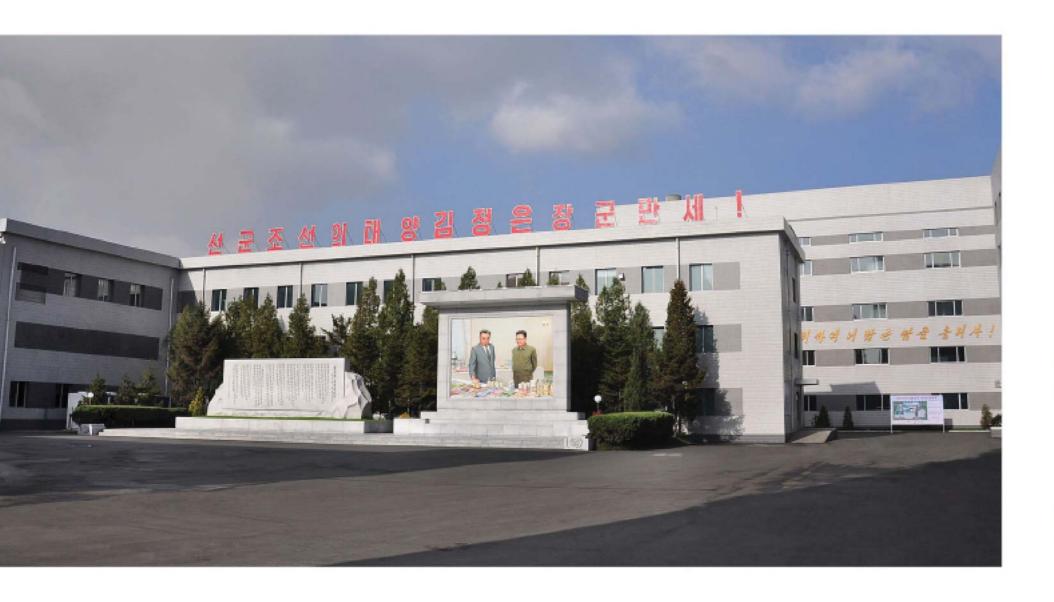
DEMOCRATIC PEOPLE'S REPUBLIC OF

KOREA

Juche 105 (2016)

(No. 721)





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Photo: By courtesy of the KCNA

FRONT COVER: Sci-tech Complex

Pictorial KOREA is published in Korean, Chinese, Russian and English.



Kim Jong Un Visits Pyongyang Children's Foodstuff Factory

Kim Jong Un, with an ennobling love for and devotion to the future of the country, provided on-the-spot guidance to the renovated Pyongyang Children's Foodstuff Factory in November last year.

Built in Juche 66 (1977), the factory is a producer of highly nutritious foodstuffs for children.

On his visit to the factory in December two years ago, the supreme leader of the country learned about its production and said that putting its production on a normal track is not merely an economic and practical problem but a problem related with the sense of moral obligation to the great leaders who made lifelong devotion for the well-being of the children, calling them the kings of the country and raising matters related with them as the most important of the affairs of the state. After giving instructions for its production and management, he took measures aimed at putting all its production lines on a modern footing.

The factory management and employees, officials in the relevant sector and scientists, technicians and workers of the relevant units finished the modernization project—construction or extension or renovation of scores of structures—in a little over ten months. And it went to production full steam.

Visiting the renovated factory, Kim Jong Un enjoyed the view of the factory and said in great delight that it had undergone a sea change as befitting a unit associated with the Party's leadership exploits, reaffirming that Koreans do without fail what they are determined to do.

He looked round the mosaic mural The Great Comrades Kim Il Sung and Kim Jong Il Seeing Foodstuffs for Children, the monument to the field

guidance by the peerlessly great men of Mt Paektu and the rooms dedicated to education in their revolutionary activities and the factory's history, which have been built or rebuilt at the factory.

Making the rounds of the factory, he learned about its modernization, production and the variety and quality of products. A multidimensional integrated manufacturing system has been established, he noted, adding that all the processes are automatic, every element of production is sterilized and dust-free. He highly spoke of the modernization of the factory.

He said what pleases him particularly in the modernization of the factory is that all its production lines are furnished with the latest equipment designed by native scientists and technicians and manufactured by domestic efforts, and stressed again that what constitutes the nucleus of the Party's policy on modernization is accomplishing it by our own efforts and by our own

He expressed his expectation and conviction that officials and employees of the factory would produce soya milk and other tasty and highly nutritious foodstuffs in larger quantities for the children, always keeping in mind that putting production on a regular footing guarantees their happiness, and posed for a photograph with them.

Resolved to put his ennobling love for the posterity into reality, officials and employees of the Pyongyang Children's Foodstuff Factory are increasing production.

Article: Kim Hyon



Kim II Sung talks with young heroes in February Juche 60 (1971)

Korean Youth Movement Boasts Its Proud 70-year History

Tanuary 17 this year marks the 70th founding anniversary of Kim Il Sung J Socialist Youth League.

Greeting the meaningful anniversary, the Korean young people are looking back with great pride on the 70-year history of brilliant feats that will go down in the national history.

Maintaining it as the most important affair of the revolution to attach importance to young people, President Kim Il Sung ushered in a new history of the policy of attaching importance to young people and laid everlasting

Paektusan Hero Youth Power Station and praised the feats of the youth shock brigade members there. The President began his revolutionary activity with going among them

and, based on the valuable tradition of the Korean youth movement that was established in the tempest of the anti-Japanese revolution, found the Democratic Youth League of Korea on January 17, Juche 35 (1946).

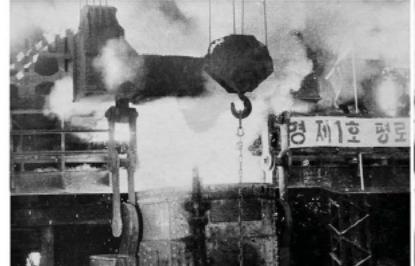
came into being when the current supreme leader Kim Jong Un visited the

Upholding the banner of democracy, the DYLK embraced young people of all strata who were at a loss what to do after Korea's liberation (August 15,

On the basis of his idea of attaching importance to young people, the Korean youth movement was developed into the Juche-oriented youth movement and the young people were trained into the vanguard of the revolution, reliable reserve of the Workers' Party of Korea.

