The Pyongyang Times

Democratic People's Republic of Korea

No. 36 (3 124) weekly

http://www.pyongyangtimes.com.kp e-mail:flph@star-co.net.kp Sat, September 5, Juche 109(2020)

DISASTER RELIEF

Ri Pyong Chol checks typhoon relief work



Ri Pyong Chol, member of the Presidium of the Political Bureau of the Central Committee of the Workers' Party of Korea, vice-chairman of the Central Committee of the WPK and vice-chairman of the Central Military Commission of the WPK, checks typhoon-caused damage on a field in Jangyon County, South Hwanghae Province.

Ri Pyong Chol, member of the Presidium of the Political Bureau of the Central Committee of the Workers' Party of Korea, vice-chairman of the Central Committee of the WPK and vice-chairman of the Central Military Commission of the WPK, guided the work for eradicating the aftermath of typhoon at the Nulsan, Changpha and Hangnim

cooperative farms in Jangyon County, South Hwanghae Province.

He learned in detail about the damage in those farms and underscored the need to push forward with the work to clear away the aftermath of typhoon as soon as possible.

While acquainting himself with farmers' living, he gave a pep talk to them.

He underlined the need for the officials of primary Party organizations and Party members to further enhance their responsibility and role in the relief efforts.

He also discussed the measures for manuring and cultivating well the crops in the typhoon-stricken fields and for harvesting every crop without any waste.

KCNA

Pak Pong Ju makes survey trip to typhoon-hit county



Pak Pong Ju, member of the Presidium of the Political Bureau of the Central Committee of the Workers' Party of Korea, vice-chairman of the State Affairs Commission of the DPRK and vice-chairman of the Central Committee of the WPK, on a survey trip to a typhoon-hit farm in Jangyon County, South Hwanghae Province.

Pak Pong Ju, member of the Presidium of the Political Bureau of the Central Committee of the Workers' Party of Korea, vice-chairman of the State Affairs Commission of the DPRK and vice-chairman of the WPK Central Committee, guided the work for recovering from typhoon damage on different farms in Jangyon County of South Hwanghae Province.

He met with officials and agricultural workers of the Sokjang, Chuhwa and Ragyon cooperative farms to learn about the damage in detail.

Saying the WPK shares bitters and sweets with the people all the time, he called for firmly defending the agricultural front.

He pointed to the need to pay close attention to the living of farming families who suffered damage, to make more achievements in the rehabilitation campaign and to enhance the role of Party organizations in minimizing crop damage.

He called on officials of the farms to introduce scientific farming methods positively and increase the proportion of farm work done by machines.

KCNA

Senior Party officials inspect rehabilitation efforts in South Hwanghae Province

Kim Jae Ryong, Ri II Hwan, Choe Hwi, Pak Thae Dok, Kim Yong Chol and Kim Hyong Jun, vice-chairmen of the Central Committee of the Workers' Party of Korea, provided on-the-spot guidance over the efforts for rehabilitation from heavy typhoon damage on various farms of Jangyon and Thaethan counties, South Hwanghae Province.

Amid the Party-wide, nationwide effort for recovering from damage by typhoon in full swing, true to the call of the WPK Central Committee, a full-scale campaign to minimize damage to crops by Typhoon No. 8 is underway in South Hwanghae Province.

The vice-chairmen of the Party Central Committee sprayed nutritive liquid, applied fertilizer and picked up corns together with agricultural workers, encouraging them to turn out as one in the campaign.

They told them that Supreme Leader Kim Jong Un was very much concerned about the people in the typhoon-affected areas, and called upon them to overcome the present trials and greet the 75th founding anniversary of the Party with proud labour feats. The frontline-style political work conducted by the vice-chairmen of the Party Central Committee greatly inspired the agricultural workers.

Officials and agricultural workers of the farms in South Hwanghae Province, much encouraged by their inspection tour, are full of faith and optimism to recover from the damage at an early date and greet the 8th Congress of the WPK in the most meaningful way by raising good crops.









Vice-chairmen of the Central Committee of the Workers' Party of Korea guide rehabilitation work on typhoon-stricken farms in South Hwanghae Province.

KCNA



For the sake of independence, peace and friendship

The Workers' Party of Korea has been committed to the ideal of independence, peace and friendship taking it as the basis of its foreign policy for the past 75 years since its birth.

It has made strenuous efforts to accomplish the cause of global independence holding aloft the banner of socialism.

In the 1950s and the 1960s when modern revisionism emerged in the international communist movement to complicate the situation, the WPK adhered to the stand of independence which asserts that the revolution of each nation should be carried out by its party and people in an independent and creative way as it positively spurred the development of the international socialist movement.

Taking advantage of the collapse of socialism in several countries between the late

1980s and the early 1990s, the imperialists and renegades of socialism raised a clamour about the "end of socialism" and distorted and denied the socialist ideal. At that juncture, the WPK afforded the revolutionaries and progressive peoples of other countries aspiring after socialism a clear understanding of the validity and vitality of the Jucheoriented theory of socialism and instilled in them the strong confidence in the victory of the socialist cause.

In Pyongyang on April 20 1992, representatives of 70 political parties around the world including 48 party leaders adopted and made public the Pyongyang Declaration "Let Us Defend and Advance the Cause of Socialism", which served as a fighting programme for rebuilding socialism with the Juche idea as the

guideline.

The WPK actively supported and encouraged foreign nations in their struggle against imperialism and hegemony-seeking.

The DPRK rendered disinterested internationalist assistance to the Cuban and Vietnamese peoples in their efforts to accomplish the cause of anti-imperialist independence and provided Egypt, Syria and other Arab nations fighting against the armed invasions by Israeli aggressors with material and military aids gratis.

