# RCE Chubu and Bio-region Based ESD

**Toward 2014 World Conference on ESD** 

(End of the Decade Conference, UNESCO)

#### Reita Furusawa

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 Chubu University

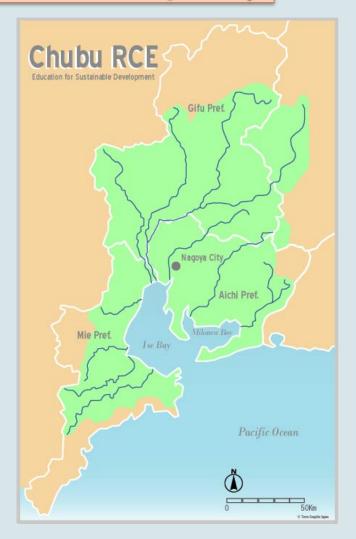
RCE Chubu

- Secretariat, RCE Chubu

## RCE Chubu (Central Japan)

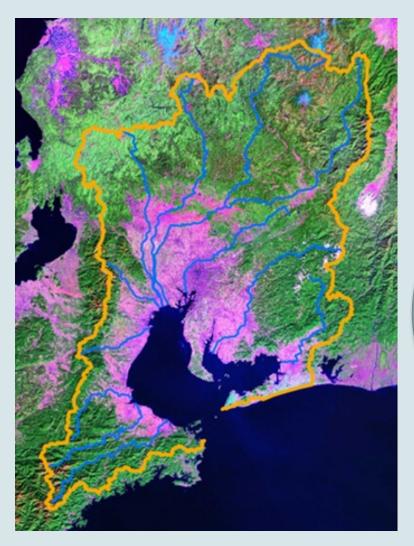


2007(Oct) Acknowledged by UNU. 2008 (Jan) Established RCE Chubu



### Chubu Area and the Environment

Ise Mikawa Bay



#### **Natural Environment**

Mountains: Hida,Kiso, etc.
Rivers: Kiso, Nagara, etc.
Bays: Ise Bay, Mikawa Bay

#### Social Environment

Urbanization: Nagoya city Depopulation: rural areas Multi-Cultural: foreign residents (foreign workers)

#### **Economic Environment**

Manufacturing: Toyota, etc. Commerce: Nagoya city Agriculture & Forestry: timber products, Flowers, etc.

## RCE Chubu Network

#### **Universities**

Aichi Gakuin University
Aichi Prefectural University
Chubu University
Nagoya Institute of Technology
Nagoya City University
Nagoya University
Gifu University
Nihon Fukushi University
Meijo University
Mie University

#### **High and Junior High School**

Chubu University Daiichi High School Haruhigaoka High School Haruhigaoka Junior High School

#### **Research Institutes**

San-En-Nanshin Center for Regional Collaboration, Aichi University
National Institute for Fusion science
Kinsyozan Fossil Association
Association of Ise Mikawa bay basins studies Chubu University
Association of Multi-cultural and Gender equality studies Chubu University

#### **Administrative Institutions**

Aichi Prefectural Government
Gifu Prefectural Government
Mie Prefecture
Kasugai City
Nagoya City Hall
Chubu Regional Environment Office
Chubu Bureau of Economy, Trade and Industry METI
"Chubu District Transport Bureau ,Ministry of Land,
Infrastructure, Transport And Tourism"
"Chubu Regional Bureau, Ministry of Land,
Infrastructure, Transport And Tourism"
"Chubu Regional Agricultural Administration Office,
Ministry of Agriculture, Forestry and Fisheries
Environmental Partnership Office Chubu
Nagoya Open university of the Environment

#### **NGOs and NPOs**

Children's Club for Love The Earth EXPO 2005 Volunteer Center Ai-Chikyu Platform ASK-NET IseMikawa.net Eco-Design Forum for Civic Society Eco Platform TOKAI Kachigawa-Ekimae Shopping Street

Citizens Environmental Foundation Gifu NPO Center Gifu Industrial Hemp Association International Green Citizen Association (IGCA) Alaska, its spirits and Michio Hoshino Support Center for Sustainable Regional Design DEE21(Digital Economy & Enterprise for the 21st. Century) Nagova International Center Nagova UNESCO Nissin Nature Observation Association Japan Oldest Stone Museum Nature Club Tokai Fujimae Ramsar Society Yamazakigawa River Green Map Chubu FSD-RCF Promotion Network (CERPN

