#### Tokushima Primary Schools were Approved as UNESCO Schools!

All primary schools in Tokushima Prefecture were approved as UNESCO Associated Schools!

UNESCO (United Nations Educational, Scientific and Cultural Organization, based in Paris, France) approved all four primary schools in Aizumi Town, Tokushima Prefecture, as UNESCO Associated Schools to encourage exchanges between students and teachers at schools around the world to share information and experiences. They were the first approval cases in the prefecture.



UNESCO Associated Schools started in 1953, and has engaged in

promoting ESD (Education for Sustainable Development) in cultural and traditional events and practices, environmental education, and intercultural exchanges in order to achieve the ideals stated in the UNESCO Charter.

Four primary schools in Aizumi Town applied for the UNESCO School in June 2012 through the Tokushima Prefectural Board of Education, as they have devoted themselves to various unique activities including related to local traditional cultures such as indigo-dyeing called "Aizome", folklore dancing called "Awa Odori" dancing, and growing indigenous spring carrots. They also have conducted environmental conservation activities at and along their local river system.

On November 15, 2012, a ceremony was held at the Aizumi town office, and the Prefectural Board was entrusted to deliver the certificates to the respective principals.

■All primary schools in Aizumi town, Tokushima, were approved as UNESCO Schools!

## November 2012

Four primary schools in Aizumi Town, Tokushima Prefecture, were approved as UNESCO Associated Schools, and the certificates were delivered to the principals respectively at the ceremony. Shikoku EPO interviewed the principals and learned their activities.

## [Visit the Board of Education of Aizumi Town]

Shikoku EPO asked the Superintendent and vice superintendent of the board of education about the town and educational practices.

Each school has committed themselves to their own unique activities for more than 10 years through comprehensive learning classes and other subjects. The activities have two aspects: First, they are closely linked to their local culture, history, industry and/or geographical features, Second, they are collaborated with local people.

The superintendent of the Prefectural Board of Education was at first hesitated to apply for the UNESCO School. But later he realized that what the schools had done was what ESD had aimed for. When he talked about the intention to the principals of the four primary schools in the town, they were willing to apply for that.

# [Visit Aizumi Higashi Primary School]

One of the most outstanding features of the activities that Higashi Primary School has done was to practice the folklore dance called "Awa Odori". Thanks to guidance by local residents, they followed the official guideline of school teaching, and pupils have learned how to play the folklore musical instruments which are indispensable for the dancing. Pupils also visited the ritual lion dance called "Shishimai" and learned how to do that annual dance.

# [Visit Aizumi Kita Primary School]

In collaboration with local farmers and women's groups, Kita Primary School has engaged in energetic activities. One such activity was learning river environment at the Shohoji River conducted mainly by 4<sup>th</sup> graders. They observed the local river from the riverbanks and learned about the creatures along the river and the river itself. At the end of the school year, they made a presentation of what they learned in front of the people who supported the activities.

# [Visit Aizumi Nishi Primary School]

The purpose of the activities of Nishi Primary School was to love their hometown. The pupils learned how to grow indigenous spring carrots. Tokushima is the largest producer of the vegetable in the country. Another activity was to experience Aizome indigo-dyeing throughout the year. For this activity, the school rented a plot of farmland from the local farmers and the pupils learned how to plant Chinese indigo. Later in the year, they harvested the plant, dissolved it into water and maintained the indigo liquid. At the end they used the liquid to make a dyed product.

# [Visit Aizumi Minami Primary School]

Minami Primary School has engaged in experiencing local traditional culture and learning environmental preservation. Their main focus was also to experience local indigo dyeing particularly among 5<sup>th</sup>- and 6<sup>th</sup>-graders.

# [After Visiting 4 Schools]

Shikoku EPO visited four local primary schools, all of which had conducted their activities "with local people at the local communities". In other words, their school activities had three aspects of "school

education", "home education" and "community education". While participating in the community activities, the pupils would develop a sense of pride for their community.

