

2014~2018 Tree Plantation Project

Isinya Kajiado Kenya



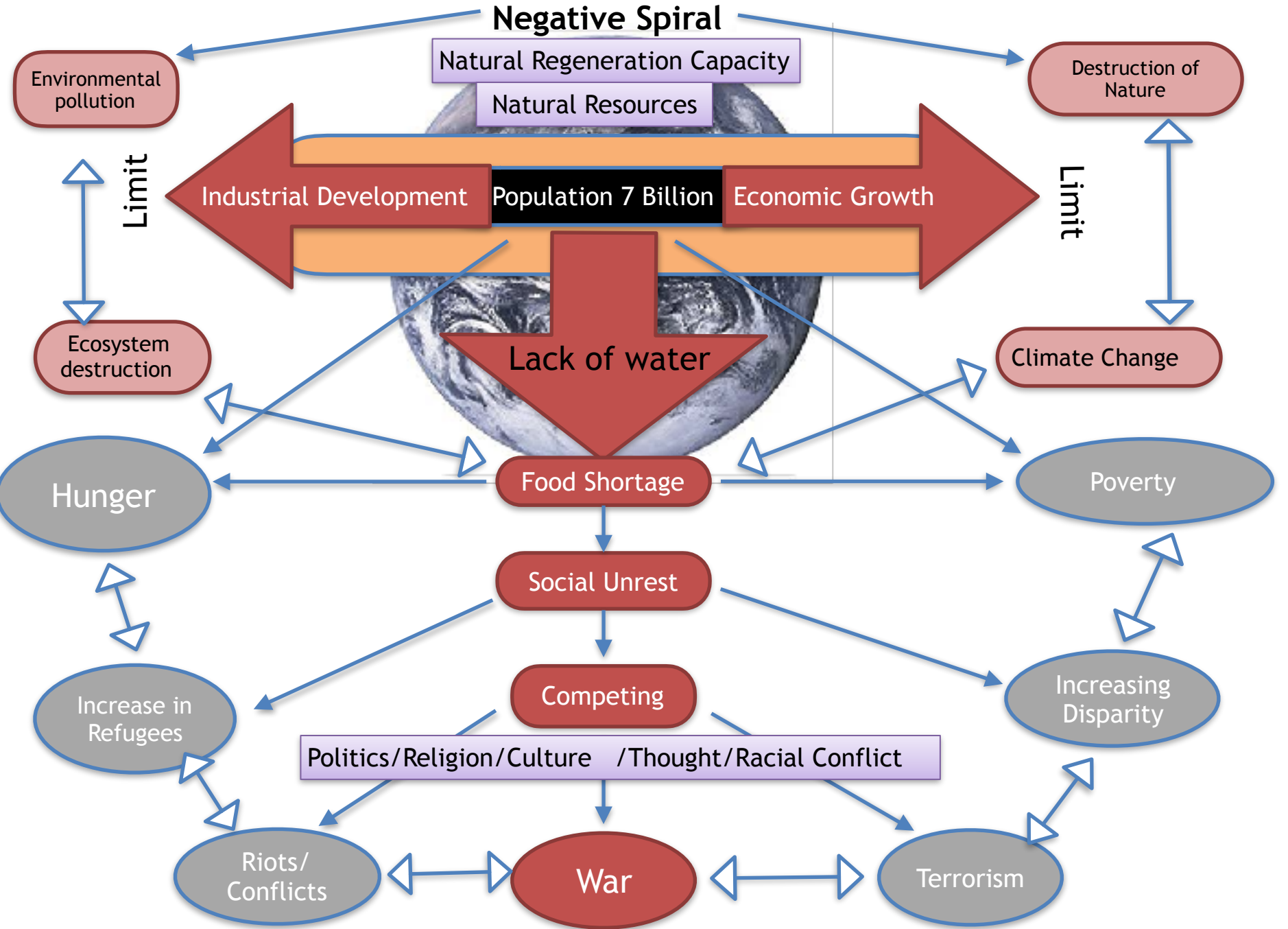
Funded by ERCA
Fujisawa East Rotary Club
ICA Japan

The World Trend

There were only 10 million people on the planet 10,000 years ago, but it will reach 10 billion at the end of this century. As of 2015, most of the global poor live in sub-Saharan **Africa**. The average **poverty** rate for sub-Saharan **Africa** stands at about 41%. 27 of 28 of the world's poorest countries are in sub-Saharan **Africa** all with a **poverty** rate above 30%.

