



Scenic landscape with clean air and forested hills.



Japanese drone experts from FRS Corporation headed by Kiyoshi Irie (third left) with JICA's Chief Advisor Suzuki (fifth left) and staff James Wong (seventh left).



Pristine water flows down the stream below JICA's operation house in Kg Tudan.

Rediscover Sabah's beauty Satoyama style

Kan Yaw Chong

JAPAN International Cooperation Agency (Jica) is leading a spirited interest to rediscover the beauty of Sabah Satoyama style. Satoyama is a traditional 1,000-year old rural Japan village farming system known for people living in harmony and peace with nature on a daily basis, surrounded by pristine, graceful forested hills where springs and crystal clear water flows right past their doorsteps, or even straight into their houses!

A misguided dream of romanticising the past? No, it's a step in a good direction to recapture a lost value in response to the trauma of modern technology which a growing sea of humanity has blamed for destroying much of the natural beauty of the planet Earth, robbed their peace and health and make them captives of the typical stress-filled concrete jungles of big cities.

But can we find a village in remote Sabah that fits the bill of the trademark characteristics of Satoyama, in which you can see, feel, taste the balance, the grace and beauty of a farming landscape where natives keep a culture of living in coexistence with their environment inherited from generations.

Well, don't ask me. Ask Kazunobu Suzuki – the new Jica Chief Advisor for the four-year Sustainable Development on Biodiversity and Ecosystems Conservation in Sabah (SDBEC) launched in July 2013 by State Secretary Tan Sri Sukarti Wakiman.

An ecstatic Suzuki just can't stop raving over the discovery of Kampung Tudan – a remote hamlet of arable valley sandwiched between hills in the border zone of the Crocker Range in the hinterland of Tuaran District, which he thinks is typical of a Satoyama and out of sheer joy, picked Tudan as JICA's dream pilot project site over the next four years

Kg Tudan is Sabah's Satoyama: Suzuki

"Kg Tudan is what I call a landscape called Satoyama where the native people coexist with nature," Suzuki said. "Kg Tudan is a very clean environment. The water is very clean, the air is very fresh and clean, the soil is very clean – the local community of about 400 people can be proud of their nature," Suzuki noted.

"One very interesting farming feature we found out is that until now, they don't use any chemical fertiliser, pesticide or weedicide. They are still doing what we call Nature Farming, like Satoyama in Japan.

"But here is Kg Tudan, located in the Crocker Range buffer zone – a village surrounded by a forest ecosystem, a river ecosystem, a padi ecosystem, a hill farming



Fragrant healthy blooms which trumpets the beautiful landscape of Kg Tudan. Inset: Suzuki: JICA SDBEC Chief Advisor.



Crystal clear water from the hills typically flows past Kg Tudan.



A fragrant, original native species of guava – uninfested by worms.



Pineapple amidst other crops.



Clean fish pond in a beautiful landscape.

ecosystem, the people rely on the forests, the vegetables, the fish, the fresh mountain water which are products of nature, for their daily livelihood. They are living in harmony with nature," Suzuki cheered.

Steep slope cultivation with little soil erosion

Actually, one typical characteristic of the Satoyama landscape in Japan is the difficult natural condition such as steep slopes.

Suzuki sees the exact parallel in Kg Tudan which raises the question: How to cultivate in a village which is surrounded by steep slopes that are easily way over a gradient of over 25 degrees – which on paper is the upper limit guideline for cultivation set by the Department of Agriculture.

"I don't know whether this terrain is suitable for agriculture or not but the fact is the local community in Tudan have been practising slope cultivation

for probably over 100 years and according to them they have no serious problem at the moment. I think this is because they have the traditional local knowledge of utilising water, forest, hill agriculture in a harmonised manner that doesn't cause erosion," Suzuki said.

"If you have soil erosion, that's a big problem but the local community of Kg Tudan know how to maintain soil and trees by planting a variety of crops and vegetable, not one.