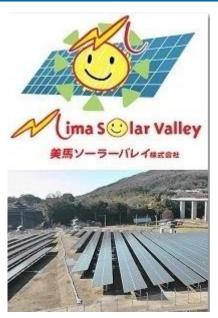
Some teachers said "we came to explain what we had done in easier ways, which should be the nature of ESD. When we applied for the UNESCO associated school, we classified a variety of activities to reorganize them."

When people understand their own community culture, they can respect and are proud of them. Such people understand and respect the other cultures in other countries and areas. We will look forward to the perspectives of their activities in the future.

## Mima Solar Valley in Tokushima Prefecture Generated Solar Power!

Mima Solar Valley is a unique joint venture invested by Gaiapower, the president of Mima Solar Valley and E Community (Citizens Association to Create Energy) and local citizens. The mega solar power house in Mima City, Tokushima Prefecture, started to generate power from December 2012.

The generation capacity of the powerhouse is 1,189kW, equivalent of the power used for 350 households. The Citizens Association and 48 private people in Tokushima purchased private placement debt securities (1 share is ¥500,000-, at 4% a year, 8 year of redemption), and this was the first citizen participatory eco power supplying operation.



# GPS Traces Black Bear in Shikoku!

NPO Shikoku Institute of Natural History, located in Suzaki, Kochi Prefecture, launched a tracking survey of Asiatic black bears using GPS (Global Positioning System). This was a part of a "comprehensive study of the population of black bears in the Shikoku Region for preservation purposes" conducted in collaboration with WWF.

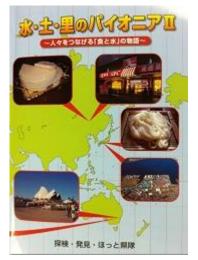


In Shikoku, only some scores of black bears were confirmed in the mountain system between the prefectures of Tokushima and Kochi, and they were designated as "endangered local species" by the Ministry of Environment. The NPO expects to find more concrete range of habitat and animal behavior for preservation activities.

#### Grad Students of Two Universities Published a Book for ESD!

Graduate Schools of Education of Kagawa University and Aichi University of Education jointly published a supplementary book for ESD called "Pioneers of Water, Land and Village – Stories of 'Water and Food' to Connect People".

The book deals with some topics such as drought in Australia, where the majority of wheat consumed for udon noodles of Kagawa Prefecture is produced. The books includes other topics such as the slow-food movement in Italy, changing eating habits in China and Japan, and food security issues in developing countries, and food disposal problem in Japan (disposal food problem). Through these topics, the considers food security and safety issues, and ways to connect Japan to the world.



The book employs a comic book style and uses a lot of dialogue. It also shows graphs and other visual illustrations for easier understanding. It helps readers think about our eating habits and ways to build a society for sustainable development.

#### Tokushima Public Health Center Provided Power for E-cars!

Tokushima Prefectural office experimentally set up a plug-in station at Tokushima public health center in the city, and people got power free of charge. (Started on June 11, 2012).

The power was generated by solar panels on the rooftop of the prefectural office, and people could get the restored power to charge their electric cars.

The original purpose was to secure the electricity for emergencies

such as massive disasters, but alternatively this was to help people be aware of e-cars and their spread.



#### Kagawa is not just a Noodle Eater, but Ethanol and Methane Producer for Circulatory Society.

Kagawa Prefecture is famous for its original udon noodle, but at the same time, people dispose of a surprising amount of noodles every day. A "Consortium for Udon Noodle Circulation Project" established by various stakeholders including NPOs, private companies, local government and academia started a recycling project in January 2012. They encouraged the production of ethanol, methane and liquid fertilizer from uneaten noodles to recycle, rather than to dispose of them.

The mechanism is ready for practice now, and it will be introduced at eco events to spread.

(top) Ethanol combustion experiment at a noodle shop (below) udon noodles are boiled in water heated by bio ethanol





## Thinned Timber is Delivered for Firewood for Mountain Elderlies!

Tosa-no-Mori Maki (firewood) Club started delivering firewood from 2010 in order both to make use of timber from forest thinning along the Niyodo River and to support life of elderly people living in the local mountain villages.