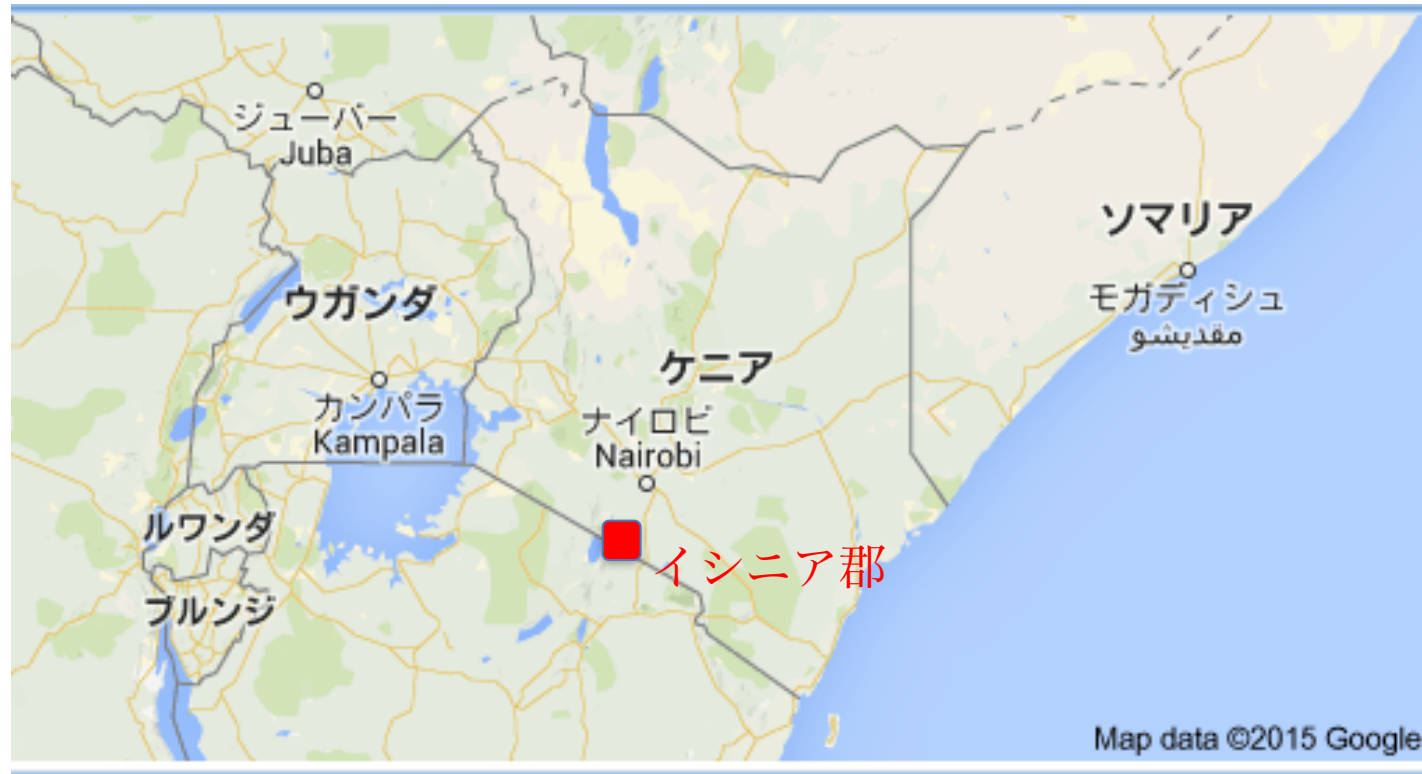
Facts and figures

- 736 million people still live in extreme poverty.
- 10% of the world's population live in extreme poverty, down from 36% in 1990.
- 1.3 billion people live in multidimensional poverty.
- Half of all people living in poverty are under 18.
- One person in every 10 is extremely poor.
- 80% of people living on less than \$1.90 are in South Asia and sub-Saharan Africa.



