

Ongoing water environmental awareness program in Vietnam being provided in cooperation with international NPOs

Thinking about the importance of water with local children and taking action

Since 2007, the LIXIL Corporation, which manufactures and sells tiles and sanitary ceramics in the Socialist Republic of Vietnam (“Vietnam”), has joined forces with two international NPOs, namely Bridge Asia Japan (“BAJ”) and Seed to Table (“STT”), and has been conducting environmental awareness initiatives for the children in that country regarding water.

Environmental awareness initiatives in Vietnam have been ongoing since the former INAX Corporation worked with its local subsidiary INAX Vietnam Sanitary Ware Co., Ltd. (“VINAX”) to forward these initiatives. Even after consolidation under LIXIL, these initiatives are still being actively pursued as a part of activities to preserve the global environment and make positive contributions to society from a global perspective. Vietnam is undergoing a rapid period of economic development, yet there are still many suburban areas that lack adequate sanitation services, and the residents of such areas lack the proper awareness of issues concerning the water they use and environmental issues involved. We are providing environmental awareness program not merely by giving financial aid, but by offering original curricular programs such as “Let us think about and study water”, sending teachers, and otherwise consistently providing environmental awareness program according to the curriculum details and suggestions determined by local societal factors and circumstances.

In 2011, in its fifth year of operations, LIXIL staffs have traveled on environmental awareness program missions to Hoa Binh Province to the north of Hanoi, to Hue in central Vietnam, and to Ho Chí Minh in southern Vietnam. In addition, they visited VINAX factories and strengthened relationships with local children and international NPOs. In the following we would like to summarize what LIXIL staff accomplished in the week from July 27 to August 2 in Vietnam together with staff from the NGOs BAJ and STT.

Water environmental awareness program 2011

Environmental activities in north, central, and south Vietnam



■ Expanding local activities together with STT (July 28)

Seed to Table ~Connecting People, Nature and Cultures~

Together with STT, the former INAX staff implemented the “Water Resource Awareness Initiative” in Nam Son Village in Hoa Binh Province north of Hanoi in July 2010 and January 2011.

A youth group in Phu Vinh Village that was monitoring the activities in Nam Son Village put in a request to STT to have the same kind of environmental awareness program instituted in its village, and on July 28 an environmental course program was launched. Phu Vinh is located in Tan Lac, Hoa Binh Province, about three hours north by car from Hanoi. It is a village of about 3,900 people in about 790 households spread out over 12 distinct hamlets.

On the first day of the program, 73 persons showed up from 11 hamlets. In the morning a class was held using the in-house designed “Let us think about and study water” text, which contains many illustrations. The class focused on a basic knowledge of water and the Earth’s ecosystems, such as the fact that even though water covers about 70 percent of the Earth, only a small fraction of that water is potable, and the fact that water circulates through Earth’s climatic systems in gas and solid form, as well as issues related to water that are more pertinent to lifestyles in rural Vietnam, for example that contaminated water causes diarrhea and that keeping one’s hands and body clean prevents infectious diseases. It was just a two and a half hour course including short breaks, but the course nevertheless seemed to prove useful. Even the younger children were answering questions from the teacher and the participants were given an opportunity to think about these issues as they relate to their everyday lives.



A class in Phu Vinh Village



Studying with the well-illustrated text “Let us think about and study water”



Checking the clarity of water with a transparency meter

In the afternoon the groups were split up by hamlet. Samples of the water used for cooking food and for agricultural uses were collected at each village and tested for quality. The participants made their

own transparency meters, which are used to check the clarity of water, using PET bottles, which they used to visually check their own water. They then used a simple but more scientific water quality test called the “Pack Test,” which measures PH levels, COD levels, and quantities of phosphorous and nitrogen. Youth groups that participated in the Nam Son Village tests ended up helping out their neighbors with their tests, which is a clear indication that knowledge passed on through the program and tests was absorbed by local residents. Measured figures were collated and presented by all after the tests. These tests results revealed significant discrepancies in water quality even within Phu Vinh Village, presumably caused by topological and similar factors.

■ Achievements of activities announced at VINAX factory on July 29

After the “Water Resource Awareness Initiative” in Nam Son Village in Hoa Binh Province in July 2010 and January 2011, a similar environmental initiative was continued locally with the help of STT. The initiative included a continual monthly Pack Test for water for domestic use at nine locals as well as for irrigation water at eight locals. As of this fiscal year, the test also includes an “aquatic creature survey” and a “water map project.”