The WPK paid special attention to the development of relations with developing countries.

The WPK defined the Non-Aligned Movement as a progressive movement reflecting the aspirations and demand common to the peoples of developing countries

for defending their national independence against the imperialists' domination and subjugation, predicting that it would be one of the great motive forces promoting the development of history in the 1960s, and conducted positive activities to make NAM hold fast to the idea and principles of anti-imperialist independence and achieve unity and cohesion.

It announced its willingness to make the DPRK become a full member of the NAM at the enlarged meeting of the Political Committee of its Central Committee in May 1974. After obtaining the full membership of the movement in August the following year, the DPRK sent its delegations and experts to many developing nations to help them build the economy and culture and develop medical services. In particular, it channelled big

intensive

typhoon.

water.

has been undertaken across

the country to deal with

the aftermath of flood and

In Pyongyang measures have

been taken to get the first-hand

information about the damage to

the reservoirs and water supply

system and to timely repair the

defects in the facilities so as

to strictly ensure the hygienic

safety of drinking and household

In the reconstruction site of

Taechong-ri, Unpha County,

efforts into promoting mutual cooperation in agriculture, thus greatly contributing to laying material and technical foundations of their agriculture including irrigation projects and solving food and rural problems.

The WPK is now developing foreign relations in a proactive and multifaceted way in keeping with the developing reality.

It works hard to develop good relations with not only such socialist nations as China, Cuba, Vietnam and Laos but others that respect and are friendly to the DPRK.

The international community fully supports and approves the WPK's positive efforts to achieve global independence and peace and promote friendship and unity between nations

Kim Un Jin

REHABILITATION

WPK Central Committee officials join typhoon relief work

Officials of the Central Committee of the Workers' Party of Korea have joined the typhoon relief campaign in South Hwanghae Province, helping local farmers recover from damage to farmland and crops in the stricken areas.

They were quick to rush to the areas, true to the noble intention of Supreme Leader Kim Jong Un who said that it is one of the top priorities for the Party to go deep among the people in need to share weal and woe while encouraging and supporting them sincerely.

The Party Central Committee officials are working together with farmers to lessen the reduction in the crop yield in the most severely

stricken fields in Ongjin, Kangnyong and Pyoksong counties.

They encouraged the farmers to turn out to conclude this year's farming successfully as they picked up corns, dug ditches and repaired farmhouses.

They also visited families of farmers carrying themselves with aid materials. They learned about their living conditions and asked them to firmly defend the socialist cooperative fields.

Local people are impressed by the officials who have worked hard from early hours till late at night while having the same meals as the farmers.

They said that the Party Central Committee officials have relieved them of worries in mind, adding that they are afraid of nothing under the care of Marshal Kim Jong Un and the motherly Party.

North Hwanghae Province, the soldiers of the Korean People's Army have finished the laying of tens of thousands of cubic metres of concrete for the foundation since they started the construction of dwelling houses on August 24 and exceeded the 60 percent line of the concrete work for the framework construction as of September 3. In Singye County the local population built stone walls covering over 1 700 square

metres over the embankment of

the Singye River and Sohung

County completed the repair of houses for over 100 families.

Nation out to clear flood,

typhoon damage

campaign

Kangwon Province repaired some 900 blocks of houses for over 1 100 families and water pipes, while stepping up the repair of embankments of several rivers and streams and

Hundreds of blocks of houses were repaired and many public buildings including schools and hospitals restored to their original state in South Hwanghae Province.

The people of Kaesong rebuilt railway and road lines and power supply and communications networks broken by flash flood and typhoon and restored damaged houses and irrigation facilities, hundreds of hectares of submerged farmland and embankments of rivers and streams with the help of service personnel.

The forestry sector and the coal industry are working to repair damage and put production on a normal footing.

KCNA



WPK Central Committee officials help farmers with gathering on a typhoon-afflicted farm in South Hwanghae Province.

Effort concentrated on minimizing damage to crops

Activities are going on in the DPRK to minimize the damage to crops by Typhoon No. 8.

South Hwanghae and other provinces strive to raise the per-hectare grain output even

a gram more by improving the growth of crops.

Different kinds of germicides and nutrient solutions have been applied to crops in the afflicted fields so as to prevent the attack of pathogenic bacteria and improve the growth of crops.

Ripping off upper leaves and dead leaves of cornstalks have been conducted as required by technical norms to ensure good ventilation and sunshine conditions.

And steps were taken to set up the fallen rice plants and cornstalks.



A reconstruction work is under way in flood-stricken Ichon County, Kangwon Province.

KCNA

POMICULTURE

Sweet fragrance of ripe fruits fills the air across the country

Secret behind increase in output

The Taedonggang Combined Fruit Farm in Samsok District of Pyongyang has increased harvest of apples this year.

"We've harvested more than 40 species of apples this year, including 'Kumgang', 'Cholryong' and 'Unnyul'," said farm manager Choe Chol Yong.

Chief engineer Kwak Chil Song ascribed the increased fruit harvest to their improvement of the nutritive conditions of fruit

According to him, the farm spread over 30 tons of organic fertilizer per hectare of the orchard and 10kg of carbonated nano fertilizer for each fruit tree to suit the topographical and soil conditions.

And it sprayed a biological activity reinforcing agent onto the leaves of fruit trees over three times a day.

The farm also attached importance to the extermination of harmful insects.

As it rained frequently this



Apples are gathered in at the Taedonggang Combined Fruit

year, the farmers could not spray insecticides in time, which increased the infestation of harmful insects, he said.