By creditably translating his idea and policy of attaching importance to young people into reality, Chairman Kim Jong Il made efforts to write a brilliant chapter in the WPK's history of attaching importance to young people and develop the country into a youth power.

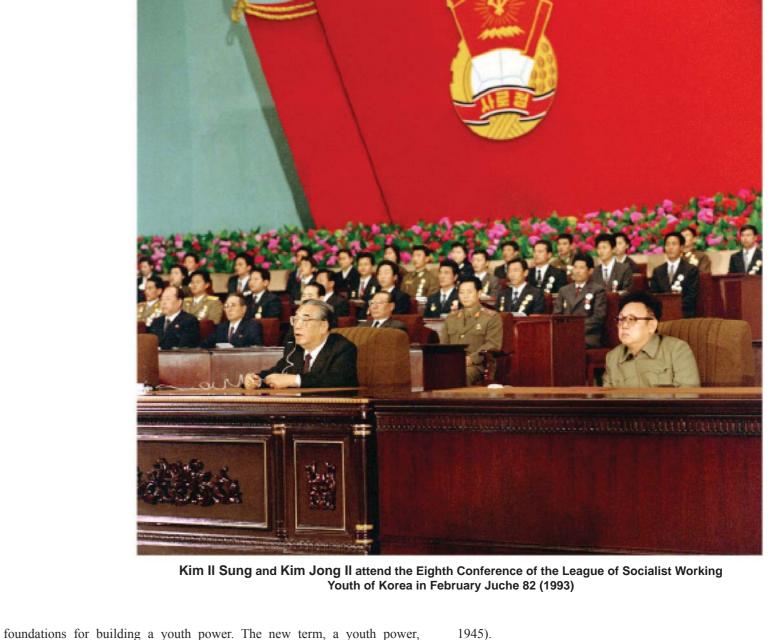
He handed over the torch of the revolution to the young people as a token











Korean young people, the vanguard and shock brigade in socialist construction, have performed brilliant feats that are etched in national history



Kim Jong II awards the flag of Kim II Sung Socialist Youth League in January Juche 85 (1996)

of his trust and expectation that they, rising generations, would become an undying torch in accomplishing the revolutionary cause of Juche. He also developed the youth league into an organization named after President Kim Il Sung.

Thanks to the warm affection of the great leaders who put forward the youth as the main force of the revolution and brought them up as a reliable young vanguard of the WPK during their leadership of the revolution, the policy of attaching importance to young people has been administered and a youth power without parallel in the world built on this land.

Young people in the DPRK constitute fully-fledged elements of the motive force of the revolution, its most vigorous force that promotes

social development, as well as a vanguard and a shock force of socialist construction.

They adorned the national history with brilliant feats—the building of a new country after the liberation, Fatherland Liberation War, postwar reconstruction and socialist construction. During the Arduous March and the forced march in particular, they faithfully supported the WPK's Songun leadership

Many structures named after the Korean youth carry the heroic feats of the young people who have displayed their energy and resourcefulness and shed sweat in those decades.

True to the noble intention of the great leaders, supreme leader



Kim Jong Un among those attending the Second National Conference of Exemplary Young People of Virtue in May Juche 104 (2015)

Kim Jong Un has put it forward as a consistent policy and permanent strategic line of the WPK to attach importance to young people, thus ushering in a fresh heyday in the Korean youth movement.

Saying that the virtue of young people is a source of pride for the country, he bestowed great trust and affection on them. To live up to his expectations, they devote themselves for the sake of the WPK and revolution, country and people, preparing themselves to be stout vanguard fighters.

Where there are young people, fierce flames of miracle and world-astounding innovations are flaring up and the revolutionary spirit of Paektu, the spirit of the blizzards of Paektu, are being displayed.

Holding aloft the slogan "Let Us Be Young Heroes in the Struggle to Glorify the Great Era of Kim Jong Un!" they are playing a pivotal role on all fronts for building a thriving socialist country to celebrate the Seventh Congress of the WPK with high political enthusiasm and unprecedented labour feats

As such hot-blooded young people, vanguard fighters of the WPK, are advancing vigorously straight forward following their supreme leader, socialist Korea will exalt its dignity as a youth power.