Many people still use firewood to boil bath water in the mountain area in Kochi Prefecture, but people have more and more difficulty these days in collecting firewood, partly because of the declining forest industry and partly because of the aging population of the villagers. The club, then, started delivering 200kg of timber of per month to the elderly households who use firewood for bathwater.

Converting from the firewood to gas and kerosene cost more as well as increase CO2 emission. Therefore, the project was very popular among the elderly particularly during the winter season. (below: a staff member delivers firewood to a contract household)



### Sewage Water is Recycled to Save Waterfront Environment and Water Shortage!

Tadotsu Town (Kagawa Prefecture) introduced advanced process of sewage water to recycle in 2004 to solve agricultural water shortage from the drought and ease water quality deterioration.

The processed water is sent for agricultural purposes when needed, or discharged from upstream to ease the bad smell caused by the river water shortage, and reduce the negative effect toward the ecosystem. They also improve the preservation for little brooks and firefly village, so the neighboring people can enjoy the waterfront, as well as use it for environmental education.

This project was awarded a top prize by the Ministry of Land, Infrastructure, Transport and Tourism in 2010, and it will be presented as a good example of excellent water usage at 6<sup>th</sup> World Water Forum in France in March 2012.



#### Thinned Timbers for Spa Resort Cut CO2 Emission!

Consortium to foster biomass energy produced by timber from forest thinning in Kagawa prefecture was established by various stakeholders such as Kagawa Prefectural Center for Stopping Global Warming, people who act to stop global warming, NPOs, and people from hot spa facilities. This consortium started curving CO2 emission as well as revitalizing local communities by using biomass energy produced by timbers from forest thinning (including discarded timbers), started in April 2011.

Under coordination by the Kagawa Prefectural Center for Stopping Global Warming, two NPOs have worked for forest thinning to preserve forests and used them at the hot spa resort instead of using kerosene, which lessens CO2 emission. (Staff members thin the forest)



### Sales of Biodiesel Fuel Mixed from Cooking Oil was Started!

A petro station in Matsuyama, Ehime Prefecture, started providing new fuel called B5 for automobiles. The B5 is a mixture of diesel oil and 5% of Bio Diesel Fuel (BDF) produced from used cooking oil (from December 1, 2011 -March 30, 2012).

The sale of this mixture fuel for ordinary users was conducted as a part of Biomass Energy Project by Ehime Prefecture. BDF was produced by Daiki Axis and petro-diesel was produced by Taiyo Oil Co., Ltd.

### Tokushima Group Submitted Proposals for Strategic Guidelines for Regional Biodiversity!

A group which has tackled biodiversity in Tokushima submitted a recommendation regarding strategic guidelines for regional biodiversity to the Governor of Tokushima Prefecture in June 2011. The group was established by eco-savvy groups and experts.

(Press conference)

The proposals stated as follows;

- · Reflecting from the regional characteristics,
- Hosting town meetings to collect views from town people collaborated with specialists, and
- Setting numerical targets and action plans.

Tokushima Prefecture is aiming to establish the strategic regional biodiversity guidelines by the end of fiscal 2012.

#### Live Earth Matsuyama 2011 was Held to Raise Awareness to the Environment

"Live Earth Matsuyama" was held at the Matsuyama Castle Park in Ehime Prefecture on May 15, 2011. On the outdoor stage, bands performed their songs and other performers had their talk shows. Some 70 stalls sold organic food and handmade crafts to 3000 participants.

The following "five Actions to Thank the Earth!" symbolized the event.

- ★ Use public transportation or walk to the event
- ★ Bring your own plate or rent them for meals
- ★ Bring your clothes to exchange







- ★ Ride a bike-power-generator to create power
- ★ Bring used cooking oil

These messages appeals went out before the event and conducted during the event.