To cope with the situation, the farm conducted the survey of harmful insects in advance while taking steps to apply agrochemicals immediately after the rain stopped.

They helped the farm save agrochemicals and improve the blight-killing effect as against before when it applied them mechanically.

In particular, it made a vegetable insecticide with an extract from a plant growing in the area to improve insectkilling effect while halving the amount of chemical insecticide applied.

The pomiculture institute of the farm designed a blight simulation program to analyse and inform when and where blight attack would occur so that the farm could take precautionary measures prevent the blight damage.

This year all apple trees of the farm have borne over 1.5 times more fruits than last year and the weight of each apple increased more than 1.3 times on average, said the chief engineer. "The farmers are now busy picking fruits to be supplied to various units across the country".

By Yun Kyong Il PT

Advanced methods introduced to growing fruits

The Pyongyang Fruit Farm in Ryokpho District, Pyongyang, introducing scientific culturing methods to increase fruit outputs.

"The farm has produced more fruits than the same year by period of last methods," introducing new said chief engineer Chae Chun Nam.

special What draws attention in them is that efforts are to nutrition management of fruit trees.

The farm newly developed amino acid microelement compound fertilizer based on by-products of cement production and domestic animals rather than sulphuric

According to workteam leader Kim Jae Son, the new fertilizer makes it possible to improve the quality of fruits and lower production costs to a quarter as against before.

It also produced organic

by processing corn shucks and rice straw with compound fungi for fruit initial manure for remarkably increasing the effectiveness of fertilizers and providing enough amounts of nutritive elements necessary for the growth of trees.

addition, the ensured timeliness of foliage dressing in accordance with periods of fruit growing trees and introduced a food production cycle to secure necessary amounts of organic fertilizer.

It also introduced such advanced methods as shapemaking and pruning.

It doubled the prescribed of saplings hectare than the previous days to increase the output by transforming peach saplings into Y-shaped ones.

The farm has a production base for efficient vegetable agrochemicals.

"We intend to make a

trial introduction of newlycultivated fruit tree saplings and develop more efficient biological pesticide inflicting no damage to environment in the near future,' said section chief Ri Il Chan.

By Yun Ki Song PT

A variety of products turned out



RYANG KUM CHOL

Fruit juices roll off the production line at the Taedonggang General Fruit Processing Factory.

The Taedonggang General Fruit Processing Factory is much concerned with developing new products.

"Our factory considers development of new products as a key to reenergizing production and directs efforts to it," said chief engineer Son Song Ryong. "Our utmost concerns here are to raise the value of new products by adding functional ingredients and to design stoppers and trademarks and decide the size and quality of containers in a fresh way so as to make them user-friendly."

According to him, the factory is paying special attention to the size and shape of containers and making and purchasing different moulds and containers.

It is also readjusting the mixing ratios and physical and chemical processing characteristics of existing products to develop new products with better taste and at lower cost.

Pak Un Ryong, chief of the technical department, said that they are digging into the nationwide and

trends of development in their field on a regular basis, adding they studied hundreds of samples this year.

They indicated the directions of development for all research teams such as drink, spices and fermentation and gave precedence to upgrading the standards in the design of products while intensifying literature search. Thus, they developed several products including a no-sugar no-calorie drink, the first of its kind in the country.

They have brought out over 20 kinds of new products including fruit kefir, fruit sweets with stuffing, yogurt, body cream and nourishing shampoo.

The factory's fruit fermented vinegar, functional vinegary drink and the animal feed production method based on processing of fruit by-products using fibre lytic bacteria were highly appreciated at the 34th national sci-tech festival last year.

By Kim Il Jin PT

Greengroceries busy with supplying fruits

Greengrocer's shops in succession," said an official Pyongyang are tied up with the supply of fruits these days.

"Pyongyang citizens are regularly supplied with the fruits from the Taedonggang Combined Fruit Farm and Kwail County in South Hwanghae Province in the period between July and October. First peaches were supplied to them last July. Convoys of trucks carrying apples and pears are now coming to greengroceries in of the Pyongyang Municipal People's Committee.

According to him, more fruits are to be provided for each citizen this year than last year.

"I have been working as a fruit and veg seller for scores of years. Not only suppliers but customers are grateful for the popular policies," said Ri Myong Son, manager of the Junggu Greengrocery.

The store delivers fruits first

to the families of war veterans, honoured disabled soldiers and service personnel and provides mobile services at dawn for the convenience of residents.

"As we are supplied with various fruits according to seasons at nominal price, everyone feels deep gratitude for our excellent system," said Mun Kvong Rok, a 60-year-old woman living in Neighbourhood Unit No. 25 of Taedongmundong, Central District.

Trucks also carry fruits to the hospitals, schools for orphans, baby home, orphanage and old people's home in the city.

By Jong Hwa Sun PT

APPLIANCE

Factory adopts innovation to increase production

Taean Electrical Appliances Factory is making innovations in the production of transformers to be supplied to major construction projects.

It is constantly devising technical innovation plans and introducing them into production.

The factory's technicians remodelled an oil gauge for transformers to reduce size of products and save oil. They designed and made a copper wire re-melting induction furnace and largesize bar pointer to apply them to the production of copper wires and ensure rapidity and accuracy of the wire rolling preparation work.

They also remodelled a press and a cutter to improve their operation efficiency and ensure good quality of cut products.

They introduced rationalization plan that can reduce power consumption and improve quality into the section heat-pressing

process and applied new jigs to improve the processing of various parts including end shield.

Meanwhile, it set up an advantageous control system so as to save much electricity and carry out load tests of DC motors on a high qualitative

This year, it has remodelled thousands of motors and sent them to cooperative farms.