Article & photo: Jong Kyong Bok

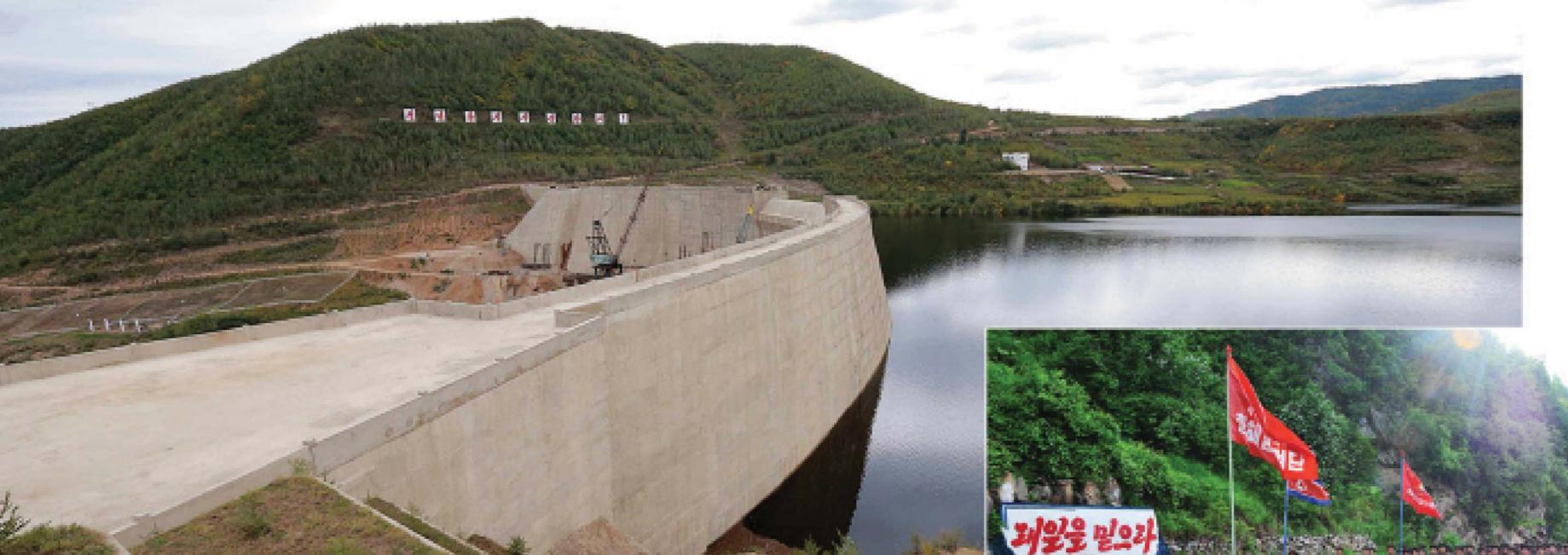








Legendary Tale of Heroic Youth of Packtu



The Paektusan Hero Youth Power Station that has risen imposingly in the Paektu area embodies heroic efforts made by the young people in the Songun era and the feats performed by them, most brilliant in the history of the youth movement of Korea.

The construction of the power station up the Sodu River in Paegam County, Ryanggang Province, was the process of overcoming the most unfavourable natural and geographical conditions never experienced in the construction history of hydraulic power stations in Korea.

Most of building materials, including cement, had to be transported from railway stations hundreds of kilometres away, and the biting cold peculiar to the region impeded the damming and other processes for about half a year.

Despite untold difficulties, many young people from across the country volunteered for the project of building the power station that would be conducive to improving the people's living standards and promoting economic growth in the province in which Mt Paektu, sacred mountain of the revolution, rises high. Full of ambition to devote the strength and passion of their precious youth, they built dams and dug waterway tunnels for over a decade in the deep, rugged mountain valleys. They thus completed the construction of waterway tunnels for power station No. 1 and dams for power station No. 2 and also erected dwelling houses for the residents in the area to be inundated.

What greatly encouraged them to carry out those difficult and gigantic projects is the policy of attaching importance to and loving young people pursued by the Workers' Party of Korea and the DPRK government.

The respected Marshal Kim Jong Un visited the site in April last year and looked round the power station under construction associated with General Kim Jong Il's boundless trust in and affection on the young people.

Saying that as he visited the construction site he felt yearning desire for the General, the Marshal recalled that the General had attached great importance to the construction project, so he visited the site on his return from a foreign trip, though he was seriously ill. He added that such gigantic project as this now under way in the rugged places and unimaginable biting cold could not be carried out by anyone else, but the Korean young people who were educated and trained in the embrace of the Party. He then highly appreciated that the patriotism displayed by the young shock brigade members engaged in the construction project powerfully manifested that ours is the only youth power in the world.

Greatly encouraged by his affection and trust, the members of the shock brigade resolved that they would erect the power station until the 70th anniversary of the WPK founding and worked day and night with the youthful courage and mettle. They thus created a legendary tale of heroic youth by carrying within some 120 days the amount of work equal to what they did in the previous ten years.

The shock brigade members transported building materials with large and small sledges when means of transport were even frozen in intense cold. The death-defying corps members bolstered up the railway bridges with their bodies in the icy water of the Sodu. Their revolutionary, self-sacrificing and

patriotic spirit are being admired by everybody.

The young builders cultivated themselves, regarding the construction as the curriculum of "Paektu Youth University" and giving marks to their conscience every moment and every day on their own.

They cultivated themselves mentally and physically with the clean water and air of Paektu and tempered their courage and faith in the blizzards of Paektu, growing into the most dependable successors to the Party and reliable pillars of socialist Korea.

In October last year the respected Marshal Kim Jong Un participated in the inaugural ceremony of the Paektusan Hero Youth Power Station and delivered a congratulatory speech in high appreciation of brilliant feats performed by the youth shock brigade members.

He said

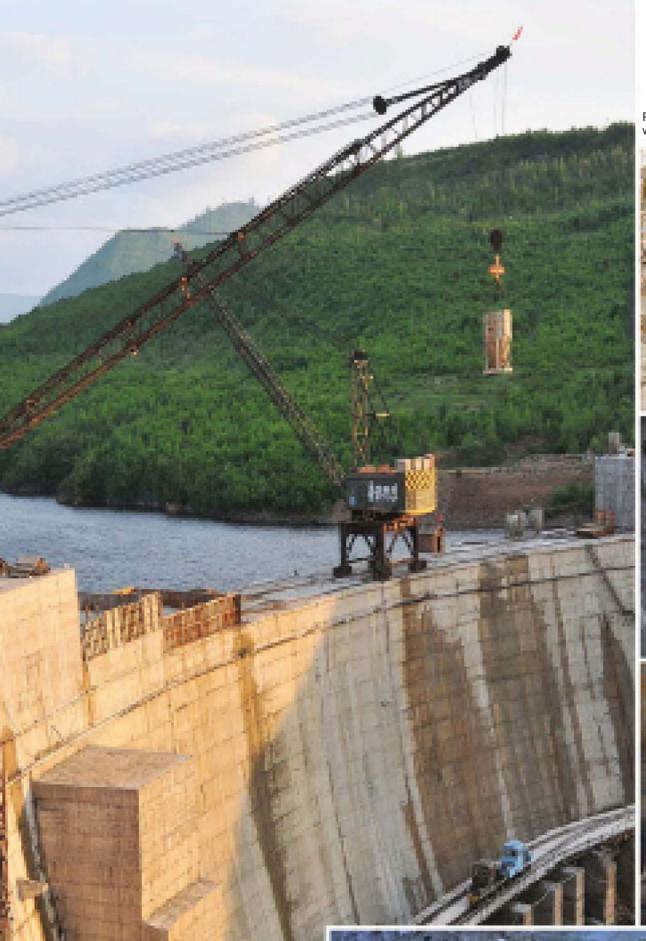
"The dam rising over there is the accumulation of the burning

patriotism and loyalty cherished by our young vanguard, and the height of the dam of power station No. 1 is the height of the dignity of our country with heroic young people, a youth power."

