Photo by Theerasak Saksritawee

South China Sea award unacceptable: ROC government says

The award rendered by the tribunal at the Permanent Court of Arbitration in the South China Sea arbitration, which includes Taiping Island in the Nansha (Spratly) Islands, initiated by the Philippines is completely unacceptable to the Republic of China (Taiwan) and is not legally binding on the nation, according to Minister of Foreign Affairs David Tawei Lee July 12.

"There are two main reasons for this," Lee said during a news conference at the headquarters of the Ministry of Foreign Affairs in Taipei. "First, the ROC is referred to as 'Taiwan Authority of [mainland] China,' an inappropriate designation that is demeaning to the status of the ROC as a sovereign state.

"Second, Taiping Island was not originally included in the Philippines' submissions for arbitration. But the tribunal took it upon itself to expand its authority, declaring ROC-governed Taiping Island, and other features in the Nansha Islands occupied by Vietnam, the Philippines and Malaysia, all to be 'rocks' that do not generate an exclusive economic zone."

According to Lee, the arbitral tribunal did not formally invite the ROC to participate in its proceedings, nor did it solicit the ROC's views. "Therefore, the award has no legally binding force on the ROC," he said.

The minister also described the decision as severely jeopardizing the legal status of the South China Sea islands, over which the ROC exercises sovereignty, and their relevant maritime rights. "It is beyond dispute that the ROC is entitled to all rights in accordance with international law and the UN Convention on the Law of the Sea over the South China Sea islands and their relevant waters," he added.

Source: Taiwan Today

Regarding disputes in the South China Sea, Lee called for their peaceful resolution through multilateral negotiations in the spirit of setting aside differences and promoting joint development. "The ROC is willing, through negotiations conducted on the basis of equality, to work with all states concerned to advance peace and stability in the South China Sea."

Taiping Island, with an area of 0.51 square kilometers, is the largest naturally formed island in the Nansha Islands. It can sustain

President Tsai Ing-wen vowed on July 13 to protect Taiwan's interests in the South China Sea a day after an international tribunal delivered a ruling seen as having an adverse impact on Taiwan's claims in the region.

"Just yesterday, new changes took place in the South China Sea, and now is the time for us to demonstrate our resolve to safeguard the country's interests," Tsai said aboard the Di Hua Zuoying naval base in Kaohsiung before it set off on a routine patrol mission in waters near the Spratly Islands. Tsai was referring to the ruling handed down by the Permanent Court of Arbitration in The Hague on a case brought by the Philippines against China that focused in part on whether islands claimed by China were entitled to 200-nautical-mile exclusive economic zones. The court ruled that none of the land formations in the Spratly Islands, including Taiwan-controlled Taiping Island (Itu Aba), were islands under international law and were therefore not entitled to exclusive economic zones.

Tsai was intent on rallying the troops following the verdict, which the Presidential Office said would not be accepted by the Republic of China (Taiwan) and was not legally binding on the government. Tsai criticized the ruling, particularly its interpretation of Taiping Island, saying it "has seriously jeopardized our country's sovereignty over islands in the South China Sea and their surrounding waters," she said. "This ship represents the ROC and the uniform that you are wearing represents the responsibility that you assumed from the people. This patrol mission demonstrates our determination to protect our country's interests."

Source: Focus Taiwan

human habitation and an economic life of its own, and meets the criteria of an island as defined in Article 121 of UNCLOS. Therefore, the ROC enjoys full rights associated with territorial waters, a contiguous zone, an exclusive economic zone, and a continental shelf in accordance with UNCLOS. The ROC recovered Taiping Island in December 1946 following World War II, and has stationed government personnel there for nearly 60 years since June 1956.

Winners of 2016 Tang Prize unveiled in Taipei

Winners of the 2016 Tang Prize in four categories were announced June 18-21, with each category receiving a cash prize of US$1.24 million and research grant of US$311,000 to be presented in September.

Canadian jurist Louise Arbour won in the rule of law category, joining academic American William Theodore de Bary of Columbia University for Sinology, French microbiologist Emmanuelle Charpentier, American geneticist Jennifer A. Doudna and Chinese-American biologist Feng Zhang for biopharmaceutical science and American physicist Arthur H. Rosenfeld for sustainable development.

Arbour was recognized June 21 for enduring contributions to international criminal justice and the protection of human rights, to promoting peace, justice and security at home and abroad,

and to working within the law to expand the frontiers of freedom for all. She is a former UN high commissioner for human rights and a former chief prosecutor for the UN International Criminal Tribunal for the former Yugoslavia and for Rwanda.