By Yun Kyong Il PT

NANOTECH

Nanotechnology widely applied to agriculture with good results

The agricultural nanotechnology institute of the Academy of Agricultural Science has recently developed nanotechnology products which help the growth of crops and increase the per-hectare yield while reducing the consumption of fertilizer and agrochemicals.

The nano silicon fertilizer developed by the institute is cost-effective and has simple production process as it was made with the industrial waste as the basic raw material.

According to researchers, this fertilizer improves the resistance to fall and diseases of crops and, particularly, the growth and nitrogen absorption rate of the roots of rice paddies and disease resistance of rice paddies in the areas vulnerable to cold-weather damage. And the amount of the fertilizer used is only one thousandth as compared to the previous silicon fertilizer which was consumed in large quantities.

The introduction of the fertilizer into hundreds of thousands of hectares in the past years has confirmed that it can

increase the average per-hectare vield by ten percent, and the fertilizer production process has been built in some ten cities and

Choe Song Ryong, director of the institute, said that a very small amount of its agricultural nano germicidal agent is enough as compared to the previous germicidal agent, and the agent has big penetrating and diffused power against germ cells and good mobility and adhesion. For its good effects and application, it does not give humans and damage to environment.

When this germicidal agent was spread to crops and fruit trees including rice paddies, it exterminated diverse kinds of diseases and the extermination rate was over 90 percent.

The institute intensified research into nano germicidal agents, thus bringing out a nano germicidal agent with stronger extermination effects.

The agricultural functional vinyl sheet is more than double the tensile strength and ductility of normal vinyl sheet, has good resistance to ageing and its serviceable life is



SONG YONG SOK

The agricultural nanotechnology institute under the Academy of Agricultural Science works to develop products to help increase crop yield.

1.5-2 times longer than that.

In particular, in case the vinyl sheet is used for seedbed, the germination rate of seeds and the growth of seedlings will be improved further as the sheet has good light permeability and radiation function of far infrared rays that promotes the growth of young seedlings and is highly efficient in heat insulation.

The institute also turned out various products including a nano photosynthetic reinforcing agent and nano biological growth accelerator.

Its nanotechnology products appreciated highly national sci-tech at the festival and exhibition of the national nano technology sector.

By Kim Kum Myong PT

RECYCLING

Raw materials reused to generate profits



KIM HYOK CHOL

An employee operates the large injector to produce batterycell cases at the Taedonggang Battery Factory.

The Taedonggang Battery Factory, which is located Phyongchon District, Pyongyang, has recently established recycling systems to get much profit.

Nowadays, the use of many kinds of electrical appliances is unthinkable apart from the use of battery and the wide use of battery brings environmental pollution. Especially, the lead of waste batteries is a material detrimental to environment.

"We recycle lead from worn-out batteries to prevent pollution environmental and to reduce production cost," said Kim Song Chol, chief engineer of the factory.

The factory established an electrical smelting process to recycle lead from lead oxide of waste battery. On that basis, produces lead for battery with newly built resistance

It also halved electrode

consumption as compared to the past by solving technical problems to use waste graphite electrode producing in reprocessed lead.

It also set up a dry refining process to raise the purity of reprocessed lead.

"The purity of lead, which is produced in the process consisting of dry refining furnace, mixer, pump and the like, reaches almost 100 percent," said technician Ri Chol Yong.

Besides, the factory has also built a pipe production produces which different sizes of plastic pipe with waste separator as raw material.

It is carrying on research to increase the capacity and life span of 12V-18Ah battery for light by establishing a new production method based on machine casting die.

By Chae Hyang Ok PT

DEVICE

New tap changer instrumental in making power transformers

The Taedonggang Electrical Appliances Factory in Nampho recently has developed a tap at 300A changer

It is a worldwide trend to increase the stability of transformer by installing changer in power transformers.

"Our tap changer has been designed to act according to a new structure of operating principle in keeping with 300A capacity of load current," said Pak Jong Ryong, key developer and section chief of the factory.

Developers settled the size and structure of fixed and operating contacts which can change at the time of load, a knotty

problem in developing the changer.

designed They manufactured a spring by calculating the rational energy of tension spring which can change the operating contact in a moment while passing 300A current.

They also made a new insulation cylinder which can be claimed to be the core in the making of the tap changer.

For its wide application, it can be used to manufacture insulation cylinder the power transformer variety produce and a of insulators and contacts.

The factory has reportedly made some 20 kinds of facilities and over 500 pieces of parts by

applying it.



Tap changer developed by the Taedonggang Electrical Appliances Factory.

EDUCATION

To develop education into one that can guarantee future

Teachers training college improves teaching methods

Pyongyang Teachers Training College actively introduces advanced teaching methods in keeping with the modern trend of educational development and pedagogical requirements in order to improve students' actual abilities.

More than 100 situations that may arise in the course of giving lessons at primary schools have been added to the virtual reality teaching experience system so as to enable students to possess the capacities to deal with various situations as they get virtual teaching experience.

The college also made and introduced over 60 pieces of multimedia combining artificial intelligence and augmented reality technologies, thereby making it possible to enhance students' practical teaching capacities while reducing the difference between mock and practical lessons.

It has applied to education a robot-based teaching method forcomprehensively increasing the intelligence of primary school children and a system for assessing the application ability of the intellectual development schemes devised by students, and dozens of programs developed at the college have proved effective in boosting the performance of students.

It also developed an education control system for steering in real time the course of lecturers' teaching and students' study.

As a result, all forms of teaching are carried on by way of discussion including debate, thus improving students' ability in eloquence and expression.