The members of the Paektusan Heroic Youth Shock Brigade celebrated the 70th anniversary of the founding of the Workers' Party of Korea with their brilliant feats and spent merry days on their visit to Pyongyang.

They are now displaying their youthful resources and gallantry in the construction project of the Paektusan Hero Youth Power Station No. 3 so as to greet the 70th anniversary of the founding of Kim II Sung Socialist Youth League and the Seventh Congress of the Workers' Party of Korea with unprecedented labour feats.

Article: Kang Su Jong Photo: Ri Hak Myong



Paektusan Hero Youth Power Station is invested with heroic feats of labour by young people











They have created the Songun-based culture of young people



People all over the country extend warm congratulations to Paektusan Hero Youth Shock Brigade members who are visiting Pyongyang







Happy New Year

Having seen out 2015, a year of sweet memories, we are seeing in the hope-filled new year 2016.

The editorial board of the pictorial *Democratic People's Republic* of Korea extends new year greetings to dear readers.

Last year Juche 104 (2015) was meaningful, unforgettable days for the Korean people.

The service personnel and people of the country, who turned out to celebrate the 70th anniversaries of national liberation and the founding of the Workers' Party of Korea as revolutionary, auspicious events, raised fierce flames of the Korean speed on all fronts of building a thriving country shortening ten years to one, thus improving the appearance of their country and achieving

miraculous innovations in the year. The Sci-tech Complex, a terminal of the Pyongyang International Airport, the Pyongyang Corn Processing Factory and other monumental structures have been built one after another, displaying the might of the powerful self-supporting economy.

The Mirae Scientists Street, an epitome of the WPK's policy on attaching importance to people and respecting and loving them, and the Wonsan Baby Home and Orphanage, the Pyongyang Rest Home and other establishments for the people's well-being sprang up one after another; the flood-stricken area in Rason

has been rebuilt in an excellent fashion, the misfortune being turned into blessing. These evoked cheers for the Workers' Party and socialism throughout the country.

By celebrating the 70th anniversary of the WPK's founding with the dignity and pride of being victors, the service personnel and people of the country demonstrated their iron faith and will to staunchly follow the road of independence, Songun and socialism united single-mindedly around their supreme leader Kim Jong Un.

The new year Juche 105 (2016) will be a meaningful year

when the Korean people will greet the Seventh Congress of the WPK as the apex of the revolution noteworthy in its history.

They are now full of determination to perform unprecedented feats of labour to greet the congress, a watershed in the annals of their efforts to build a thriving country, under the guidance of their supreme leader.

Assuring that the pictorial will carry more pictures that will help you have a better and deeper understanding of the reality of the DPRK, the editorial board once again wishes you a happy new year.

Editorial Board

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Kim Jong Un visits the completed Sci-tech Complex in October Juche 104 (2015)

Sci-tech Diffusion Hub for All People

The Sci-tech Complex has sprung up magnificently on Ssuk Islet in the Taedong River that is running through Pyongyang.

It is a latest sci-tech hub the respected Marshal Kim Jong Un has presented to his people as a gift in the $21^{\rm st}$ century, the era of the knowledge-based economy, by upholding the lofty intention of President Kim II Sung and Chairman Kim Jong II who had the Grand People's Study House built as a grand library for the people in the 1980s.

The complex with a total floor space of 106 600 square metres is in the shape of a huge atom symbolic of the scientific world; the construction project has been completed in a short period, a success that would not have been achieved by the established construction methods.

A comprehensive e-library, the complex boasts the databases of already-printed technical books and data about the scientific advances in the DPRK and many other countries.

The numerous e-reading rooms give easy access to an abundance of knowledge. The exhibits can be controlled, felt or operated at different indoor halls, namely basic sci-tech hall, applied sci-tech hall, earthquake experience room and virtual science lab, which are equipped with touch-screen computers, projectors and other gadgets. The sci-tech diffusion room has been designed to adjoin the reading rooms to meet the convenience of

visitors in learning sci-tech theories and methods.

Outside the complex is a sci-tech exhibition including the areas for energy of the future and scientific games, as well as a studying site.

As a multi-functional IT hub, the complex provides real-time services to research institutes, learning institutions, industrial establishments and homes across the country via the national computer network.

Ideal as an energy-saving, green building, the complex has lighting, heating and cooling systems powered by solar, geothermal and other natural energy.

A hotel has been built nearby to accommodate the visitors to the complex: it blends well with its surroundings.

A benchmark for the Juche-oriented architecture, the complex showcases the Party's idea of attaching importance to science and technology and talents and the might of socialist Korea. It is a source of great pride for the Korean service personnel and people.

Article: Kim Son Gyong
Photo: By courtesy of the KCNA







Scientists and Lecturers Move into New Houses

Scientists and university lecturers have moved into new flats on the magnificent Mirae Scientists Street, another emblem of the strength and spirit of the DPRK that is making leaps forward to create the highest quality of civilization at the

Merry laughter resounds in sunny apartment blocks, schools,

kindergartens, nurseries, public amenities and sports parks.

The new residents are raising cheers for the Workers' Party and socialism with a firm determination to prove themselves worthy of the Party's expectations by training more talented people and producing better research findings.

Photo: Jin Yong Ho



We Are More Than Happy

Hardly could I sleep out of an enough. immense gratitude for our motherly Party on the day when my family moved into this new flat. My flat on Munsu Street was quite good, but now I have been allocated a new, palatial flat on Mirae Scientists

Indeed, all educationists and scientists are enjoying happiness in the embrace of the motherly Party and socialist country.







