

NEWS LETTER

LIXIL Corporation

To the press

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Environmental education program in collaboration with international NPOs

LIXIL helps children, who are responsible for the future of Vietnam, learn about the importance of water.



LIXIL Corporation (Headquarters: Chiyoda-ku, Tokyo; President and CEO: Yoshiaki Fujimori), a global leader in the housing products and building materials industry, and its subsidiaries, LIXIL INAX VIETNAM Corporation ("LIXIL VIETNAM") and LIXIL INAX DANANG Manufacturing Co., Ltd. ("Danang INAX") provide environmental education to children in the Socialist Republic of Vietnam ("Vietnam") in collaboration with the following two international NPOs: Bridge Asia Japan ("BAJ") and Seed to Table ("STT").

LIXIL has five plants in Vietnam and has developed alongside the expansion of the Vietnamese economy. LIXIL now holds the largest share of the sanitary ware market in Vietnam. Hoping to be of some help to people in Vietnam, LIXIL, as a local community oriented company, started its involvement with environmental education activities in 2007. BAJ and STT help local people to learn and think about their own life and environment, and take action accordingly. LIXIL not only supports their activities financially but also prepares original textbooks and provides classes to local communities.

This was the 14th environmental education program in Vietnam and staff from BAJ and STT as well as five local and 2 Japanese staff entered classes of about 220 children and interacted with them in Thua Thien Hue Province in the middle region and Hoa Binh Province in the northern region.

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February 20: Environmental class at Thuy Xuan Primary School—in cooperation with BAJ

Thuy Xuan Primary School is located in the outskirts of Hue City in Thua Thien Hue Province. BAJ, to which LIXIL provides support, has been providing environmental education at this primary school since November 2013. Children learn about the scarcity of water on Earth, circulation of water, the impact of water contamination on health, and other water-related issues, using LIXIL's original textbook *Let us Think about and study Water*. On February 20, a total of 105 students from three classes in the third grade participated in the environmental class.

At first, the LIXIL staff members introduced themselves to students. Since it was the first time for them to meet them, the self-introduction about their name, family members, hobby, job and the area where they live helped make the students feel

closer to them.

During the class, students made filters using a plastic bottle, which is designed to show, in a simplified way, the mechanism of filtration of rainwater or other liquids through soil in the process of permeation. Son from LIXIL VIETNAM, who has participated in this educational program from the beginning, explained the experiment.



Chau introduces his job



Children making filters



Interaction through group work

Dung and Chau from Danag INAX, for whom this was their first experience, assisted the children with their experiment. They filtered domestic wastewater with which children are familiar, such as rice water, ash-mixed water and broth from boiled food, and compared colors and smells. They also measured the level of pollution using "Pack Test kits" Because experiments are seldom conducted in general classes at their school, students showed great interest and carefully observed how polluted water is purified through a filter device to deepen their understanding.

Students who participated in the class made positive comments, including "Let's do this experiment again," and asked the staff "When will you come again?" This indicates that our efforts have helped pique their interest in the environment.

■ February 21: Environmental class at Lam Mong Quang Junior High School—in cooperation with BAJ



Introduction of daily environmental



The children showed great interest in water



The principal (center) watches on as the children undertake an experiment

Vinh My village in Phu Loc District is located in the white sand area and people in the commune use low quality water from wells for domestic purposes. There is an environmental club at Lam Mong Quang Junior High School. Principal Nhon encourages students to think on their own and learn with their own hands. He agreed with BAJ on its environmental activities and the environmental club and BAJ have been cooperatively engaged in environmental activities. The club addresses issues related to water for domestic use through fieldwork for about two hours, once every fortnight. On February 21, BAJ staff members and students of the first year of the junior high school (corresponding to sixth graders of an elementary school in Japan) who belong to the environmental club participated in club activities together.

On this day, a presentation on environmental activities implemented by LIXIL was also made. The topic of greenery curtains received a good response and the school is considering adopting the idea. Following LIXIL's presentation, students reported results from a water quality survey in Vinh My and another on reuse of housing construction materials. In response to the report on the water quality survey, LIXIL staff proposed

to discuss the results and survey how water is used in neighboring areas. Students will present results from water quality surveys in neighboring areas the next time LIXIL staff visit the school.