And the college has positively adopted extracurricular group running methods including those of guiding children in amusement games using virtual toys, developing their intelligence using abacus and getting them to study foreign languages through image memory in order to increase students' guiding and practical abilities.

It also teaches students various other teaching methods including the interactive online

teaching method, the teaching aid using method and the methods of combining instruction and edification in primary education and combining school and family education.

Students improve their practical technical and abilities application in multifunctional classrooms including those for practising school primary teaching methods, preschooling methods and natural experiment teaching methods.

The introduction of new teaching methods has fired students with study zeal, increased teaching density, brought the whole process of teaching closer to educational reality and enabled students to theoretically understand teaching content in correlation with basic and adjacent subjects.

The college continues to research new teaching methods so as to make teaching content more practicable, comprehensive and up-to-theminute.

By Kim Rye Yong PT

Environment renewed to better conditions



JON KWANG HUN

A glimpse of the nature study room at Ponghak Primary School in Phyongchon District, Pyongyang.

The educational conditions and environments of schools are constantly upgraded amid the nationwide interest in the DPRK.

"Some years ago, our school was not equipped with advanced educational conditions and environments in keeping with the latest trend of educational development, but now it has changed," said Jong Yong Su, headmaster of Sungni Primary School in Rangnang District, Pyongyang.

The exterior of the school building was refurbished with tiles in different colours, and the corridors were turned into "hallways of knowledge and common sense" full of visual aids which are science-based and lifelike and also suit the psychology of pupils.

The practice rooms, including the nature room, have plenty of experimental apparatuses and facilities, while the classrooms are furnished with TVs, IP cameras and other electronic appliances to become multifunctional.

Meanwhile, hundreds of schools across the country have upgraded their educational conditions and environments in accordance with modern educational development and over 190 schools were newly designated as technical senior middle schools last April.

Technical senior middle schools are dedicated to training technical personnel in the sectors of the metal, coal-mining, chemical and electric industries and fishery, agriculture, pomiculture and animal husbandry.

Those newly designated this year are exclusively involved in technical training in the field of information technology.

As part of the ongoing nationwide effort to build model schools, over 30 schools such as Munsin Primary School of Tongdaewon District, Hyongsan Primary School of Hyongjesan District and Sanghung Primary School of Sosong District were newly built in Pyongyang and more than 30 schools were built or rebuilt in North Phyongan Province.

Jagang Province has furnished a school in a mountainous area with the most unfavourable conditions and generalized the example to give dozens of schools facelifts. The building of model schools is also pushed in South Hamgyong Province, Rason City, South Phyongan Province and South Hwanghae Province, among others.

Besides, all provinces including Jagang, South Phyongan and Ryanggang have consolidated the material and technical foundations of schools by furnishing them with computers, TVs and equipment and tools for experiment and practice.

The public interest in education is constantly growing in the DPRK thanks to the state policy of making a leap forward by dint of science and guaranteeing the future by dint of education.

School develops programs to make study enjoyable for students

Teachers at Okryu Primary School in Taedonggang District, Pyongyang, are working hard to develop and introduce new teaching methods.

"We are intensifying research into teaching methods that suit the ages and minds of primary school pupils by adopting information technology and other means," said headmistress Pak Pok Hui, adding in the course of this they developed the music and dance combined teaching support system.

In the past music and dance lessons, a teacher used to show an example of the teaching content to be followed by pupils.

But with the new teaching support system, pupils can learn the music and dance subject without the help of a teacher.

The system enhances their faculty of expression and creation as well as the sight-reading and sight-singing abilities and makes them capable of singing with emotion so that they can fully display their gift

and talent.

Divided into such sections as basics of music classroom, singing classroom, dance classroom and several other classrooms, the program helps students understand correctly about voice parts and chords by combining low and high-pitched sounds when they sing in tune with the melody in the textbook.

According to music teacher Jong He Yong, many boys seemed bored and could not concentrate their attention on music and dance lessons but, after the introduction of the teaching support system, they got much more interested in music.

"The music subject is now very interesting and I can sing really well in the singing classroom," said second-year student Om Un Ryong. "Now I want to learn to play musical instruments and to dance."

The school has also introduced games, virtual reality and augmented reality technologies and 3D projecting

technology in several subjects.

The school's teaching support systems that enable students to look at, listen to, feel and assess new things by themselves and combine study and intelligence games are well received by the students and their parents and also at other primary schools.

By **Ri Sang II** PT



CHAE MYONG RIM

Teachers discuss how to introduce a music and dance teaching support program at Okryu Primary School in Taedonggang District, Pyongyang.

By Pang Un Ju PT

MACROBIAN

Centenarian tells about her life with pride

With the number of macrobians increasing in the DPRK year after year, Jang Tuk Gum, resident in Sunchon-dong in Sunchon of South Province, Phyongan greeted her 100th birthday last May.

She was living in a large single-storey house together with her second daughter Ri Chang Suk and Ri's son and daughter-in-law.

Guided by Ri who looked younger her advanced age of 71, The Pyongyang Times reporter entered the room of the centenarian who warmly welcomed her.

After exchanging greetings, the reporter asked the elderly woman if longevity ran in her family.

She shook her head with a smile on her kind and healthy face free from senile plaque and told the journalist about her

She was born to a poor slashand-burn farmer as a second daughter out of three siblings in Chonsong-ri of Unsan County, South Phyongan Province, in May 1920.

Pressed by hard life, her parents married her to a goodnatured man soon after she came to maturity, but her husband was forcibly drafted for labour by the Japanese imperialists.



Jang Tuk Gum living in Sunchon-dong of Sunchon City, South Phyongan Province, receives congratulations from her granddaughter and great-grandson on her 100th birthday.