Lecturers receive congratulations from their students

I Must Be Dreaming Now

My new flat has five rooms including the study and couple's rooms, all furnished with quality furniture and household necessities. The kitchen has also been designed so well that my wife loves it. I am a young lecturer in my twenties and yet has been provided with this fine flat gratis together with the old professors and doctors. Marshal Kim Jong Un has put forward educationists as genuine patriots and revolutionaries, showing close

concern for their living conditions. As a young intellectual, I will discharge my duty in carrying through the Party's idea of attaching importance to science and technology and its plan of building a civilized socialist nation, so as to repay this great affection and trust

Kim Yong Ho, lecturer of Automation Faculty of Kim Chaek University of Technology













Schools, kindergartens and commercial and other public service facilities on Mirae Scientists Street

Women football players won the trophy at the 2015 EAFF Women's East Asian Cup

Sportspeople Bring Home Glory





Winner of the women's 10 m platform event at the 16th FINA World Championships

T ast year sportspersons of the Democratic People's Republic of Korea A fine start of the year was made by Kim Hye Gyong in January last year, Lowon more than 200 medals, including 80-odd gold medals, as of October and exalted the honour of the country in international games and adorned the 70th anniversaries of the country's liberation and the founding of

the Workers' Party of Korea. The Korean athletes gave fullest play to their high sense of patriotism and collectivism, Juche-oriented playing tactics and stubborn fighting spirit in the

who won in the 15th Asian Marathon Championships and the 2015 Hong Kong

Women football players lifted the trophy at the 2015 EAFF Women's East Asian Cup, and 16-year-old Kim Kuk Hyang claimed the women's 10m platform title at the 16th FINA World Championships.

Taekwon-Doists topped the country rankings at the 19th Taekwon-Do World Championships with 16 gold medals, four silvers and five bronzes,

adding brilliance to the dignity and honour of the birthplace of Taekwon-Do and demonstrating the wisdom and invincible spirit of the nation.

Ri Se Gwang won the men's vault title at the 46th World Artistic Gymnastics Championships by displaying excellent techniques in performing difficult

Many other athletes stood on the winners' podiums at the World Junior and Senior Women's Boxing Championships, World Youth Weightlifting Championships, the IFG World Challenge Cup and other international games.

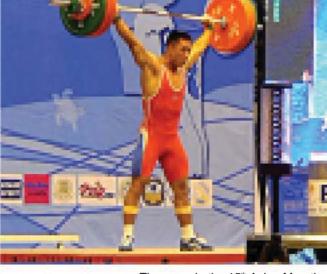
The DPRK sportspersons, seeing out the year of great pride, are feeling more keenly that their supreme leader's ideology and leadership are a science and leads to victory, and they are a sure guarantee for building theirs into a sports power. And, seeing in a new year of promise, they are making a firm resolve to greet the coming Seventh Congress of the WPK with gold medals.

> Article: Kim Mi Ye Photo: By courtesy of the KCNA

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sporting venues, thus producing brilliant results.







They won in the 15th Asian Marathon Championships and other international games

Catfish Teem in Ponds

—Pyongyang Catfish Farm—

The working people of the country are in high spirits to L celebrate the Seventh Congress of the Workers' Party of Korea with brilliant labour achievements, boosting production everywhere they are working.

Entering the new year, the management and employees of

Last year it brought about a remarkable turn not only in making fish farming scientific, intensive and industrialized but in raising fish.

All the production processes, ranging from raising to feed production and management, have been put on a modern, are fully determined to further increase production in the new

They have established an intelligent, informatized and digitized integrated production system for real-time measuring and controlling of water temperature, pH and amount of oxygen in the fish ponds and regulation of water supply and amount of feed in accordance with the growth of catfish.

To raise fish all the year round, they have introduced solar water heaters and covered outdoor ponds with PVC sheets, thus widely using renewable energy.

They also direct efforts to conducting research and mass technical innovation movement to increase production with reduced feed consumption and production cost.

Thanks to their painstaking efforts to enrich the people's diet, the factory sees a steady increase in production.

> Article: Kim Thae Hyon Photo: Ri Kwang Song







Indoor fish pond



An integrated production system has been established at the farm to regulate the water supply and amount of feed for an increased production





Liquid fermentation process at the fermented feed processing shop

Spawning ground

Freezer

A Comprehensive Pharmaceutical Base



Production of solution through an automated flow line



Jongsong General Pharmaceutical Factory has a history of some 20 years.

The factory combines production and development of the pharmaceutical drugs that are much favoured by people for their high efficacy. It has now undergone remarkable changes in not only its production but also appearance, thanks

to the passionate enthusiasm of its officials and employees to increase production.

It originally developed and manufactured the Urokinase injections and has now increased its product indices—various kinds of pills, injections, solution, capsules and Koryo medicines.

Last year alone it achieved a tenfold increase of

production capacity of solution.

It put all the production processes of solution, ranging from making of plastic bags to solution filling, bonding, loading, sterilizing and packing, on an automated basis.

It is now making innovations in pharmaceutical production in order to celebrate the coming Seventh





Inspection of medical products



Production of pills, injections and capsules

Congress of the Workers' Party of Korea with unprecedented feats of labour.

It is directing great efforts to laboratory work for developing medicines urgently needed in promoting people's health, based on the successes gained in developing Urokinase and other injections.

Jong Thae Gyong, head of research section, and other researchers have registered considerable

success in the development of highly efficacious medicines with natural materials abundant in the country.

They are also making strenuous efforts to ensure the domestic production of raw materials for medicines.

The production environment of the factory is dust- and germ-free, and inspection of the medical

products is conducted by means of state-of-the-art analyzing facilities. Therefore, its production lines and products all satisfy the WHO's GMP.

The factory officials and employees are making continuous efforts to produce medicines in larger amounts

Article & photo: Hong Kwang Nam





A Rainbow over the Taedong

Mujigae (rainbow in Korean), a full-service ship that commenced operations on the Taedong River running through Pyongyang, the capital of the DPRK, in October Juche 104 (2015) on the occasion of the 70th founding anniversary of the Workers' Party of Korea. It was built under the auspices and meticulous guidance of the supreme leader Kim Jong Un, who spares nothing for the people's well-being.

It accommodates over 1 230 people, has a displacement of 3 500 tons and is 120 m long and 25 m wide. The four-storey ship with a total floor space of 11 390 m² houses shop, snack bar, restaurant for Korean dishes, dining rooms, banquet hall, belt buffet, restaurant on the deck and revolving restaurant. They serve traditional dishes of Korea and other famous foreign dishes.