RCE Chubu Commission

Secretariat
Chubu University

#### RCE Chubu and the Region



### Chubu Area and International Events

2005

2005 Japan International Exposition, Aichi Prefenture



2010

Convention on Biological Diversity

CBD (Convention on Biological Diversity) COP10, Nagoya City, Aichi Prefecture

World Conference on ESD, End of the Decade meeting, Nagoya City, Aichi Prefecture

2014

2005~2014: UN Decade of ESD(D-ESD)

## 2014 World Conference on ESD (UNESCO)

2009

The UNESCO World Conference on Education for Sustainable Development – Moving into the Second Half of the UN Decade (Mid Decade Conference)
2009, 31 March - 2 April 2009 Bonn

the conference aimed to highlight the relevance of ESD to all of education; promote international exchange on ESD, especially between countries of the North and the South; carry out a stock-taking of the implementation of the UN Decade, and develop strategies for the way ahead.



500 Participants

## 2014 World Conference on ESD (UNESCO)

## 2014

World conference on ESD, End of the decade meeting, Nagoya City, Aichi Prefecture

■ Aichi Pref. & Nagoya City (Main Venue)

**■**Okayama City

-Hokkaido Pref. & Sapporo Clty

- -Hamamatsu City
- -Aichi Pref. & Nagoya City
- -Okayama City
- -Kobe City
- -Kitakyushu City
- -Oita Pref.



# CBD COP10 Aichi Nagoya 18~28<sup>th</sup> Oct 2010





- Nagoya Protocol on ABS
- Aichi Target (Post 2010 Target)
- O UN Decade of Biodiversity (2011-2020)









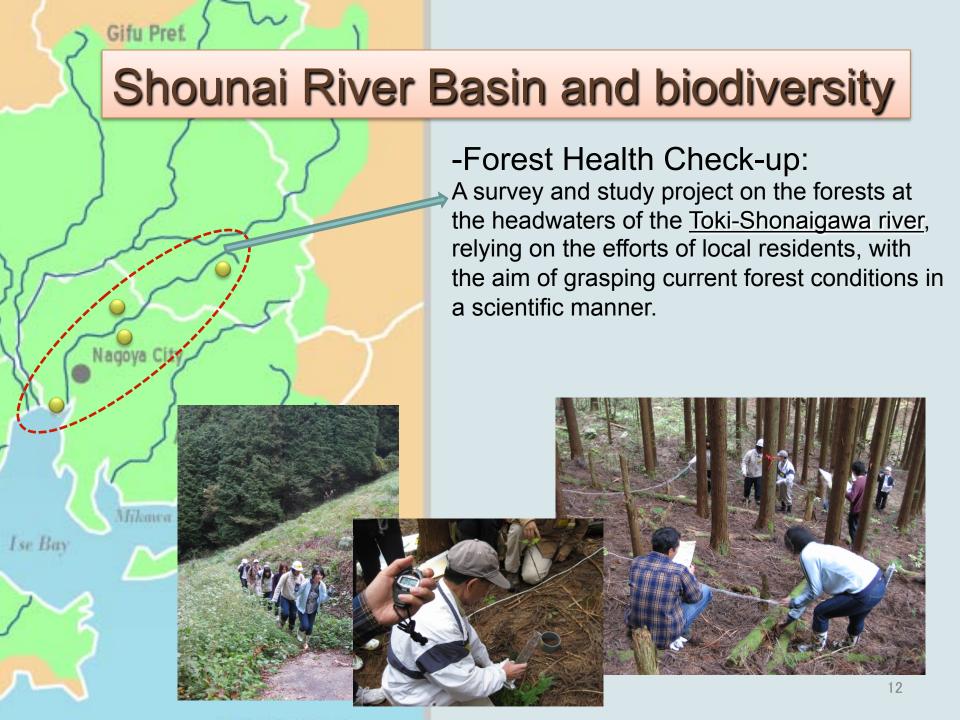
## RCE Activities during the COP10





生物多様性保全のために ESD (持続可能な発展のた めの教育)が果たす役割 The Roles of ESD for Biodiversity Conservation ~世界と日本のRCE(国連大学がつなぐESD地域拠点)の取り組み~ -The Networking of UNU's Regional Centres of Expertise on Education for Sustainable Development-10/20 15:30~17:30 ① フォーラム Forum 場所: 生物多様性交流フェア・フォーラム会場・名古屋学院大学体育館・大会場 主催: RCE中部(中部ESD拠点)、RCE仙台広域圏、RCE横浜、RCE兵庫・神戸、RCE岡山、 RCE北九州、国連大学高等研究所(UNU-IAS)グローバルRCEサービスセンター Venue: Nagoya Gakuin University Gymnasium (Large Hall) -Interactive Fair for Biodiversity Presented by: RCE Chubu, RCE Greater Sendai, RCE Yokohama, RCE Hyogo-Kobe, RCE Okayama, RCE Kitakyusuh, United Nations University-Institute of Advanced Studies (UNU-IAS) Global RCE Service Centre ワークショップ「生物多様性とESD~今後の連携に向けて~」 Biodiversity and ESD -for Further Collaboration- (workshop) 10/20 18:00~19:302 ワークショップ Workshop 場所: 名古屋学院大学体育館・小会場1 Interactive Fair for Biodiversit **\*\* Language: Japanese with simultaneous English interpretation** ESD Education for Sustainable Development 2005