After Korea's liberation, she could lead a happy life worthy of human being together with her husband who narrowly escaped death to return home.

Although she lost her parents, brother and sister by enemy bombing and her husband was killed by the enemy during the Fatherland Liberation War, she overcame all sorrow and devoted her all to the production of food grain in wartime.

She worked as an official in the days of postwar reconstruction and socialist construction, as she brought up three children. Even after retirement, she volunteered

to do things for the good of the country.

The reporter engrossed in hearing her story, when the doorbell rang. Then there came the leader of her neighbourhood unit and her household doctor from the dong clinic.

When Jang reached 90, the clinic put her name on the list of macrobians, and since then its doctors have taken special care of her.

According to the household doctor, Jang has normal blood pressure and a strong heart.

And the leader of the neighbourhood said Jang's grandson granddaughter-inlaw and all other family members take good care of her

health. The city authorities saw to it

that her house was repaired and furnished with more household articles in the run-up to her centenary.

"I live happily as the country shows deep concern for my health and life and my offspring are devoted to me. Some time ago, Supreme Leader Kim Jong Un sent me a birthday spread. I feel regretful as I cannot repay the favour shown by him," said Jang Tuk Gum.

of radon, and therefore it has

widely been used for treating

skin diseases. It is recognized as

a pollution-free spa as it is free

from ammonium, nitrous acid,

nitric acid ion and especially

a high temperature at the wells

and which have high water

yields are highly effective

in softening skin, promoting

myocardial contraction, blood

pathogenic microorganisms. Hot springs whose water has

By Pang Un Ju PT

COSTUME

To preserve tradition and beauty of Korean costume

Garment Research Institute of the Academy of Light Industry is channelling efforts into standardizing the design and processing method of Korean costume.

"Our institute has newly threw light upon various technical problems arising in the creation of designs and the processing of Korean costume," said Kim Myong Sil, chief of the office of Korean costume.

The institute added a special touch of refined beauty by updating the techniques of making the trimming line of jogori and the lower part of a sleeve while preserving well the formal factors peculiar to Korean costume including collar, breast-tie and collar strip.

Researcher Choe Hyang Mi pictured flowers in the lining for skirt and jacket, which was harmonized by light pale yellow and light pink colours favoured by Korean women and embroidered full-blown apricot blossoms on the surface coating. Thus, she came up with the design of bridal dress and the processing method which promoted the cubic effect of costume like an art work.

Besides, the institute standardized the designs of holiday clothes for men and women, including tangui (ceremonial dress) and paeja (women's waistcoat) promoting the women's beauty of line, magoja (Korean jacket worn

over upper garment) turumagi (overcoat) children's rainbow-coloured jacket.

On the other hand, much time and energy is spent to creating the design of men's paji (trousers) and *jogori* (jacket).

After making an in-depth research into the data of men's attire, the institute created the designs of paji and jogori in close contact with Pyongyang Jang Chol Gu University of Commerce, Pyongyang University of Fine Arts, Korean Folklore Museum and other units related to Korean costume and offered a prize for them on several occasions.

It further diversified the colour matching of upper part of jogori and paji and the colour selection of sleeveless jacket and turumagi as it completed the processing technique which subdivided all the structural elements as the position, width and length of breast-tie, gusset and collar and the tailoring of trousers.

perfected also standardized technical indices badly needed for the design and processing of wedding clothes of young people and the holiday clothes of middle-aged and old people.

It is pressing on at the final stage with the writing of book for design, layout and processing methods of Korean costume.

By Ri Sung Ik PT

Hot springs good for health and medical treatment

Hot spring is the mineral spring whose water has a temperature of over 20°C in natural condition, and the DPRK has lots of such famous spas.

The place names of the country containing such characters as "on" and "chon" can be seen as having connection with hot spring. Typical examples are Myongchon County in North Hamgyong Province, Samchon and Paechon counties in South Hwanghae Province and

Onjong-ri of Yangdok County in South Phyongan Province.

Over 60 spas across the country warm the body to dilate blood vessels and have physical and chemical actions with their hydraulic pressure, floating force and chemical components.

Sokthang Hot Spring is a high temperature spa in Yangdok County, South Phyongan Province, which contains lots of



It is also called Jongdal (lark) hot spring, which derives from a legend about a lark that recovers from a leg injury at the spa. The water is effective in enhancing the autonomic nerve functions, promoting blood circulation and antiphlogistic process and



Researchers work to standardize the designs and processing methods of traditional costume at the Garment Research Institute under the Academy of Light Industry.

treating rheumatoid arthritis and peripheral neuritis.

At Kyongsong Hot Spring in North Hamgyong Province the water springs up through the thick sand layer and sand bath is highly efficacious there. It is good for the treatment of disorders at the backbone and in the nervous system, chronic gastritis and other diseases.

Other well-known spas are Ryonggang Hot Spring in Nampho and Unsan Hot Spring in North Phyongan Province.

balneotherapies according to indications, including drinking, gastric and rectal lavage, bathing, inhalation, sand bath and washing of lesions.

Sanatoriums are found at spas in the country.

In particular, a hot spring resort was built in the Yangdok area last year to provide people with various therapeutic and physical exercise services.

By Ri Myong Jun PT



The Yangdok Hot Spring Resort provides visitors with various therapeutic and physical exercise services.

AU

Africa advances towards independence and prosperity

t present, the African Union is channelling big efforts into improving the socio-economic and political position of its member states.

The AU was inaugurated at the special summit meeting of the Organization of African Unity held in Libya on September 9 1999. The summit declared the AU would be set up in place of the OAU, reflecting the long-cherished desire of the continental people to build a powerful Africa by ensuring lasting peace and stability in the region

and realizing continental integration, and the requirements of the changed times as well.