The interior of the ship that is remindful of a hotel has been

laid out in various forms—illuminations of soft light blend well with window curtains and carpets of different patterns and the customers feel cosy and warm as if they are at home.

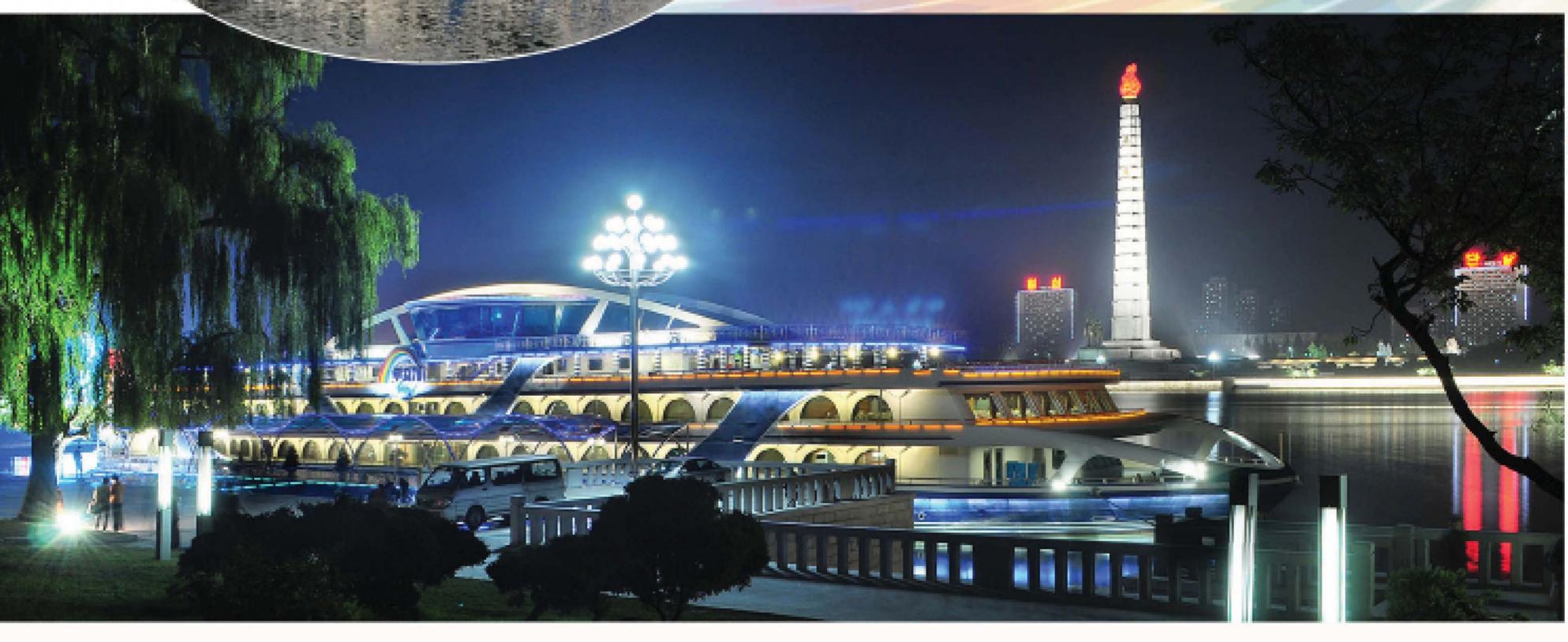
They are more pleased there to enjoy hundreds of dishes and good service.

The snack bar is provided with acoustic facilities as well as a stage, so that the customers entertain themselves.

At the restaurant on the deck and the revolving restaurant on the third and fourth floors respectively, they drink famous Taedonggang beer and enjoy a fine view of ever-changing Pyongyang.

Mujigae, like a beautiful rainbow arcing over the Taedong, is a great charm to everybody.

Article: Mun Jin Yu
Photo: Jin Ju Dong





Swimming pool, bedroom, shop and other service facilities

Children's Picture Books and Their Compilers





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Children's picture books, such as *I Want to Know Everything* and *Stories for a Week*, are widely read by children in the Democratic People's Republic of Korea. As they contain interesting stories, riddles and intellectual games with illustration, the children read them with joy and laugh.

Those picture books are compiled by Jang Un Sop and Jang Tae Gil, father and son.

Several decades ago Jang Un Sop was appointed head of the editorial department of picture books at the Kumsong Youth Publishing House.

He graduated from Pyongyang University of Fine Arts, entertaining the hope of being a famous painter. Though, he found his life worth living in creating books for educating the children.

He keeps it as his criterion for producing children's picture books not to neglect any of the pictures in them—a manifestation of his love for young readers.

His criterion was handed down to his son Tae Gil who nurtured his dream of filling the bookcases in every house across the country with picture books for children. universit

His first picture book, *A Rabbit and an Elephant*, produced in his twenties, indicated that he had a marked individuality as a caricaturist, humorous and satirical. His later works showed his advance in artistic discernment.

The Jangs pooled their thoughts and efforts to compile picture books in keeping with the developing reality by combining original style of picture-and-text with questions and sufficient humour in order to improve the power of observation and intellectual faculties of the children.

They compiled the *Illustrated Books of Stories Told by Peerlessly Great Persons of Mt Paektu* in 60 volumes that are greatly conducive to education and edification of the children. The collection of books includes *A Butterfly and a Cock* told by President Kim Il Sung, *A Boy Defeats Robbers* by General Kim Jong Il, and *Awangnyo Who Found a Fire* by Kim Jong Suk, anti-Japanese