Drone to map land use for Kg Tudan



BELIEVE it or not, a whole group of engineers and technicians came all the way from FRS Corporation, Japan, led by Chief engineer, Kiyoshi Irie, and flew for two hours an unmanned aerial vehicle over Kg Tudan. This first ever, historic drone flight over this remote hamlet drew out the entire population of SK Tudan from their classes to watch the aerial spectacle.

"They took 3-dimensional pictures of Kg Tudan from the air which are very useful for our land use planning, especially mapping for the Participatory 3-Dimensional Model," Suzuki said.

"It's very interesting technology, very useful for developing land use maps, community profile and the Participatory 3Dimensional Model as well," Suzuki said.

"So we do have such technology from a Japanese company which is very helpful and I am trying to work with them how to work with the Sabah Government," Suzuki said. – Kan Yaw Chong



JICA's operation centre in Kg Tudan.



Above and below: Cheerful women return home from farm in the evening.



Kg Tudan Village head Golonius Gidin showing multiple cobs of organic glutinous corn on shoulder high plant.

Where they don't plant single crops
They don't plant one single crop. So biodiversity is good for land and soil maintenance," Suzuki pointed out.

"So even if it involves controversial issues like planting on steep slopes, when you maintain well planted big fruit trees and diversity – and they know how to plant trees to hold the soil and shrubs to trap sediments – you can use it in a way that doesn't cause erosion and it seems okay," Suzuki said.

"But of course, we need to study it. We still need to check the water quality, we'll check all the time the physical quality, eg. smell, the biological quality like flora and fauna, insects, chemical quality such as pH, by using a very simple kit, starting now and the local community can one day be the researchers.

"This is the kind of education programme that the Sustainable Development on Biodiversity and Ecosystem Conservation in Sabah (SDBEC) intends to upskill the locals to make sure they discover something by themselves," Suzuki smiled.

Scientific basis to teach Sabahans how to improve relationship with their environment

This writer suggests Malaysians in Sabah especially decision-making politicians take a serious interest on SDBEC because it is very instructive on how the Japanese look at sustainable development and particularly, the way they take a careful bottom-up end-to-end approach to achieve a desired outcome, where human relate to the environment as a friend.

What is SDBEC? As Suzuki explained it – a pilot project in livelihood improvement in the Crocker Range Biosphere Reserve, within a time frame from July 2013 to 2017.

Few people realised that the Unesco had designated Crocker Range Biosphere Reserve under its 1971 Man & Biosphere Program – an intergovernmental scientific program that aims to establish a scientific basis for the improvement of relationship between people and their environments. It proposes interdisciplinary research, demonstration and training in natural resources management.

The core zone of this Crocker man & biosphere reserve is 144,492 hectares, the buffer zone – 60,313ha and the Transition Zone is 145,779 hectares, says Suzuki.

Kg Tudan is part of the minority buffer zone which is critical to guard the integrity of the core zone.

Hence how the Tudan folk behave and relate to their core zone environment is the key to the permanent protection of the 139,919ha Crocker Range Park established in 1984 as the water catchment to serve the future water needs of Sabah's West Coast.

The key implementation partners of SDBEC are the Sabah, Federal Governments and Japan International Co-operation Agency (Jica) and so it is a joint technical co-operation to push for an understanding and practice of sustainable development.

Given decades of recurring destructive relationship between man and environments in Sabah, I really believe that the SDBEC is one project Japan is helping to open the eyes of all Malaysians, politicians and bureaucrats in Sabah on how to improve on its festering environmental degradation problem.

The best part – bottom-up approach

The best part? Instead if a top down – leader or government knows best approach, the SDBEC pilot project takes a bottom-up approach to first find out what people on the ground actually want and need to use, before swinging in a project into action with all kinds of deleterious environmental and people casualties.

Suzuki said JICA-SDBEC will implement this process.

The execution of SDBEC to secure livelihood improvement will be a community-based conservation through agricultural improvement; resource management and environmental education by close collaboration between local authorities and various other stakeholders, Suzuki said.

The bottom-up process Jica uses probably is the best bet to ensure a high Happiness Index from development.

First phase – Preparation stage – do a baseline survey.

Second phase – Consultation stage

Third – Integration stage.

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