The First Ordinary Session of the Assembly of Heads of State and Government of the AU took place in South Africa's Durban in July 2002, signalling the start of its work.

The AU has developed into a pan-African organization with 55 member nations and an authoritative group struggling to protect the interests of the Africans.

The union makes positive efforts to bolster

up continental cooperation in wide fields through the regular summit and on other occasions.

The 33rd Ordinary Session of the Assembly of Heads of State and Government of the AU held in Addis Ababa of Ethiopiathis year discussed measures to solve such serious continental problems as dispute and spur regional growth.

In addition, the session pledged to go on with the work for creating the joint anti-terrorist forces of the continent in order to ensure regional stability and eliminate terrorism and discussed the matters of cementing unity for economic development in the region and encouraging all member nations to join efforts and take necessary measures to enhance the position and role of African women

It clearly demonstrated the unanimous stand of the members to reject foreign intervention by strengthening unity and cooperation.

The AU's efforts to build an independent and thriving Africa will bear good fruits.

By Choe Yong Nam PT

WRONGDOING

Koreans massacred following Kanto earthquake

ne of the greatest earthquakes in Japan's history occurred in Kanto on September 1 1923, causing huge casualties and massive damages. The quake claimed a lot of lives and left over 1.2 million homeless and many others missing as it set over 10 cities and villages on fire.

An extraordinary meeting of the Cabinet was held at the Prime Minister's residence in the afternoon of that day, which issued an order to resort to every possible means in order to appease the antipathy of the citizens towards the government.

circumstances, groundless rumours that Koreans set fire and poisoned wells were widely spread. After that, the theory about Koreans planning an insurrection was fabricated, followed the announcement of royal ordinance No. 401 by the Japanese king on mercilessly killing Koreans. Accordingly, the whole country was placed under martial and the army, police, vigilante corps, young people's corps other rightist gangsters all turned out to go on the rampage against Koreans throughout

Japan.

More than 23 000 innocent Koreans were slaughtered by outrageous and unimaginable methods in a few days.

The Japanese set up checkpoints at street corners to pick out Koreans by making them pronounce difficult Japanese words and mercilessly killed them on the spot.

The massacre of Koreans was an infamous mass murder committed by the Japanese in an organized and planned way by mobilizing the whole state power.

There are many natural disasters recorded in the world history for causing

heavy casualties, but no country has ever taken advantage of a natural disaster to massacre another nation like Japan.

International stipulates that mass aimed slaughter annihilating the whole of a country, nation, race or part of them is a crime against humanity and it should be punished without applying the statute of limitations. Therefore, Japan is wholly to blame for massacring Koreans at the time of the great earthquake in Kanto.

Japan should honestly admit its heinous crimes against Koreans in the past, make an apology and reparations and withdraw from its policy of hostility towards the DPRK as early as possible.

By Om Ryong PT

VIETNAM

In a bid to build a developed industry

he Socialist Republic of Vietnam in Southeast Asia is known as a granary of the world.

It is because the country has fertile land and the majority of the locals are engaged in agriculture to produce a large quantity of rice every year.

It had been under the control of colonialists since the late 19th century, but the Democratic Republic of Vietnam was founded on September 2 1945 through a long period of struggle for independence.

The Vietnamese people waged a war of resistance against foreign invaders and the struggle for achieving the country's reunification, thus reunifying the country in the mid-1970s and declaring the founding of the Socialist Republic of Vietnam in July 1976.

After proclaiming the founding of the socialist republic, Vietnam has directed efforts to achieving the country's development and ensuring regional peace and stability.

The 12th Congress of the Communist Party of Vietnam, which was held in January 2016, called on the whole party and all people to steadily advance towards socialism.

Vietnam, which sets itself a goal to build a basically modernized industrial state by 2020, designated shipbuilding as an important sector development and channels big efforts into it while concentrating on developing fisheries and tourism. In recent years, it has paid special attention to bolstering up IT and renewable energy development fields.

It strives to turn Southeast Asia into an area of peace and stability as it externally strengthens cooperation with regional countries.

Vietnam has a timehonoured history of friendship with the DPRK.

In March last year, Supreme Leader Kim Jong Un paid an official goodwill visit to the Socialist Republic of Vietnam so as to invariably inherit and develop the traditional relations of friendship and cooperation between the two parties and two countries generation after generation.

The efforts of the Vietnamese people to build a prosperous country will bear good fruit.

By Song Jong HoPT

Briefly

Zimbahwe

New agricultural development strategy unveiled

Zimbabwean President Emmerson Dambudzo Mnangagwa issued a new agricultural development strategy on August 26.

The new strategy is aimed to shore up the agricultural sector which is very important for the national development, he said, adding that the government would continue to assist the local farmers, so as to ensure food security.

It is said that in the country agriculture accounts for about 15 percent of the GDP and more than 60 percent of its population are engaged in the sector.

Uzbekistan

Steps taken to protect national economy

The Ministry of Justice of Uzbekistan said on Monday that the import of some foreign goods would be banned from November 1 and the supervisory authorities would intensify their control to the import of goods.

It is aimed at revitalizing domestic producers by ensuring the domestic production of the imported goods, it noted.

In addition, the work for the enactment of a new law on the import of goods is also being stepped up, it said.

Palestine

Israel accused of territorial seizure move

The Palestinians in a village near Hebron in the West Bank have recently launched a protest action against the Israeli moves to seize their territory.

According to foreign media outlets, Jewish settlers in Hebron reportedly started to build a road to the village to wrest the land there.