heroine

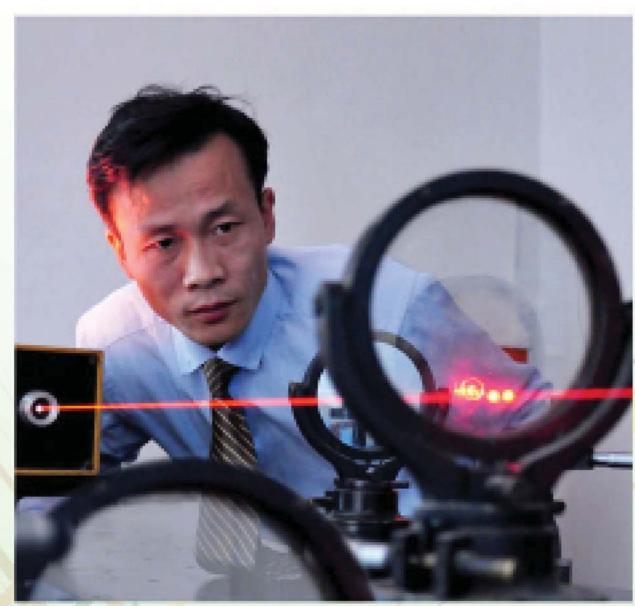
The son recently produced a lot of picture books aiming at improvement of intellectual faculties and emotional sensibilities in keeping with the worldwide trends in the field. Such works of his as For Improving Children's Intelligence (20 parts), I Want to Know Everything (five parts), Illustrated Books of World Fairy Tales (60 volumes), I Can Do It Myself (32 volumes), Do You Know? (ten volumes) and Stories for a Week (ten parts), are also read widely by adults.

Now Jang Un Sop is in his seventies and still works at Kyoyuk Sinmun. And Tae Gil in his forties has two sons and works at the Educational Books Publishing House. They are close companions and dedicating themselves to producing more picture books that are favoured by children.

Article: Kang Su Jong Photo: Ri Myong Guk



Young Affiliate of TWAS



Kim Kwang Hyon

About twenty years ago a boy living in a remote mountainous village in Manpho, Jagang Province, had a dream of becoming a scientist, writing his own name next to Ri Sung Gi and Kye Ung Sang, the country's famous scientists.

He was Kim Kwang Hyon, now a PhD in physics and researcher at the Laser Institute of the State Academy of Sciences of the DPRK, who has been honoured with TWAS Young Affiliate of the World Academy of Sciences and is a full member of the Abdus Salam International Centre for Theoretical Physics.

When others congratulate him on his success as a scientist, Kim says, "As the song, *Paean to Motherland*, goes, my socialist motherland realizes everybody's dream."

Kim enjoyed all the benefits of socialist free education system under which everybody learns to his heart's content and can develop their aptitudes and talents to the full. He studied at the then Kanggye Middle School No. 1 and the University of Sciences, and began to work at the Laser Institute of the State Academy of Sciences.

Feeling grateful to the country and harbouring an ambition of repaying it with brilliant achievements, he set out on the road of scientific research.

He voluntarily took study subjects in physics, such as theory on nonlinear optical effects with metal nanomaterials, one of frontiers in the field. He devoured a lot of reference documents



Kim in the days of the then Kanggye Middle School No. 1 in Jagang Province

and conducted ceaseless analysis of them to produce amazing results.

In the course of this, he provided the theoretical basis for significantly developing technologies in physics and the national economy, while drawing the attention of the international laser and optics circles.

He presented many essays to prestigious international scientific journals in the fields of laser and optics, and obtained doctorate at the Humboldt University of Berlin, Germany.

The World Academy of Sciences, an international body that selects young affiliates with prominent scientific results every year, sent a message to Kim in July last year.

"Through a careful search, nomination and selection procedure, I am very pleased to inform you that you have been selected as TWAS Young Affiliate for the period 2015-2019 from the East & Southeast Asia and Pacific Region (ROESEAP)."

Kim was also honoured with a full membership of the world's top international institute in the field of theoretical physics last year.

The man hailing from a mountainous village has realized his boyhood dream in his thirties and is now making continued efforts to contribute to the country's prosperity with his scientific achievements.



A snap at the Yonphung Scientists Holiday Camp

Article & photo: Kim Thae Hyon





He is keen on training talents and conducting scientific study



Some of his essays carried by international scientific journals





At an international scientific forum



Renovated Changgwang Kindergarten

Thanks to the warm love of the Workers' Party of Korea and the government of the DPRK for the rising generation, many good establishments for children and students, like Pyongyang Orphanage and Baby Home, Wonsan Orphanage and Baby Home and Songdowon International Children's Camp, were built across the country.

Last year Changgwang Kindergarten in Central District of Pyongyang underwent a facelift.

This kindergarten that was built in Changgwang Street 30 years ago is a weekly childcare centre for the working mothers such as journalists, artistes, scientists and teachers.

Over the past decades the kindergarten has brought up many children,

enjoying the benefits from the state that provides all conditions for education and health promotion of the children and under the warm love and care of teachers and doctors, including those responsible for extracurricular activities.

Now it has been renovated as befits the cradle of children thanks to the love of the WPK for the rising generation and the future.

It has a fence depicting butterflies, sunflowers and rainbow, a yard with many facilities for amusement games, and many buildings overlaid with decorative tiles. The whole kindergarten presents modern and juvenile feelings.

More conspicuous is the inner part of the kindergarten which is intended for the education and edification of children.

The walls in the corridor bear paintings related with their daily life,

morality education, Korean language and numbers, famous cartoons and musical notations.

In line with the requirements of the IT era ample conditions for pre-school education have been provided for the kindergarten under the universal 12-year compulsory education system.

There is a new building furnished with rooms for electronic amusement games, a wading pool and the rooms where children can learn how to sing, dance and play musical instruments

dance and play musical instruments.

The Changgwang Kindergarten is the cradle of the children who grow up happily and healthily.

Article: Kim Kuk Hyang Photo: Kim Yun Hyok







New Discoveries Dating Back to Lower Palaeolithic



Stone tools from layer No. 1

The new discoveries made by a team of archaeologists from the History Faculty of Kim Il Sung University and the Archaeology Institute of the Academy of Social Sciences is attracting the attention of the archaeological circle.

The relics that date back to the Lower Palaeolithic were unearthed in a cave located in the mid-slope of a 40-m-high hill in Tongam-dong, Sunchon, South Phyongan Province.

Tongam-dong relics have two cultural layers. Dating by various scientific methods says the layer No. 1 dates back about 880 000 years and the layer No. 2 approximately 720 000 years.

