected to make Part 70 *Orange Necklace* and that the part was televised.”

Part 71 *Waterproof Cloth* tells a story that the hero raccoon dog makes the

helicopter of wolves intent on hijacking canned fish to crash by using the principle of buoyancy created by air pressure difference to wind waterproof cloth on the propeller of the helicopter and Part 72 *Plastic Magnet* teaches the principle that the friction of plastic goods cause static electricity so that they can be used as magnets. The films enable schoolchildren to know how physical phenomena are used in life.

The studio also produced Part 24 *On the Day of*

Horse Race of serial cartoon *Observe Traffic Regulations Well* which is of significance in promoting children’s and student’s understanding of traffic regulations.

Meanwhile, the studio produced parts 41 and 42 of historical cartoon film *Ko Jumong* which is popular with viewers and completed parts 1 and 2 of cartoon *Prince Hodong and Princess of Rangnang* with a plan to make it as a multi-part work as a single-part cartoon of the same title was created and televised in 1990.

“When I came to know through a TV report that the Korea April 26 Animation Studio newly created parts 1 and 2 of cartoon *Prince Hodong and Princess of Rangnang*, I was eager to see it. I saw the first showing of it at the cinema. Its storyline is more interesting and the characters, buildings and everything else of hundreds of years ago it shows were so vivid that I almost took them for the real. I am looking forward to the next parts,” said Choe Song U, a moviegoer.

To retain true taste of Pyongyang cold noodles

By Sin Pyol PT

The name of the Okryu Restaurant which has become so familiar to the Korean people with the past over 60 years reminds everyone of the Pyongyang cold noodles first as the dish is the most symbolic national food that represents the restaurant.

Tens of millions of people have relished the Pyongyang cold noodles at the restaurant since its establishment.

“The Pyongyang cold noodles, symbol of Korean noodles, is as good as a work of art. It requires a harmonious combination of all elements like the thickness and toughness of noodle strips, the taste and colour of meat stock, the aroma and savoury taste of seasonings, shape and positioning of garnishes and the utensils. If even one of them loses its own peculiarity, it is impossible to retain the real taste of the Pyongyang cold noodles,” said department head Om Song Nam.

According to him, cooks studied a great deal of data, repeatedly had consultative meetings with historians, folklorists and culinary experts to find out the traditional recipe for the Pyongyang cold noodles and develop it to suit the feelings and likings of the Korean people, and conducted tens of thousands of experiments to obtain the ideal mixing ratio of materials and numerical values for processing conditions.

Whenever they are provided with the main material, they preliminarily knead it to evaluate whether it can be used or not. And in consideration of such conditions as the temperature and humidity of the cookroom, they strictly observe the requirements of the recipe from kneading the dough to pressing it, fixing the thickness and boiling noodle strips and putting the dish in bowls.

In the past, the Okryu Restaurant took part in different cooking festivals, culinary skill contests and exhibitions like the cooking festival in celebration of the Day of the Sun and the culinary skill contest in celebration of the Day of the Shining Star, and won over 170 diplomas and hundreds of medals.



By Hwang Jong Ryol PT

A family living in neighbourhood unit No. 49 in Janggyong-dong No. 1 of Sosong District, Pyongyang, is well-known for raising many ornamental fishes.

It is the family of Rim Myong Chol, driver at the Ministry of External Economic Relations.

His house reminds visitors of an aquarium.

Two of three living rooms are filled with big and small fish bowls. So, visitors to his

house say they feel as if they see an aquarium. Different kinds of ornamental fishes, including red carassins auratus, angelfish, *Mollienisia sphenops*, zebra fish and guppy, swim about in the fish basins.

Spectacular are a couple of ornamental gold carps with their golden scales glistening playing about in a big fish bowl in the anteroom.

It is part of his family’s daily routine to spend a pleasant time seeing fishes swimming in bowls back home from work, Rim said.

Everyone has their own joy of life and he has become rich in emotion and more attached to his family since he began to raise fishes, he said, adding that it is refreshing and pleasant to see fishes swimming serenely and it relieves him of fatigue from a day’s work.