Tree Plantation Movement

In 2014, with the support of the Fujisawa Higashi Rotary Club, ICA started a greenery campaign in which children planted trees. In 2014, we planted 200 trees, including drought-resistant neem, savanna acacia, and baranites. This has led to improvements in food security and environmental awareness among local residents.



Top Benefits of Trees

1. TREES COMBAT CLIMATE CHANGE
2. TREES CLEAN THE AIR
3. TREES PROVIDE OXYGEN
4. TREES COOL THE STREETS AND THE CITY
5. TREES CONSERVE ENERGY
6. TREES HELP PREVENT WATER POLLUTION
7. TREES HELP PREVENT SOIL EROSION
8. TREES SHIELD CHILDREN FROM ULTRA-VIOLET RAYS
9. TREES PROVIDE FOOD
10. TREES HEAL
11. TREES REDUCE VIOLENCE
12. TREES MARK THE SEASONS
13. TREES CREATE ECONOMIC OPPORTUNITIES
14. TREES ARE TEACHERS AND PLAYMATES
15. TREES BRING DIVERSE GROUPS OF PEOPLE TOGETHER

- 16. TREES ADD UNITY**
- 17. TREES PROVIDE A CANOPY AND HABITAT FOR WILDLIFE**
- 18. TREES BLOCK THINGS**
- 19. TREES PROVIDE WOOD**
- 20. TREES INCREASE PROPERTY VALUES**
- 21. TREES INCREASE BUSINESS TRAFFIC**