Accompanying villagers and VINAX employees look on



Presentations of aquatic life studies and water maps



Participants admiring the factory wastewater facilities

Seventy-seven people from seven hamlets of Nam Son Village visited the VINAX factory in the capital of Hanoi, Vietnam, where they presented the results of their findings for the year and were given a tour of the factory. The visiting delegation consisted not only of youth groups and young students, but also of people who have spent the vast majority of their lives in the village and who have never visited a major city like Hanoi. On this tour, Nam Son Mayor Bui Thanh Truyen said, “There are few opportunities for people in the village to ascertain information. We would very much like to sponsor study tours for youth and children’s groups. We know that there are forests and rivers where we now live, but by looking at other environments we should be able to reaffirm the confidence we have in just how splendid the environment we live in is.” STT and LIXIL have been successful in fulfilling that very wish.

In spite of the overbearing heat, the long bus rides, the unfamiliar city air, and the general exhaustion from the trip, the youth groups and other children from the hamlets used large, easy-to-read sheets of paper and confidently presented their survey results amidst the proud eyes of fellow villagers and VINAX employees alike.

Underscoring the presentations was a desire to assume responsibility for protecting the environments of their own villages by cultivating an understanding of commonly-seen aquatic environments in the community through the study of frogs, fish, insects, and other water-dwelling creatures. Furthermore, in hamlets where the effects of agricultural chemicals may be cause for concern with regard to agricultural products, the participants conducted surveys that mapped the intake- and waste-flow of “household water” and “agricultural water” (i.e. irrigation water) and produced “water maps” from their findings. These “water maps” were the outcome of conversations between the youth groups and LIXIL employees, the latter of which were consulted as water-resource specialists.

VINAX President Shinji Ito, who was there at the presentation offered, “The children have developed an interest in the aquatic creatures that thrive near them as well as in their quality of water; they have done careful studies and have shown pride in the presenting the results of their findings. Clean water is essential for a future that ensures quality of life. In these presentations I feel that I have foreseen a bright future for Vietnam.”

After the presentations, the children and villagers who were not able to visit the factories or sanitary ceramics production facilities were taken on a tour of the VINAX factory. Many of the participants were surprised at the sheer size of the factory and the giant pieces of machinery within. Many were particularly impressed with the wastewater processing plant, exclaiming, “Japanese technology is extraordinary” after seeing sewage processed into clear water before being effused as waste.

Mr. Song, a VINAX employee, was present on the 28th and 29th of the program. Song has not only been a participant since 2007, he has also taught environmental awareness program as a school teacher. During the current presentations he provided guidance to the students and served as the presenter. Environmental awareness initiatives not only raise awareness among VINAX employees, who are needless to say members of the LIXIL group, they also inspire pride as employees.

■ Environmental classes together with BAJ at the farms and markets of the Tui Byeu district, Hue, July 31



Located in central Vietnam, the ancient capital of Hue is one of the few cities in the country that has thrived on domestic and foreign tourism. There is a thriving agricultural industry toward the upper reaches of the Huong River, which flows through the city of Hue. BAJ observes the way people live and farm in communities, conduct water surveys together with children, and try to get people to understand the importance of vegetables harvested locally as well the significance of protecting nature in the community.



Rice paddies in Tui Byeu outside of Hue

The activities of BAJ and the now-defunct INAX spanned the river, from the downstream urban areas to the upstream agricultural communities. During this most recent trip, we traveled with BAJ on their journey beginning on the afternoon of the 30th as they traveled down the river by boat, observing the people that live on the river. On the 31st, we arrived at the Tui Byeu district, which is one of Hue's outlying farming communities, and together with BAJ staff Messrs. Toe and Katayama conducted environmental courses.

The first place visited was a farming house in the Tui Byeu district. The farmer was kind enough to let us perform a Pack Test on the drinking water, tap water, and well water. It proved to be not only an opportunity to assess water quality in the area by testing water in everyday use, but also to raise the awareness on the part of the farmer as to water quality issues.

After visiting and testing the water at that farmer's house, we went to a site near the Tui Byeu market and looked for issues as we toured the market. The market we visited had no proper wastewater before, and sewage was dumped in an area close to a farm. At present, however, there is an operating wastewater treatment facility, and the environment is gradually being improved. Nevertheless, agricultural products being sold are placed on the floor, so it is not an ideal sanitary environment. BAJ has toured the market, deliberated to identify the problem areas, and is implementing improvement measures in accordance with its fundamental mission.

Shortly upon arrival, we gathered women that were working at the market and conducted an environmental class while showing them the custom-made "Let us think about and study water" text. In addition to basic lectures on water issues, there were talks on the importance of water for keeping the market as a whole clean and importance of traditional farming methods that do not entail pesticides, fertilizers and such. After lunch, the same environmental lectures were given to the members of the youth groups who were participating for the first time. It only lasted for a mere 30 minutes, but Mr. Toe, who was doubling as an interpreter, was able to ascertain the major issues concerning water use at the field trip site, and over the course of conversations, was able to reaffirm the pertinent issues with the group.