He said he began to raise fishes over ten years ago.

In his spare time, Rim studied the scientific method of breeding ornamental fishes and got the knack of it through visits to the Grand People’s Study House and Sci-Tech

Complex. Finally, he became a master at raising fish.

Rim, with profound knowledge and rich experience, confidently says that it is necessary to know well about the quality of water and feed in order to raise ornamental fishes. He always collects the world data on such fishes and often goes to see “patients” at other families raising such fishes.

According to him, raising fishes requires ardour along with a relevant taste.

He unusually liked to raise fishes from his childhood.

So he married a breeder working at the Taedonggang Fish Farm. His wife Yun Son Ae greatly helped him become a “man of wide knowledge”, he said.

Then, she said with a smile that they had only a small fish bowl with two goldfishes during their newly-wed life but now they have big fish bowls and they are called “goldfish family”.

They usually have a lot of fries every ten days and unstintingly distribute them to not only their villagers and friends but even those who

visit their home for the first time after hearing about the family, and tell them how to raise the fishes in detail.

“Only those who have ever raised fishes can find pleasure in seeing fishes grow and making friends and promoting friendship with each other, talking about fishes,” said Rim.

The couple’s dream is to write a book on the experiences in and knack of raising ornamental fishes and breed and spread many world-famous ornamental fishes.

Priority given to development of medical science and technology



The Workers’ Party of Korea gives top priority to improving and strengthening public health service.

It is necessary to hold medical science and technology as the dynamic in consolidating material and technical foundations of the public health sector and improving medical service.

In recent years we have made a series of achievements in the sector of medical scientific

research.

Research projects have been undertaken in earnest to domestically produce raw materials for official medicines and notable success has also been achieved in developing new Koryo medicines needed for the treatment of communicable diseases.

Research has been intensified into diseases of high morbidity and mortality and dynamic efforts been made to research and develop highly effective medicines and medical appliances which suit the constitution of the Korean people.

We are pressing ahead with projects to open up new medical sci-tech fields urgently required in the practice of health service, put Koryo medicine on a scientific basis and introduce advanced medical science and technology.

Given the worsening

world health crisis, big efforts are directed into scientifically and technologically supporting the consolidation of anti-epidemic foundations for safely controlling and managing the country’s anti-epidemic situation even in the face of outbreak and spread of any infectious diseases.

Medical workers are working hard to present sci-tech findings contributing to treatment.

Success in every affair depends on the determination and efforts of those in charge.

When medical scientists and all others in the public health sector exert themselves with extraordinary enthusiasm, the country’s medical science and technology will make rapid progress.

Ri Kyong Sim, department director of the Ministry of Public Health

New early diagnosis, treatment methods based on advanced technologies established



By Pang Un Ju PT

Recently, the research group of the Pyongyang Maternity Hospital has raised their medical service level by establishing early diagnostic and treatment methods based on advanced technologies.

It established a diagnostic method of great practical significance in the clinical obstetrical field and introduced it into clinical practice.

Department head Pae Jang

Yun said, “To diagnose a congenitally deformed unborn child and take necessary measures is important in raising the stable neonatal birth rate.”

Various diagnostic methods are used to solve the problem and among them is the chromosome-based one.

According to Pae, the method is recognized as a scientific and practical one but making a special nutrient solution for culturing chromosomes is a prerequisite for using the

method. So many countries are competitively conducting research to make such solution by themselves, he said.

To solve the problem, Kim Hwan Song, PhD, and other researchers of the genetics laboratory set a target of domestically producing the solution which had been imported and conducted the relevant research for several years.

Through uninterrupted speculation and dozens of rounds of experiments and analyses, they selected

a starting material from which such solution can be extracted. They then intensified research and succeeded in making the solution whose different technical indices are on an advanced level.

Based on the success, they completed a method of diagnosing congenital deformation using chromosomes with high accuracy.

The hospital also achieved success in the treatment of an obstinate disease which is high in fatality rate.