One of whose features was to encourage participants to use rental plates and spoons, or bring their own. Food stalls did not provide any plates or spoons. The participants had to deposit 100 for each item.When they brought them back, they could get refunded. They got foods and cakes onto their own containers, and sometimes that created conversation with the shop owners. At the end of the day, there was no garbage. No one left used plates behind without taking back their money. It was a very efficient system. On the stage, Yu Tanaka from Mirai Bank talked on energy and global environmental issues. He has come to the event every year. This time, he talked about the electricity business and nuclear power plant, which were hot issues these days. Also UA, a musician, came on stage to perform. As a part of disaster relief activities for East Japan Earthquake and Tsunami, a fund-raising box was set up. At the same time, they called to collect fans and pyrethrum coils for donation, advised by the sufferers from Hanshin Great Earthquake in 1995.

The brochure of the event says "We were born here and grew up here. That is why we have to have the eye to see safe food in real terms and safe environment for the family to live in." We saw a lot of practices and discoveries which realized such a message. The event will be held again next year. (above: Counter to rent plates and spoons. Middle: People get food into their own container, Bottom: People enjoy music)

# "Tosacco Town" was Held for Children to Experience Real Life.

An event called "Tosacco Town" was held in Ryoma Stadium in Kochi, organized by NPO Kochi citizens organization for two days on February 26 and 27. This was the second time after the one held in September two years ago. 330 children from 4<sup>th</sup> graders up to junior high school age participated. The purpose of the event was to provide a place to communicate with other children, an opportunity to experience social mechanisms and eventually to respect the local community and become proud of that. (Children work for comic writer.)



When children registered in the "town office", they learned the community rules for half an hour, and received nine tos ("tos" is a unit of money in this community). One tos was deducted as a tax. In the Tosacco Town, there were some 30 jobs such as newspaper company, police, bank, broadcasting center, railway company, construction designer, and painter. Cardboard was used for partition for the offices and shops, and each section had its own signboard. There was a comic writer's office, too, as Kochi produced

one of the most famous comic writers in the country. At the job placement office, children chose jobs from vacancy ads and worked and earned money and paid taxes. Each section had grown-ups (specialists) to tell how to do the jobs. The stretcher at the fire station and ballot box at the election were real ones. The children who worked each section looked serious. Some children who worked at the railway company tried to lure passengers-to-be. The grown-ups who came to support the event smiled when they saw such serious children. Some children could even raise funds to start their own business. When the town had new jobs, the atmosphere of the town got exciting.

When the children earned money by working, they could spend it at the shops and restaurants. They enjoyed using the money they had earned.

The participants could run for the town mayor and cast the ballots (Photo: Children cast the ballots for the town mayor election) and a new mayor was born. "In the previous election, the candidate who promised the tax reduction won the election and the tax was cut. Because of that reason, some jobs at the tax office was closed." Said Ayano Hiroi, the current president of the committee. The sign at the tax office explained and one out of four jobs was lost at the tax office. The children would learn that their actions changed the public service.

Behind the town, about 90 grown-ups from high school students, college students, office workers, local government employees and NPO staff members worked as organizers. They were divided into six units to operate the event. Some of them prepared for the overall system and program, some worked to ask for donations and support, and some developed and prepared the meals consumed during the event. The grown-ups spent more than a year to create the town. One of the grown-up members said "We have to figure out a way to let children understand things very well. We have to study hard to know things correctly in order to tell things correctly to the children". Others said "We enjoyed to meet people in other jobs or other situations." It was a great opportunity for both grown-ups and children to communicate and agree on various things such as collecting garbage, delivering food, developing unique goods and raising funds.

The original idea and model of Tosacco Town was in Munich, Germany, where there are 30 of such "towns" where children can experience social activities. And the activities have developed to actual exchanges. The former mayor participated in the "children's towns exchange meeting".

What did the participants learn from the "life" for two days? They had to work by themselves and they had to cast ballots to change the social system. Then what happened to their town? Tosacco Town was not the place to answer the questions, but to experience them. The town exists not just for two days, it will reappear in to the next event. As the children grow older, the town may develop, or some children may be the committee members. We cannot wait to see the future.

★ Shikoku EPO considered that the whole process (preparation to the event) of Tosacco Town event was a good example of ESD (Education for Sustainable Development), it was shown during the ESD Forum in Takamatsu in February 19, 2011.