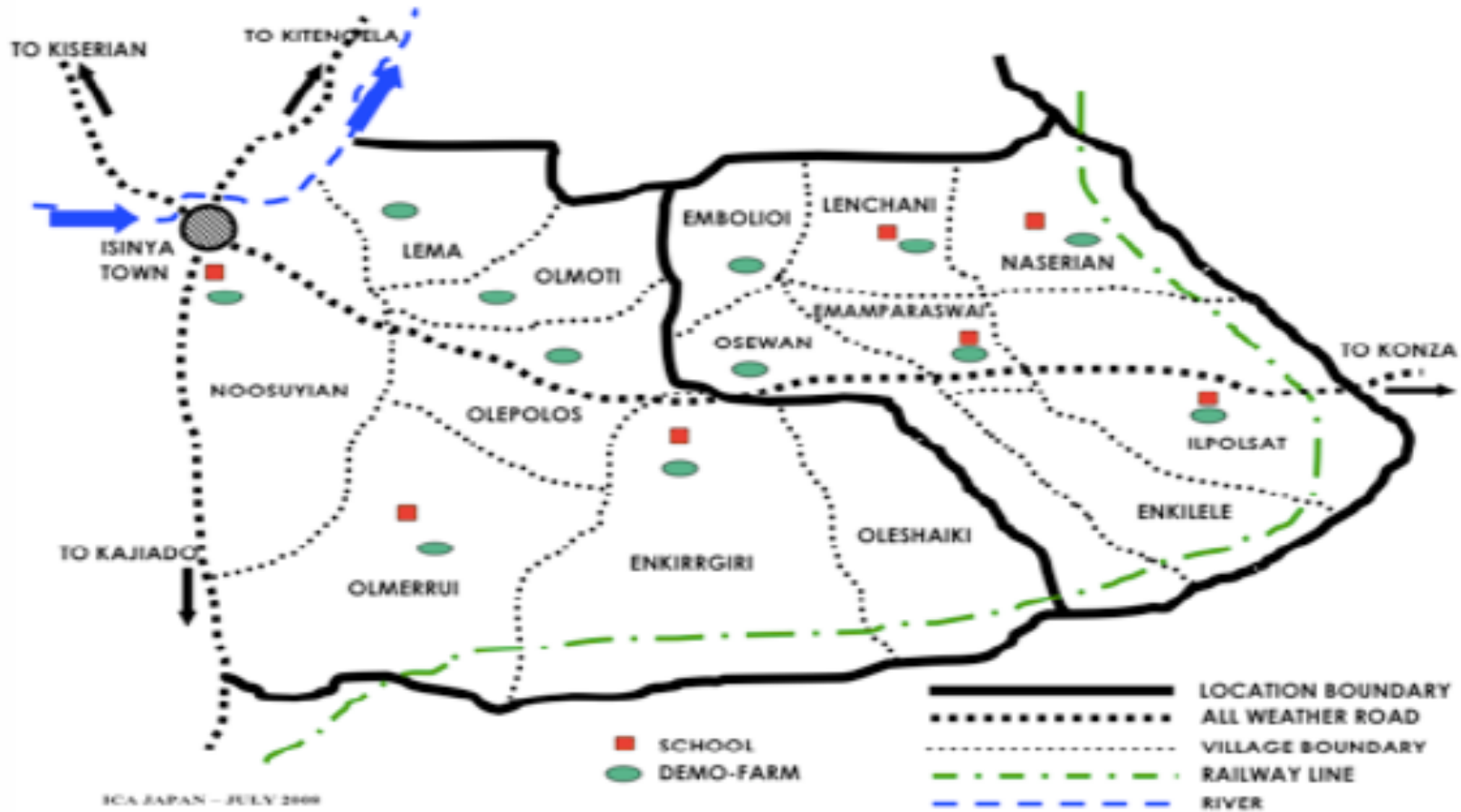


Kajiado County is located 66 km from Nairobi, the capital of Kenya with a population of 687,000, and 80% is semi-arid.

The town of **Isinya** is situated along the Nairobi-Arusha highway. It has a population of 8,670

Isinya Kajiado

11 villages in Isinya Kajiado



The situation in Kenya

Kenya has a total land area of 58.40 million hectares, but only 7% is forest area. Located just below the equator, it has a tropical savanna climate. The population is 42.75 million.



The **Maasai tribe** has a deep, almost sacred, relationship with cattle. They are guided by a strong belief that God created cattle especially for them and that they are the sole custodians of all the cattle on earth. This bond has led them into a nomadic way of life following patterns of rainfall over vast land in search of food and water for their large herds of cattle.

2014

In front of the Kenya Agriculture Office

ICA is working with the Ministry of Agriculture in Isinya.
Mr. Benson is a coordinator. (Left back)



2014 — GREEN MOVEMENT

Tree plantation was implemented at the Empyiakat village, Ole Nkotila School) in 2014.

200 children planted 200 Neem, Acacia tree varieties.



Ole Nkotila Primary School



Acacia



Markhamia

2015

Enkirigirri Primary School



**September. 27. 2015,
Fujisawa East Rotary Club
ICA Japan**

2015
Ministry of Agriculture Office in
Isinya-Kajiado County



Benson
Mwangi

Lois
Gakuru

Shizuyo
Sato

2015
Enkirigirri Primary School
1,160 trees planted in 1.4 acre.



Students, Parents and Teachers were enjoying
Planting trees.



Chairman of the school Mr. Gideon Ngeenoi
planted with a student.



2016



September. 27. 2016
Fujisawa East Rotary Club
ICA Japan

Head Teacher Mr. Maloi and Benson explained importance of trees



Parents and students planted trees together.



Drip Irrigation systems in Enkirigirri primary school



Spinach



Kale

Pumpkins with mulching for water conservation



Corn and kale grows at Enkirigirri Boarding school



**Onion and trees grow at
Enkirigirri Primary school
2016**



**Chief Laban Karani and
Chairman Gideon Ngeenoi**

Trees planted in 2015 at
Enkirigirri Primary school.
They grew up to my height in one year.





September. 27. 2017
Fujisawa East Rotary Club
NALAPO
ICA Japan

2,160本 carried tree seedlings to
PJ Dave, Enkirigirri and Kikayaya primary schools



Kikayaya Primary School

received farm tools - 10 mattocks, 10 spades,
,10 buckets, 10 watering cans, 10 matchets,
2 wheelbarrows.



Kikayaya primary school students planting tree seedlings



Kikayaya Primary School received tree seedlings.



Forester Mr. David Maina demonstrating tree planting and Chief Laban Karani helping Shizuyo to plant trees



Students of Kikayaya Primary school planting tree seedlings



Tree planting Activities



Member of County Assembly, Hon. Joshua, Benson, David
and teachers planting trees at
Enkirigirri Primary school.



Farm Tools received at Enkirgirri Primary School for tree planting activities.