In the process of studying and analysing latest documentary records, section chief Ri Chang Ryong got a clue about a new method of treating the disease and thus established the method of treating the disease by injecting medicines to minimize the size of the focus before removing it through operation and of preventing the disease from returning by means of rational anticancer drug therapy.

The introduction of the method has helped improve the health of many women who were diagnosed having the disease.

With selfless devotion

By Ryom Un Gyong PT

Public health service in the DPRK is not merely a medical service, but the work to make people substantially benefit from the advantageous socialist healthcare system.

For this reason deep devotion to patients is regarded as the most important quality of health workers.

Best medicine

It was early in January when Jong Un Sil living in Mangyongdae District, Pyongyang, was hospitalized at the Oncology Institute of the Academy of Medical Science.

Entering a ward, Jong found herself mentally enfeebled due to the diagnosis she received for her disease.

Medical workers in charge cared for her with warm affection, soothing her worries.

A few days later, an 8-hour-long operation was carried out successfully.

The medical workers continued to work devotedly for her after the operation.

Pak Chung Hyok, doctor in charge, and other doctors and nurses carefully observed her health conditions to prevent postoperative sequelae as they brought her fresh fruits and tasty foods lest she should lose appetite.

Though they were busy, officials of the institute called on her to get familiar with her conditions and encourage her.

“The kindred affection the medical workers here showed me was the best medicine that restored my health,” said Un Sil on the day of leaving the institute.

Old woman restores eyesight

An old couple living in Kaechon City visited the ophthalmic department of the Tokchon City Hospital in November last year.

Before arriving at the hospital the woman who lost her eyesight due to decrepitude and her husband

had worried that she might be unable to be cured.

Guided by kind medical workers there, the couple passed through the reception counter and the eye lab into the ward.

Just before undergoing an operation the following day, she looked very nervous with worry. Reading her mind, Kim Hyok, department head, told her: “Grandmother, you will restore your sight without fail. Take it easy.”

After the successful operation the medical workers looked after her with kindred affection lest she should have any inconvenience during her hospitalization.

On the day of undoing the bandage, the first sight she saw was the medical workers who had shown her warm affection.

And on the day of leaving the hospital after her recovery, the old couple said that she could regain her eyesight thanks to the deep devotion of medical workers and the benevolent health system.

Hospitals start outreach programs from beginning of New Year

By Yun Ki Song PT

Medical workers of central-level hospitals have run field clinics since the beginning of the New Year.

The outreach medical team of the Kim Man Yu Hospital formed with competent doctors offers medical services at the East Pyongyang Thermal Power Station and Pyongyang Kim Jong Suk Textile Mill with thousands of items of medicines in dozens of kinds they prepared.

“It is the unanimous will of doctors and nurses to give encouragement to workers with sincerity and devotion,” said Pak Myong Chol, department chief of the Kim Man Yu Hospital.

On New Year’s Day, workers of the Pyongyang Thermal Power Station also received on-the-spot services from medical workers of Pyongyang University of Medical

Sciences Hospital who went there bringing a large quantity of medicines including rowanberry cough medicine with them.

Other medical workers from the hospital are also offering the same services at other units including the Rangnam Disabled Soldiers’ Essential Plastic Goods Factory.

A medical team formed with able medical workers of the Ryugyong General Ophthalmic Hospital has offered similar services at the Ryuwon Footwear Factory, Pyongyang Thermal Power Station, Pyongyang Changgwang Garment Factory and other units from the beginning of the New Year on the basis of their on-the-spot treatment plan for them.

Such outreach medical teams’ activities deeply impress employees of industrial establishments in the capital city.



KIM YONG CHAN / THE PYONGYANG TIMES

Educator devotes himself to development of sports



By Kim Jin Hyang PT

Kim Yong Il (pictured), instructor of the Pothonggang District teachers in-service training centre in Pyongyang, has been working in the sports educational sector for nearly 40 years.

During the period, he made many successes admired by public as an educator.