De Bary was honored June 20 for his monumental scholarship and leadership in the field of Confucianism, as well as an unflagging dedication to renewing and realizing a great civilized conversation to iron out differences and foster mutual understanding between East and West; Charpentier, Doudna and Zhang June 19 for the development of CRISPR/Cas 9 as a breakthrough genome editing platform promising to revolutionize biomedical research and disease treatment; and Rosenfeld June 18 for sustained and pioneering innovations of energy efficiency resulting in significant reductions in energy consumption and greenhouse gas emissions worldwide. In addition to the presentation ceremony involving the cash prizes, certificates and medals Sept. 25 at Dr. Sun Yat-sen Memorial Hall in Taipei, "Glory of Tang Prize: Laureate and Diploma Exhibition" will take place Sept. 2 to Nov. 6 in Taipei and Kaohsiung cities, according to presenter Lee Yuan-tseh, chairman of the 2016 Tang Prize Selection Committee and Taiwan's winner of the 1986 Nobel Prize in chemistry.

Established by Taiwan entrepreneur Samuel Yin in December 2012, the biennial prize takes its name from the Tang dynasty (618-907), a period considered the peak of ancient Chinese civilization. It was also one characterized by international exchanges and robust cultural activities. The open-mindedness exhibited by the Tang people in embracing different cultures epitomizes the core values of the prize.

Further information on the winners and the Tang Prize is available at the Tang Prize website.

Text: Taiwan Today, Photo: Tang Prize Foundation

Taiwan convenience store density tops world

The density of convenience stores in Taiwan hit the highest level in the world ahead of Japan, while sales in the local convenience store sector are expected to continue to grow to top NT$300 billion (US$9.32 billion) in 2016, according to the Ministry of Economic Affairs (MOEA).

The data released by the MOEA recently said that as of the end of May, Taiwan's major convenience store chains owned a total of 10,199 outlets, which translated into a density of one convenience store for every 2,304 local residents.

The four major convenience store chains in Taiwan are 7-Eleven, FamilyMart, OK Mart, and Hi-Life. They open 24-7 all year round. In comparison, Japan had a total of 54,839 convenience stores with a density of one convenience store for every 2,317 Japa-

nese residents as of the end of March, the MOEA data showed.

With access to convenience stores becoming easier in Taiwan, the MOEA said, sales at local convenience marts are expected to surpass the NT$300 billion mark, up from NT$295 billion recorded in 2015. The expected 2016 figure will mark a record high in the history of local convenience store industry, the MOEA said. In the first five months of this year, revenue generated by the local convenience store industry rose 5.2 percent from a year earlier to NT$125.9 billion thanks to lunar new year's gifting spree and a wide range of services available to customers, such as booking tickets. The ministry pointed out that the pace of expansion by local convenience store chains has slowed over the past few years, adding that they have shifted their attention to emerging businesses, such as mobile shopping and e-commerce, to post more sales. Convenience stores have become an important part of Taiwanese people's daily lives, according to the MOEA. People rely on convenience stores for errands and necessity, such as paying utility bills, using ATM machines, making photocopies, mailing packages and buying lunches and snacks.

Source: Focus Taiwan, Taipei Representative Office in Hungary

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Charcoal: More than meets the eye

by Chen Chun-fang
Taiwan Panorama
Photos: Chuang Kung-ju

In the past, trees and bamboo were used for fuel and as materials to build houses and make furniture. Today people are transforming wood and bamboo into charcoal for innovative uses. Pitch-black charcoal was originally used only for heating and cooking, but thanks to new research, charcoal has begun to be used in a wide range of products.

Hailing from Hsinchu's Hukou Township, Jacky Chen, the second-generation CEO of a charcoal factory that manufactures Dawoko Wood Vinegar, saw from a young age how much his parents would sweat as they made charcoal. But the unburnt logs became his toys, and the hot and steamy charcoal factory served as his playground. These experiences left him with a particularly strong affection for wood.

In 2003 the Industrial Technology Research Institute made its wood vinegar extraction process available for transfer to private industry, and Chen's father and some friends invested NT$10 million in equipment. After several attempts, they succeeded in distilling wood vinegar and contracted with a factory to make a body wash and a shampoo. Despite the natural-extract angle in advertising, the pungent smell put off consumers, and his father nearly declared his investment a failure.