After that, we visited the Luong Hoang area, which is also located in the Tui Byeu district, where we



Observing plants in the garden



Teaching women who trade at markets the importance of water



Selling produce on a sheet on the ground

gave lectures and performed tests on the water. We performed a Pack Test in an area of Luong Hoang that is particularly known for garbage being thrown out indiscriminately into water conduits. By doing so we were able to quantify the effects of improperly discarded garbage and reaffirm the link between maintaining clean water and establishing proper garbage disposal areas. People are most likely to learn their impact on their environment by observing the effects that are related the most to their everyday lives.

■ From Hue to Ho Chi Minh: Environmental classes at elementary schools on August 1 and 2

On the 1st and 2nd of August, we held environmental awareness classes for 3rd graders at Tui Byeu Elementary before lunch on the first day, and for Ho Chi Minh Ngoi Sao 7th graders after lunch on the second day.

The focus of BAJ's activities is Hue in central Vietnam and Ho Chi Minh in southern Vietnam. BAJ is involved with environmental awareness program in both regions, where as a part of its mission it also teaches environmental issues related to water. Since 2010 LIXIL has also been teaching environmental courses at Tui Byeu Elementary and Ho Chi Minh Ngoi Sao. The instructors are LIXIL employees. The teaching style has garnered a very positive reputation among local teachers.

Ngoi Sao is a private school, but the principal of the school learned of BAJ's activities at public elementary schools and requested its services. When the "Water Resource Awareness Initiative" course was held in January of this year, the organization was strongly urged to conduct the course in other classes, which it did for the neighboring class, even though the class was older than the one in which the previous course was held.

LIXIL holds classes with the "Let us think about and study water" text that it developed with BAJ for a broad range of educational targets, including children of different school ages, youth groups, women that work at markets, and men that manage farms. LIXIL's aim is to properly convey what is important regardless of age or status.



Photos above: Class at Tui Byeu Elementary School



Three Photos: Class at Ngoi Sao School after going to Ho Chi Minh

■ BAJIKO program achievements at the Ho Chi Minh Tuoitre Newspaper, August 2



BAJIKO activities by children

Before the class at Ngoi Sao, the party visited the Tuoitre Newspaper offices in Ho Chi Minh. BAJ holds classes for children in the sciences, industrial arts, and environmental issues. The achievements of the students in these classes are presented two to three times a year at a venue in the city. The most recent projects were presented at the Tuoitre Newspaper offices.

The venues exhibit the normal activities of the program and the children present what they learned in the BAJIKO program. On this day there was a presentation by the Ho Chi Minh Energy Conservation Center (HCMC). After a presentation on the state of energy in Japan, there were questions from participants about nuclear energy indicative of high levels of interest in matters of energy in the world and the future of energy distribution. LIXIL staff held a “Water Resource Awareness Initiative” class and provided answers to each and every question asked. It was an opportunity to get urban children from relatively well-off backgrounds to deepen their understanding of water issues.

The trip to Vietnam was a short one, but we had the chance to meet with different sectors of Vietnamese society, from children to adults, and felt there a deep need for education and practical training pursuant to the lifestyles of each. We found ways to abridge a curriculum designed for two-hour courses into abbreviated 30-minute courses. We nevertheless plan to create educational materials designed with the relevant target students and course durations in mind and raise the quality of programs.



Activities presented
at a newspaper company



Class with an abridged version of
“Let us think about and study water”

Summary of the itinerary in Hanoi, Hue, and Ho Chi Minh, Vietnam:

July 27: LIXIL staff arrives in Hanoi, Vietnam

July 28: Environmental classes and on-hands training offered with STT in Phu Vinh, Hoa Binh Province

July 29: Visit to the VINAX factory; presentation of achievements in Nam Son Village and inspection of factory (with STT)

July 30: Traveled to Hue. Accompanied BAJ and participated in their activities in the Huong River

July 31: Held environmental classes with BAJ for farmers and market vendors in Tui Byeu; conducted water quality survey.

August1:Held environmental class at Tui Byeu Elementary for 3rd graders in Hue.
Travelled to Ho Chi Minh.

August2:Attended BAJIKO presentation at Tuoitre Newspaper offices.
Held environmental class for 7th graders at Ngoi Sao.