Chief Laban Kalani planting tree at Enkirigirri school



Students are happy with farm tools in Enkirigirri.



Students planting trees at Enkirigirri.



Mr. Meshack of ICA Kenya planting trees at Enkirigirri primary school.



Mr. David Maina, Hon. MCA Joshua, Head teacher Mr. Maloi planting trees with students.



P.J.Dave Primary School received 400 tree seedling



Chairman Mr. Julius
of the P.J.Dave
school received tree
seedlings.



MCA, Parents, and Teachers of P.J.Dave school



Shizuyo Sato
planting tree.



MCA Hon. Joshua
planting tree.



Farm Tools were given
to P.J.Dave Primary
school



P.J.Dave Primary School Planting trees



Moringa



Olea europaea



Podocarpus falcatus



Guavas

Neem



Guavas



Prunus africana



Pawpaw



Comments from participants (school officials, volunteers, etc.)

Volunteer groups that participated this time were closed during November and December, so they needed to take care of the seedlings while they were not in school. Most of the participants wanted to fill the school with green. One said he would like to participate in activities to plant and grow seedlings in schools and public facilities when it rains. He also said, "This project has enough power to spread to other schools."

Water shortage in the world

Image source: [Wired](#),
A Bamboo Tower That
Produces Water From Air

As many as 780 million people in the world do not have safe water. The number of deaths of children under the age of five climbs to 1,400 daily. The person who wants to change this situation with low-tech is the designer Arturo Vittori with technology that naturally collects water vapor in the air without using electricity.

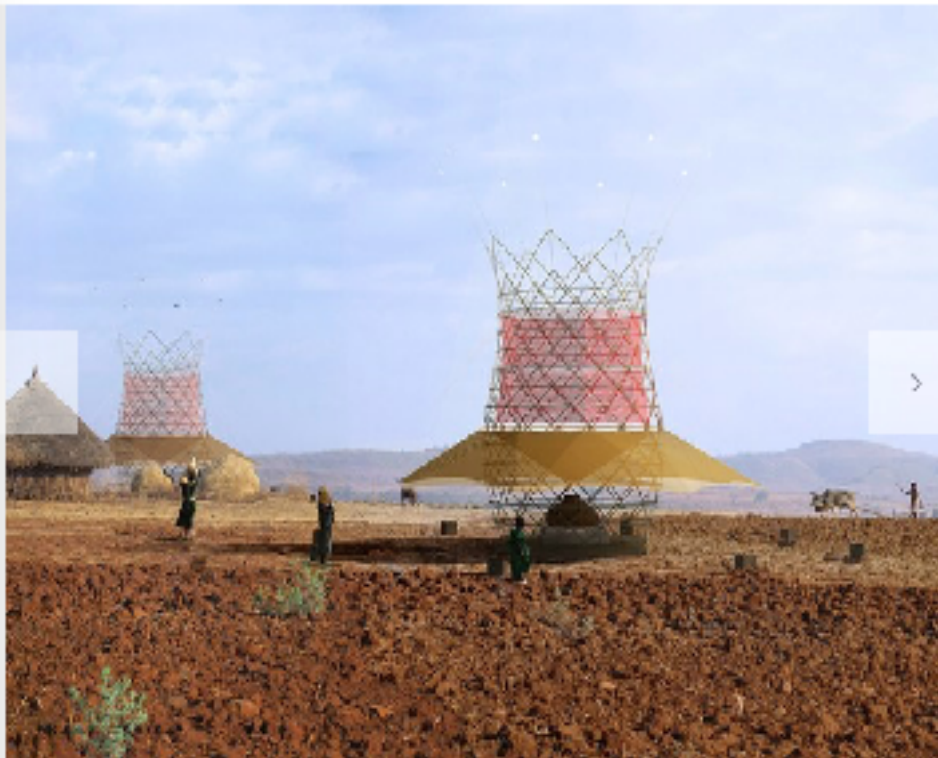


Drought is a major issue in business areas. The dry season lasted for 18 months. There is also a shortage of water available for daily use and agriculture. The only source of water was groundwater. This year we are also considering an experiment to take water from the air.