Unearthed there were 14 stone tools, eight bone implements, over 5 000 pieces of animal bone fossils and some 1 000 pieces of spore and pollen fossils

Hand axes discovered in both cultural layers are estimated to be the oldest ever in Asia. The fact proves that the hand-ax culture existed in East Asian region, including Korea.

Fossil of teeth of *Trogontherium cuvier* discovered in the first cultural layer of the relics is the first of its kind in Korea.

Those bone implements found in the second cultural layer are rare to be seen worldwide in the relics dating back to the Lower Palaeolithic, so they are very important in explaining the courses of production activities in those days.

The fossils of animal bones, spores and pollens show that there existed dense forests in the area



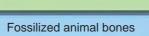
Stone tools and bone implements from layer No. 2

around the relics and the natural environment was hot and moisture-laden for either tropical or subtropical zones covered with grassland and forests.

discovered, all has been scient Korean nation by river basin since

As the Tongam-dong relics were newly

discovered, along with Komunmoru relics, it has been scientifically proved again that the Korean nation had lived in the regions of the Taedong river basin since the Lower Palaeolithic and Korea is one of the cradles of human civilization. The



relics are also valuable materials conducive to the study of the culture in the Palaeolithic period in Korea and other Asian regions.

Article & photo: Kim Son Gyong



Natural Graphite Brush Wins ISO Standards

The Democratic People's Republic of Korea, which places great weight on science and treasures its scientists and technologists, is now being rewarded with profitable achievements of scientific research.

Among them is the natural graphite brush developed by the Natural Graphite Development Centre of the DPRK that obtained an international standard, as it is far superior to metal or artificial graphite brushes in density, electric conductibility, strength and other physicochemical and mechanical qualities.

The DPRK is rich in graphite resources. Jo Il Suk, PhD and chief of the research institute, and other scientists and technologists set themselves a goal to develop the processing technology of graphite, in order to make a graphite brush, a sought-after device for rotating electric machines, and made three-decade-long strenuous efforts.

In the course of this, they overcame all sorts of difficulties to develop the material which is used to make the natural graphite brush and won international standard for it several years ago.

Based on this scientific achievement they solved all the arising problems by their own efforts and thus laid scientific and technical foundations for mass-production of natural graphite brush.

Domestic and foreign experiences show that they are free from sparkling and active for more than 10 years, much more advantageous and environment-friendly than metal brush and artificial graphite brush.

The deliberations took place at the International Electrotechnical Commission between late July and September last year through the fierce competitions of cutting-edge technological development among many countries and amid interest and expectations of many scientists and technicians across the world. The Korean-made natural graphite brushes were appreciated as the best product and won IEC/TR63021.

Demand for them is growing.

Article & photo: Jin Yong Ho

Natural graphite brush developed by scientists and technicians of the Natural Graphite Development Centre of the DPRK





North-South Workers Meet for Football Match

There was a football meet in October last year between workers of the north and south of Korea for national reconciliation, unity, peace and reunification at May Day Stadium in Rungna Islet, Pyongyang.

The matches were seen by Kim Yong Dae, vice-president of the Presidium of the DPRK Supreme People's Assembly, chairman of the Central Committee of the Korean Social Democratic Party and also chairman of the National Reconciliation Council, senior officials from working people's organizations and reunification-oriented organizations and working people. The audience also included a south Korean delegation of workers' football for reunification,

visiting overseas Koreans and foreigners.

Amid the playing of the song *Glad to See You* and enthusiastic cheers of the audience, football players of the north and south Korean teams entered the stadium, flying the flag bearing the map of Korea, followed by a congratulatory address and speeches.

The speakers said that the football matches would mark a significant occasion in the efforts of the workers to achieve peaceful reunification as indicated by the June 15 North-South Joint Declaration and October 4 Declaration. They also stressed that the shouts for reunification resounding







A football meet between workers of the north and south of Korea

in Pyongyang should reverberate from Mt Paektu to Mt Halla and propel the drive for national reunification under the banner of By Our Nation Itself so as to hand down a reunified country to the younger generation.

Then, matches were played between the tobacco complex team of the General Federation of Trade Unions of Korea (GFTUK) and the combined team of the Federation of Korean Trade Unions (Hangukrochong) and between the capital construction team of the GFTUK and the combined team of the Korean Confederation of Democratic Trade Unions (Minjurochong).

The players put on a good show of their skills in reflection of the reunification zeal of all the fellow countrymen, and enthusiastic cheers of the audience added to the atmosphere of reconciliation and unity prevailing in the stadium.

After the matches all the players, flying the flag bearing the map of Korea and hand in hand, ran round the pitch.

The football meet that promoted the national reconciliation and unity and added to the enthusiasm for national reunification instilled a great hope in the Korean people in their effort to open up a broad avenue to independent reunification and marked a significant occasion in restoring the severed national bonds and bloodline and contributing to the improvement of inter-Korean relations.

During their stay the members of the south Korean delegation visited the Pyongyang Kim Jong Suk Silk Mill, International Friendship Exhibition House, Okryu Children's Hospital, Mirim Riding Club and other places and saw the performance given by the workers' art troupe of the GFTUK. Its leading members visited the office building of the Central Committee of the GFTUK.

Article: Choe Kwang Ho Photo: By courtesy of the KCNA



The south Korean delegation of workers' football for reunification visits the Okryu Children's Hospital



Reunion of Separated Families and Relatives

Separated families and relatives from the north and south of Korea had emotional reunion at Mt Kumgang resort last October thanks to the initiative and fraternal feelings towards the fellow countrymen of the DPRK.

The venue of the reunion was overwhelmed by the delight of the people who met families and relatives that had been separated for scores of years by foreign forces and their ardent desire to reunify the country.

They shared the affection of flesh and blood, conveying the greetings from their own beloved,

taking photographs and dining together.

Those from the north told their relatives about their devotion to the country's prosperity and happy and worthwhile life in the embrace of the socialist motherland.

Being reluctant to part from each other and feeling keenly that the Korean nation cannot live separated any more, they determined to terminate the national division forced by outside forces and bring earlier the day of reunification.

Article: Pak Ye Jin Photo: By courtesy of the KCNA



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