Numbers of participants in environmental awareness programs

Hoa Binh Province: Phu Vinh environmental classes & hands-on training: 73

Factory visitors from Nam Son Village: 81

Hue: Huong River inspections: about 25

Rural area environmental classes & hands-on training: about 30

Ho Chi Minh: Ngoi Sao environmental class: about 40

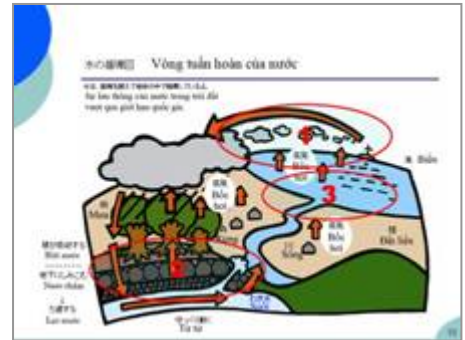
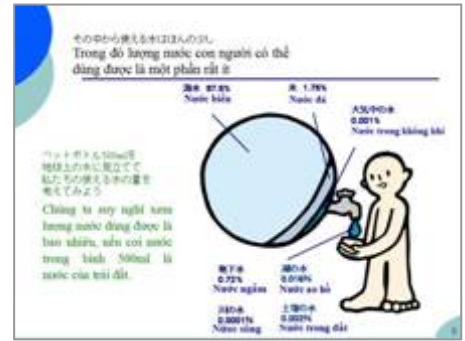
BAJIKO presentation: about 40

Principles and history of environmental awareness program in Vietnam

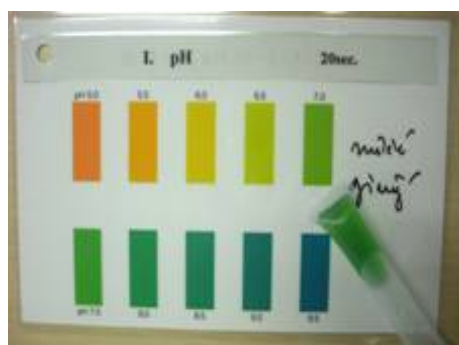
Since the founding in 1996 of INAX Vietnam Sanitary Ware Co., Ltd. (“VINAX”), joint venture and subsidiary of LIXIL Corporation, the company has manufactured and sold flush toilets, lavatory sinks, and other sanitary ceramic wares. VINAX’s sales have steadily grown, and it now enjoys the highest market share among manufacturers of sanitary ceramic wares in Vietnam. At present, construction is underway on a seventh factory. In addition, INAX Vietnam Tile Co., Ltd., which manufactures and sells tiles, as well as INAX Vietnam Plumbing Fixtures, Co., Ltd., have also been established and are expanding their business operations.

At the same time, Vietnam is undergoing rapid economic growth. With that growth, the country is facing a range of problems which societal systems have not been able to keep up with, including the broadening gap between the wealthy and poor, environmental pollution, sanitation problems, children’s rights, etc. As a company that has grown to achieve its current status together with the development of Vietnam’s economy, VINAX aims to do whatever it can to benefit Vietnamese society.

In 2006, the former INAX began searching not just for a way to provide funds and supplies, but for partners with realistic futures that it could support in their endeavors to take action that is meaningful for local residents. In 2007, it found such partners in well-established NPOs and began concrete activities with them. Using its extensive and specialized experience in issues related to water, LIXIL aims to support the kind of education that is truly necessary for the children of Vietnam to become future leaders of their country. Furthermore, the kind of education that the company promotes goes beyond merely telling children not to throw trash in rivers because they will become polluted; instead, it gets children to understand the causes of river pollution and to think for themselves about what they can do to prevent it. The merger with LIXIL has not changed our commitment based on this philosophy to continuing such practical environmental awareness programs together with BAJ, STT, and VINAX.



The “Let us think about and study water” text, which teaches people about the importance of water in the context of Vietnam



Checking water content by inserting some water in a small tube with Pack Test water quality kit reagent and checking the color after it reacts

Record of chief activities

- 2007: Activities begun with BAJ and Save the Children Japan (“SCJ”) (3-year contract)
Development of original educational texts (April)
Training of VINAX staff to be instructors; briefing to government and educational organizations
Commencement of environmental awareness programs targeting educators and children in Yen Bai north of Hanoi and Hue (June to August)
- 2008: Children from Yen Bai and Hue are invited to the Eco-products International Fair (Hanoi);
VINAX factory tour (March)
Environmental awareness programs in Yen Bai and Hue (June)
Environmental awareness programs in Yen Bai, Hue, Ho Chi Minh, and Qui Nhon (December)
- 2009: Environmental awareness programs in Yen Bai, Hue, and Ho Chi Minh (July)
- 2010: Activities begun with BAJ and STT
Environmental awareness programs in Hue and Qui Nhon. Visit to the tile factory of INAX Vietnam Tile Co., Ltd. (January)
Environmental awareness programs in Nam Son Village, Hoa Binh Province, Hue, and Ho Chi Minh (July)
- 2011: Environmental awareness programs in Nam Son Village, Hoa Binh Province, Hue, and Ho Chi Minh (January)