Image source: Wired, A
Bamboo Tower That
Produces Water From Air

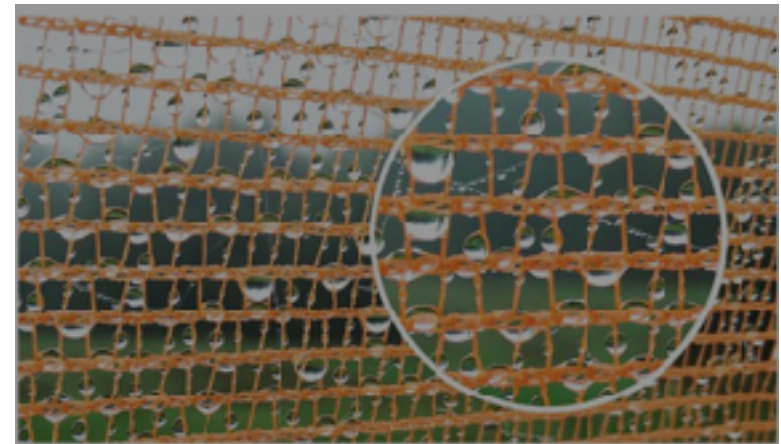
ELIZABETH ST. NEOM DESIGN 01.09.15 06:30 AM

A BAMBOO TOWER THAT PRODUCES WATER FROM AIR



Securing water from the air

Securing water is hard in Africa. Therefore, we are looking for ways to take water from the air using bamboo. The cost of material is US \$ 550. Working with a group of four it takes a week to make 25 gallons (about 95 liters) of drinking water a day.



Make a grid-like bamboo tower with a height of 9.144 (m) and a width of 3.96 (m). No electricity is required.

Image Source: Gabriele
Diamanti

The mechanism for changing salt water into fresh water is simple: the black lid is heated by sunlight and the temperature in the container rises, causing the water to evaporate and the above to accumulate in the vessel. After waiting for a day, take out the whole water .



Simply put seawater in the kettle and leave it for a day to make drinkable water. No power is required. This kettle costs 50 dollars (5000 yen) Image Source: Gabriele Diamanti





Case in Kenya: Reservoir tank: 6000 liters in one tank, filled with solar panels in one hour. One person can use 10 liters of water a day. Kenya uses groundwater.



2018

**Tree Planting Activities at a school in Kenya/Isinya
(one child one plant movement)**



ICA Japan

Activities

We implemented environment education and training of vegetable garden and tree plantation at 4 elementary schools 、 Moi Girl school.

【Locations】 5 villages: Emamparisuai village、 Ilopolosat village, Natharian village, Lenchani village、 Isinya Town : Five villages take one hour from Nairobi Kenya.

【People】 Most of the population is Masai

【Environment 】 in the Semi -desert area, there is a small amount of rainfall during the rainy season(Oct. ~ November and April ~ May), but in recent years there has been little rain due to climate change.



Planting trees at Schools (One child one plant)