国連「持続可能な開発のための教育(ESD)の10年」2005~2014





Gifu Pref.

Ise Bay

## Shounai River Basin and biodiversity

#### -Fujimae Tidal Flat Conservation:

Fujimae-Higata is a tidal flat at river mouth of Shonai River, Shinkawa River and Nikko River that flow into the port of Nagoya.

This site is one of the staging sites of East Asia - Australia Flyway. A lot of migratory shorebirds, ducks and herons also use this site as feeding and resting area. The number of shorebirds that visit this site is one of the largest in Japan. So,Fujimae-Higata had been registered in "Ramsar Convention" on November 18, 2002.

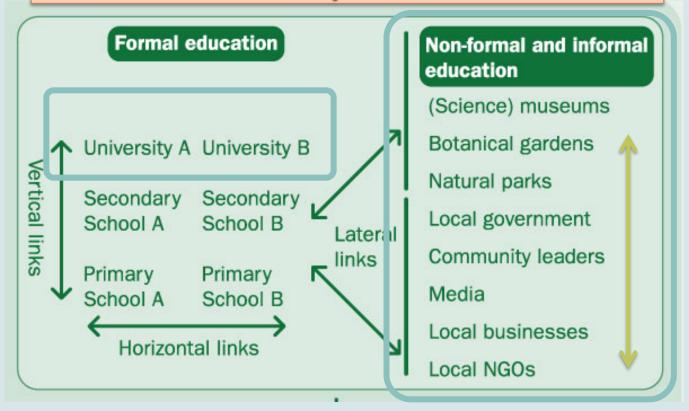






http://minnanomirai.asablo.jp/blog/ 2009/06/06/4350394

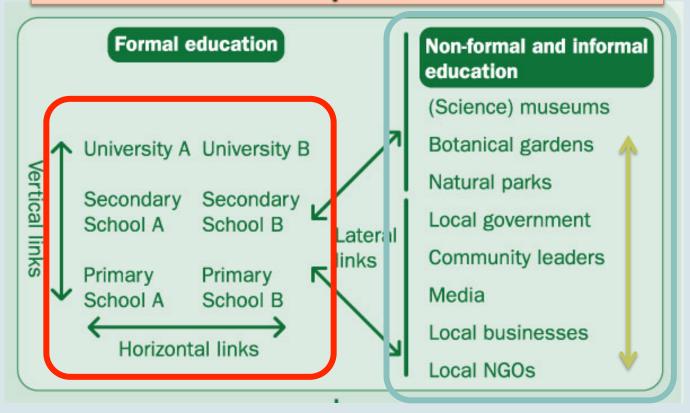
## RCE's Concept of Education



An RCE is a network of existing formal, non-formal and informal education organisations, mobilised to deliver education for sustainable development (ESD) to local and regional communities. A network of RCEs worldwide will constitute the Global Learning Space for Sustainable Development. RCEs aspire to achieve the goals of the

<u>UN Decade of Education for Sustainable Development</u> (DESD, 2005-2014), by translating its global objectives into the context of the local communities in which they operate.

## RCE's Concept of Education



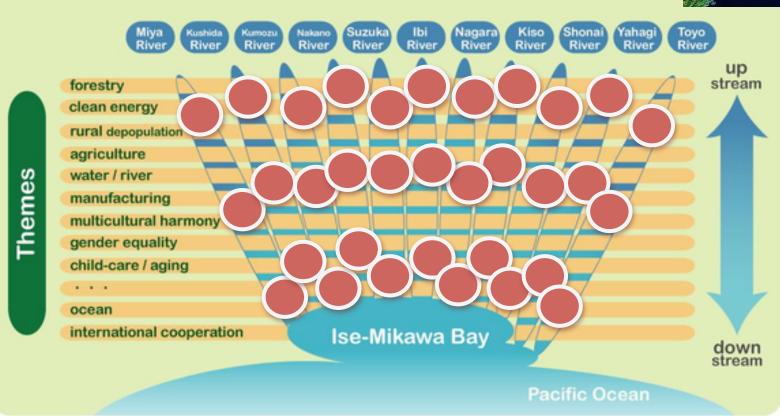
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#### **Bio-region ESD Lecture Series**