Lots of Palestinians put up tents and embarked on the struggle to defend their territory in protest against the move.

China, Russia

Cooperation deal inked

Recently, China and Russia signed a protocol on the execution of plans that are pushed ahead within the limits of the 2020-2021 year of China-Russia scientific and technological innovation and cooperation.

Both sides also concluded an MOU on establishing a joint lab for the research into COVID-19 and an agreement on cooperation in the training of experts in new technological fields who can speak Russian.

Cuba

Hurricane hits island

On August 24-25, a 70-100km/h hurricane hit the southern coastal area and western region of Cuba to destroy over 2 000 houses, cut off communications service and electricity and water supply and damage agricultural crops including manioc, banana and maize

Especially, the western provinces were reportedly damaged severely.

Cuban President Miguel Mario Diaz-Canel Bermudez said that the rehabilitation should be done with a view to building better than before, adding that it is important to make positive efforts to repair the damage in power supply, telephone service, dwelling houses and agriculture.

THE PYONGYANG TIMES

ARCHAEOLOGY

Koguryo tombs with murals and relics newly unearthed

The Archaeology Institute of the Academy of Social Sciences has recently unearthed tombs with murals and relics tracing back to Koguryo Kingdom in Wolji-ri of Anak County, South Hwanghae

Province.

The newly discovered relics are two Koguryo tombs with murals and gold ornaments.

The first tomb with murals is a traditional Koguryo-style

tomb with stone chamber and earth mound.

Discovered on its four walls and ceiling are pictures of four guardians and parts of pictures like constellation, lotus flower pattern, cloud, lotus leaf. pipal tree and tortoise-shell patterns.

The second tomb with murals is also a Koguryo tomb with stone chamber and earth mound.

Excavated in the tombs are nine pieces of gold ornaments such as an elaborately crafted gold ear ring and flower petalshape ornament.

The DPRK archaeology society confirmed that the mural tombs were built in the first half of the sixth century and

estimated that they are of great significance in the archaeology sector

Considering historical records which say officials of above the third rank were only entitled to use tombs with murals in the period of Koguryo Kingdom, the excavation of these historical relics brings to light the fact that the area was one of the important administrative hubs of Koguryo.

KCNA















The murals and relics of the tomb from the period of Koguryo Kingdom (277 BC-AD 668) discovered in Wolji-ri of Anak County, South Hwanghae Province.

FOOTBALL

Pyongyang's women team sets sights on premier league top three

"More than half of our players are just fresh from the youth team," said Jo Song Ok, head coach of the senior women's football team of the Pyongyang Sports Club.

The team was recognized as one of the strongest at home until recently as it would finish in the top three at the national premier league.

But the ageing of the team cast gloom over its future and the fear of its failure materialized as it fell to the fourth place at the 2018-2019 national women's premier league.

The club replaced the team's head coach with Jo who had rich international experience.

She was the captain and a centre-forward of the DPRK eleven when they won international games in succession taking the spotlight of the world and was a coach in charge of centre-forwards and midfielders when the DPRK women triumphed at the EAFF E-1 Football Championship 2017.

She wants to hand down her past glory to her team.

"The outcome of games can

be said to depend on the special skills of the team's players. In my view, it is most important to select players with special techniques and make each of them give full play to their fortes in accordance with the team's tactical plan," she said.

She always finds herself among the players to observe their merits and demerits and to work out appropriate training schedules and methods.

She applies herself to finding out players who excel in the speed of prediction, reaction and action, shooting, scoring

and playmaking.

In the latter half of this year, her team has mainly focused on studying tactics.

"Whenever the ploys we elaborated with so much effort work, everyone jumps for joy, and in the course of this they grow in confidence and redouble their efforts to achieve a higher goal," said the head coach.

The entire team is toiling with a sense of mission to exalt the honour of their country and add lustre to the name of their team.

By Kim Rye Yong PT



JANG KYONG NAM

Women footballers discuss tactical plans at the Pyongyang Sports Club

SCENIC BEAUTY

Moran Hill, pride of Pyongyang

Moran Hill is one of the scenic places counted in Pyongyang.

In the past, Pyongyang people called enjoying spring on the Ulmil Pavilion as "greeting the spring on the Ulmil Pavilion", and viewing the moon at the Pubyok Pavilion as "welcoming the first full moon at the Pubyok Pavilion" and they have rated them as two of eight beauty spots in Pyongyang.

Moran Hill was called thus in a sense that the mountain peaks look like a blooming peony.

The scenery of the hill is very graceful since it unfolds unique sights according to four seasons in harmony with the wonderful topography.

When we liken the spring scene, where all kinds of flowers bloom, to the childhood of Moran Hill, the summer covered with green foliage should be called youth.

It is good to have a rest in the shade of greenthick forests under the burning sun in midsummer, but it will be another pleasant experience to have a walk along the path while thinking.

Especially, after pouring rain,

it makes the body and spirit feel refreshed as the water drops on leaves glitter like rainbowcoloured beads by the effect of sunshine.

The hill was reportedly called Hambangme, which means that it looks like a fully blooming peony flower which is wet with

Artificial falls in several places, ponds and pavilions, and over 180 kinds of plants and birds including *Styphnolobium japonicum*, a natural monument, on Chongnyu Cliff add more beauty to the hill.

On the hill, there are many historical heritage sites including the inner and outer walls in the period of Koguryo which existed between 277 BC and AD 668.

Today, Moran Hill is developing into a better cultural recreation centre with the reconstruction of Kim Il Sung Stadium, Moranbong Theatre, Pyongyang Municipal Youth Park Open-Air Theatre and Amusement Park of Kaeson Youth Park.

By Min Chol PT