Teacher of good students

Among the students learned from him, many were awarded official commendations including DPRK Hero Pak Jong Su, who rescued the revolutionary slogans written by anti-Japanese guerrillas, eternal assets of the Korean revolution, in the unexpected

flames and died a heroic death, Labour Hero O Kum Hui, a player of the Korean youth women's football team that won the Third World Youth Women's Football Championship, and a sportsperson who is active as an international football referee.

In 1991, he had worked as a football instructor of a middle school in Pothonggang District and when a new football class was formed, he took charge of the class.

His work was laborious since he had to not only teach students football techniques but also train them into the pillars of the country, who are knowledgeable, morally sound and physically strong, and he was in charge of the football group of the school.

He implanted patriotic spirit into students before teaching them football techniques, and his sincere love and devotion became a stepping-stone for the growth of disciples.

An educator, he made painstaking efforts to put himself on a par with developing reality, won the title of October 8 model teacher and received

certificates of registration of new teaching methods and of creation of experimental apparatuses and teaching aids.

Teacher of teachers

Kim Yong Il, who had remained loyal to the educational work with his ability and actual results, came to take on a new office as an instructor of the Pothonggang District teachers in-service training centre in 2015.

He thought deeply about how to guide and lead the sports education of schools in the district.

The main thing was to enhance the role of sports teachers who were in direct charge of sports education.

While engaging in the inspection of classes at work and meetings for a joint review, he put much effort to raising the qualifications and abilities of teachers.

Especially, he rendered positive help to creating new teaching methods while making all the teachers acquire the global trend of development of education.

It happened last year when Ho Kwang Myong, a teacher of Pulgungori Junior Middle School, was creating

a new teaching method.

He set an ambitious goal for Ho so that he could invent a new teaching method that conforms to the development trend of modern sports free from previous teaching methods.

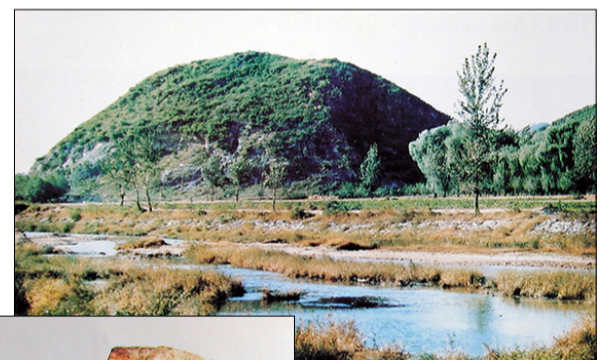
And he gave him a hint of new idea and guided him meticulously in the creation of the new teaching method from teaching design to programming.

"I would deeply be impressed by Kim Yong Il who is more enthusiastic than others in work though he is nearly 60. It was the manifestation of the clean conscience, before the sense of responsibility for work, of him who is determined to contribute to the development of the country's education," Ho Kwang Myong recalled.

Thanks to his positive and selfless assistance, Ho and many other teachers could acquire high abilities and thus Pothonggang District takes the first place in sports education throughout the capital city.

Even today, Kim continues to follow the road of conscience and devotion for the future of the country.

Komunmoru Site



PROVIDED TO THE PYONGYANG TIMES

The Komunmoru Site in Hugu-ri, Sangwon County.

By Ri Sang Il PT

The Komunmoru Site in Hugu-ri, Sangwon County, consists of remains of pithecanthropus, which is believed to date back more than a million years.

It is a deep narrow cave with a length of about 30 metres, a width of some 2.5 metres and a height of 2 metres. At the time of the discovery, it was filled with sedimentary soil and even the entrance was blocked.

The most primitive rude stone implements and fossil bones of animals were discovered at the

site. Among the artefacts were hand axe-shaped, hoof-shaped, pointed and fragmented stone tools which are believed to be one of the earliest stone implements made with certain methods.

The fossil bones of animals include those of tropical and sub-tropical animals which became extinct or disappeared in Korea, including buffalo, elephant, hyena and monkey.

The Komunmoru Site provides powerful evidence that proves the Taedong River basin is one of the cradles of human civilization.