【Emamparisuai Elementary school 】



Children's parents also participate as volunteers in tree planting

Tree Plantation at School

【 Emamparisuai 】



Local Forestry Agency staff also participate to teach children

LENCHANI



Lenchani



Lenchani



Ilopolosat Village



Ilopolosat



Ilopolosat Elementary School



The first watering experience for the students

Moi Girl School



Moi Girl School students learn to plant



Dried grass is used to prevent soil surface from drying due to direct sunlight



Moi Girl School



Vegetable garden



Planting Papaya and beans

【Moi Girl School】

Drip irrigation was set up



Drip irrigation training for vegetable harvest



Children pouring water



ナセリアン小学校での植林

Planting trees at Natharian Elementary School



Masai women and children participated in watering

Muddy Road to Natharian



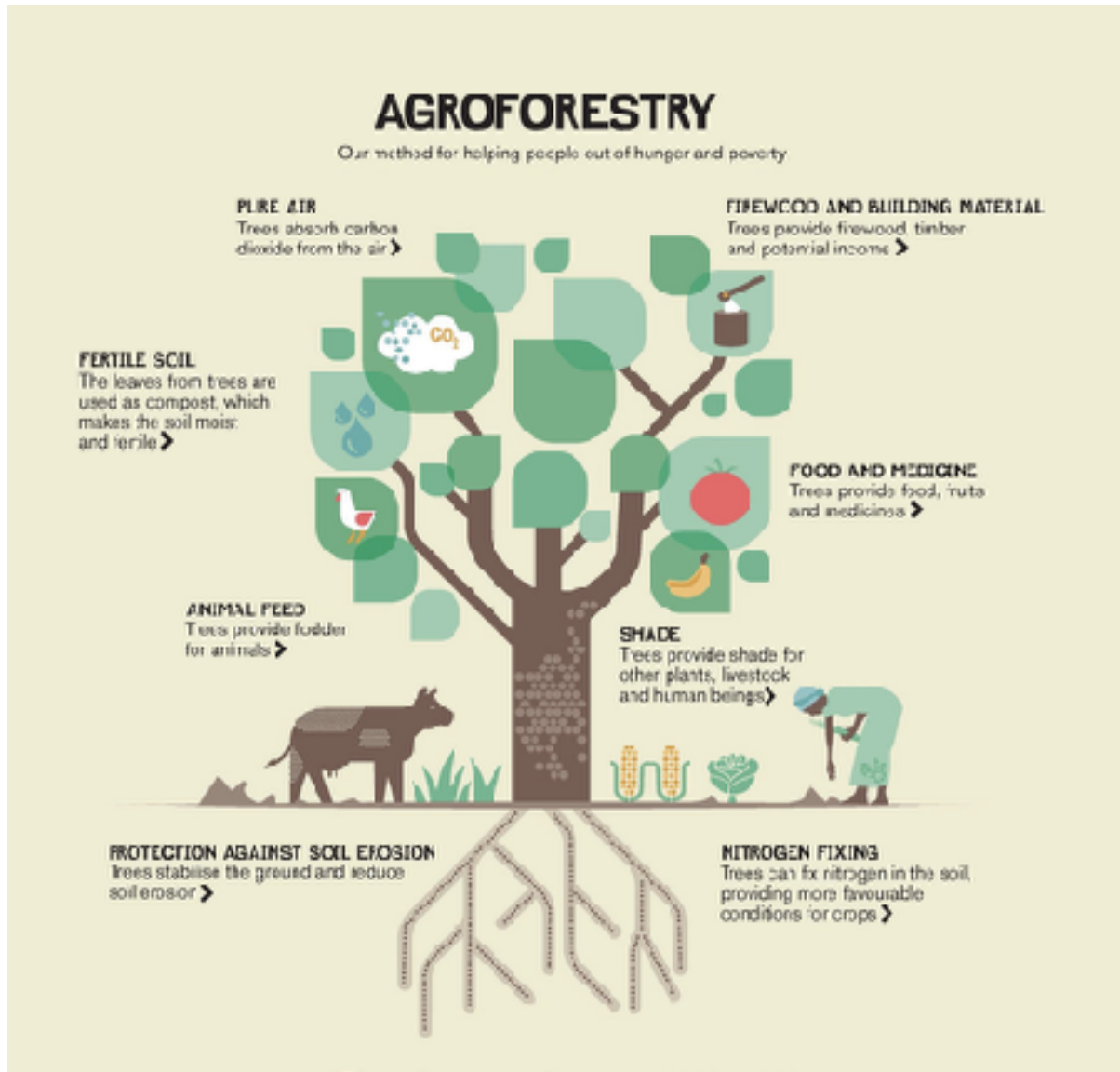
Emamparisuai



Emamparisuai Elementary school



AGROFORESTRY (ENG)



The Community Development Seminar in 2018





Photo with Participants in 2018



Volunteer

5. Level of Recognition

4. Support · Level of Support

3. Connection Levels

2. Main People

1. Project Name :

Purpose :

Goal :

Elements :

Implementation Plan :

Time :

Adjustment :

Technology
Cooperation

Funds
Cooperation

--Influence--

--Implementation--

Plan

--- Special ---
--- Action ---

----- Information Program -----

Private

Public

Area. Community

Result of the seminar - 2018

- **Group one**
Identified a project on water harvesting (dam).
- **Group two**
Identified a project on water purification.
- **Group three**
Identified a project on Agro-farming(Poultry).
- **Group four**
Identified a project on water harvesting and conservation.
- **Group five**
Identified a project on Dairy cow farming in order to increase the volume of milk production in the area.