Precious gift from nature

One day, Chen, who was then a junior at a college in southern Taiwan, happened to be spending his nights at the charcoal factory that his father owned with partners. The stuffy humid air of the factory aggravated his eczema. Having once heard his father say that wood vinegar was an antibacterial and disinfectant, he sprayed some of the factory's distilled wood vinegar on his arm. "Much to my surprise, it stopped being itchy. I went on to try it on half of my face, and the result was that the itchiness and swelling receded on that side, whereas the other half remained as swollen as a pig's head," laughs Chen. He then delve into Japanese research on wood vinegar, discovering that it was effective as a cleanser, a disinfectant, a sterilizer and a deodorant. "Wood vinegar is extracted from the smoke produced during charcoal production," explains Chen. "Unlike petrochemical products, this completely natural substance poses no threat to the environment. We ought to put this gift from Mother Nature to good use."

And so, based on the results from numerous experiments, Chen and his friends developed a series of products with different ratios of wood vinegar as an active ingredient, including skincare products and environmental cleansers. By insisting on only natural ingredients, they were able to make the most of wood vinegar's natural antibacterial and cleansing properties. It used to be that the smoke emitted during charcoal manufacture was regarded as a contributor to air pollution, but research has determined that the wood vinegar extracted from that smoke is a natural substance of considerable vitality. Many inventive uses for it have been discovered in Taiwan, and the hope is that more people will produce and use this environmentally sustainable product.

Black jewels of the natural world

Bamboo charcoal is another jewel of nature. When subjected to high temperatures, the water in bamboo cells evaporates, leaving behind cell walls full of small holes. "The pores in a single gram of bamboo charcoal average about 300 square meters in specific surface area, which is the size of a tennis court, notes Chen Hsi-chou, executive director of the Eco-Carbon Development Association of Taiwan. "This gives bamboo charcoal sponge-like adsorption qualities."

Early on, bamboo charcoal was used in its whole unadulterated form, put in water and stores of rice to absorb impurities, or

ground up and placed in deodorant pouches. Thanks to scientific research and technological advance, ceramic grinding technology has been employed to turn bamboo charcoal into nanoparticles used in yarns for clothing and bedding that emit far-infrared radiation.

Bringing greater convenience

Apart from its use in clothing and other household goods, "activated" bamboo charcoal, which has been subjected to high temperatures, can be eaten and used as a natural food coloring—completely overturning people's image of charcoal. "We were the first to try adding some bamboo charcoal powder to flour to make noodles and dumplings," recalls David Chen, the manager of Bamboo Paradise Resort. "We found that they retained moisture very well and didn't get too sticky after cooling. The first time they were shown at a food exhibition at the Taipei World Trade Center, everyone was pleasantly surprised." The charcoal adsorption paper for which a patent was granted in 2015 has likewise surprised people. Laboratory results show

that its chemical particle adsorption capacity is as high as 92 percent. Currently, bamboo charcoal adsorption paper is being used in protective packaging for exports of Taiwan's fruit and flowers so as to extend freshness. It is also being used in wallpapers, leveraging its powers of adsorption to reduce harmful substances in the environment.

Making use of the conductive qualities of bamboo charcoal, Taiwan has also developed supercapacitors for electric vehicles with activated carbon from bamboo charcoal. By cutting charging times without any reduction in range, these supercapacitors have brought greater convenience to the disabled and elderly users of mobility scooters.

ITRI showcases technologies for next-gen smartphone systems

The Industrial Technology Research Institute (ITRI) showcased a series of new technologies it has developed for next-generation smartphone systems at a forum held in Hsinchu on July 15.

Text: Focus Taiwan, ITRI

One of the technologies presented at the forum was "dynamic interest analysis" of smartphone users. It makes use of smartphone software text extraction technology combined with user profiles and interest analysis to help ICT companies get a firmer grasp of user and smartphone interactions. Another technology featured was virtual smartphone technology, which provides cloud solutions for smartphones that enable changes in operating modes depending on location.

When users enter a private workspace, for example, the internet and camera functions can be turned off by switching to a business mode.

Other technologies presented were a privacy preserving IM app and a targeted search advertisement network. The privacy app is an encryption technology that evades message decipherment of the server, the ITRI said, and users do not need to change their original friend list or their interface operation settings to protect their privacy.

The targeted search advertisement network assists users in receiving precise purchasing information by analyzing internet browsing behavior.

ITRI hopes that these technologies will help boost the competitiveness of Taiwan's smartphone brands.

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