In the afternoon, LIXIL staff gave a lecture using LIXIL's original textbook *Let us Think about and study Water.* Students learned about water pollution and the impact of polluted water on people's health, and how to keep the water clean. The staff member also talked about environmental pollution in Japan. Following her lecture, students filtered discharged water that students had brought to the class and the remaining broth of bún bò Huế. In this experiment, students learned that, after being filtered through soil, the transparency of the discharged water increased. They also measured the level of pollution using "Pack Test" and found that filtration alone does not remove all contaminants in water. Through this experiment, they understood that measures to reduce the discharge of domestic water in everyday life are necessary.

February 23: Environmental class at Dich Giao Village—in cooperation with STT

Dich Giao Village is located in the mountainous area of northern Vietnam. The class on February 23 was the fourth held at Dich Giao Village, inviting 90 children and Youth Union members who had not been able to participate in the previous classes. In addition to Son, Huong and Hanh from LIXIL VIETNAM also helped with the class.

STT, with which LIXIL collaborates, construct toilets in response to requests from residents. STT covers half of the construction costs and the remaining half is shared among households. Construction of toilets is carried out by local residents. Having them share some responsibility helps spread knowledge on correct use of toilets among residents.

In the morning, a class was given using LIXIL's original textbook *Let us Think about Toilets* with the aim of providing information necessary to maintain the constructed toilet appropriately. Children learned about the historical background of toilets, the types of toilets available, and the correct way to use and clean toilets.

In the afternoon, a workshop was held where children were divided into groups and conducted a survey on the state of toilets in different hamlets. They later compiled and presented their



Children learn about how to use a toilet and other basics



At the workshop



A toilet constructed by villagers. On the plate are the year of construction and LIXIL's financial contribution to the construction costs.

survey results using photographs. They shared their survey results on the presence or absence of toilets and the numbers and types of toilets. They also presented other findings, including "Flush toilets are sanitary but their construction costs are high" and "Dry-type toilets can be installed at low costs and we can make fertilizer with them, but one concern is the odor."

In this activity, the participation by local staff members in the group work facilitated communication with children, and also made it easier for children to ask questions. Children's understanding of these classes is gradually being deepened and LIXIL staff members have recognized the significance of these educational activities and the importance of continuing efforts. LIXIL will, in cooperation with NPOs, continue to provide environmental education to the children of Vietnam—the generation responsible for the future of their country.

LIXIL Business in Vietnam

In the LIXIL Group, American Standard is the first sanitary ware brand which entered the Vietnamese market. American Standard started its production and sales activities in Ho Chi Minh in 1996, followed by INAX in Hanoi in 1997. With these two brands, LIXIL currently has the No.1 market share in the Vietnamese sanitary ware market. In 2010, we began to sell fittings, as we started operation of a new factory. Then, in June 2012, we also entered into the electric water heater market which seems to be promising. Moreover, in the area of building materials, LIXIL has been engaged in manufacturing and sales of dry exterior tiles, mainly mosaic tiles, since 2008. On January 8, 2014, the construction of a manufacturing plant for residential sashes was completed in line with business expansion of this product in Vietnam.

Outline of environmental education activities

Dates	February 19-24, 2014
Places	Hue City, Vinh My village in Phu Loc District, in Thua Thien Hue Province Dich Giao Village in Hoa Binh Province
Details	water resource awareness initiative, class about toilets, water filtration experiment, water quality experiment, etc.
Seven lecturers	LIXIL Corporation LIXIL INAX VIETNAM Corporation LIXIL INAX DANANG Manufacturing Co., Ltd.
216 students/children	Third graders of Thuy Xuan Primary School, students of the first year of Lam Mong Quang Junior High School who belong to the environmental club, Children in Dich Giao Commune
Five staff members from cooperating organizations	Incorporated NPO " Bridge Asia Japan" Incorporated NPO " Seed to Table"

The 14th environmental education program in Vietnam