#### Ise-Mikawa Watershed

(The rivers empty into Ise-Mikawa Bay)



#### Developing Strategies of for 2014

- How we put the outcomes of RCE activities to the world conference on ESD (organized by UNESCO) as an input?
  - Analyzing each RCE's activities
  - -Domestic and regional communication
  - -Total wrap-up of RCE initiative
  - → Communication with UNESCO and etc.
  - → 2014 World Conference on ESD
  - → post DESD (2015~)

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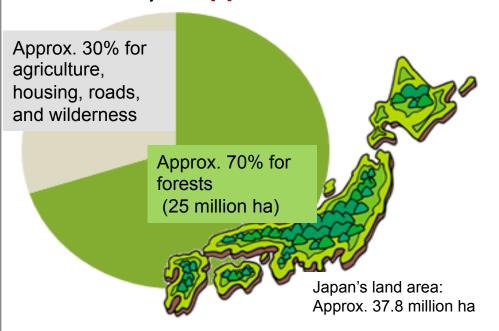




## Japan's Forests

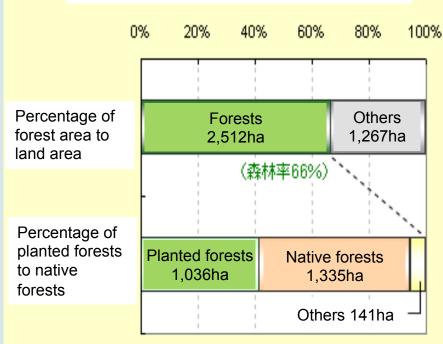


## Forest coverage rate (percentage of forest area) is approx. 70%.



\* World's average forest coverage rate is 30%.

#### **Japan's Forest Category**



Planted forests account for 40% of Japan's forests.

The forestry industry has been on the decline since timber imports were liberalized in 1964. Although trees were planted thanks to the government's afforestation project in 1954, most of them have been unattended. Without being thinned for about 40 years, these planted trees have become overgrown. As a result, one out of every five people now suffers from hay fever in spring due to the large amount of pollen from trees such as the cedar and Japanese cypress.



This picture shows the typical condition of unattended planted forests.

## Planted forests safe and secure for people

(Forests favorable for rainwater infiltration and resistant to floods)

Dark forest floor Less grasses Less organic matter in the soil Others Insecure and dangerous fores

Rainwater is difficult to penetrate underground, and flows over the ground directly into rivers. Only a small amount of water can be retained by the forest.

Directly to rivers

Light forest floor More grasses More organic matter in the soil Others

Safe and secure forests

Rainwater can sufficiently penetrate underground and be supplied slowly to rivers. A large amount of water can be

retained by the forest.

# Forests in the Upstream Basin Landslide occurring Source: Material prepared by the investigation team of Japan Society of Civil Engineers (Upper Yahagi River)



Source: Toyota Yahagi River Institute "Tokai Rainstorm"

Background

## Tokai Rainstorm in Sept. 2000

Hit Tokai Region, especially Nagoya City (Aichi, Gifu, and Mie Prefs.)

Caused by the autumn rain front and Typhoon No. 14.

Rainfall per night: About half of the annual rainfall

Total rainfall: Max. 589 mm

Rainfall per hour: Max. 114 mm/h

Flood damage and landslides occurred.

Picture of a city in the downstream basin



Death toll: 10 people
Minor and sever injury toll:
115 people
Flooding above floor level:
22,894 houses
Flooding below floor level:
46,943 houses



## Forest Health Check in the Headwater Basin of the Toki and Shonai Rivers

Investigation:

(Health index)

- Investigation of vegetation
- Investigation of denseness
- Measurement of infiltration capacity







- **eport**
- Scientific assessment by researcher group
- Annual report meeting and report issuance
- Information exchange with other areas



Forest Health Check Reports

Continue annual forest health checks for 10 years

Objective: Understand the current situation of planted forests in the headwater basin

Deterioration due to poor management is the cause of soil runoff, landslides, and floods.

Cooperation between civic groups, ordinary citizens, researchers, and government

Understand the current situation by conducting scientifically-based investigations in many locations, and use the information to determine countermeasures.

- Inform as many people as possible about the problems
- Get as many contributors as possible to resolving problems
- Develop next-generation human resources





Forests conservation, Students' initiative, Cooperation, Local revitalization
Specialized knowledge and research, Leading to sustainable development, Learning with each other among different generations



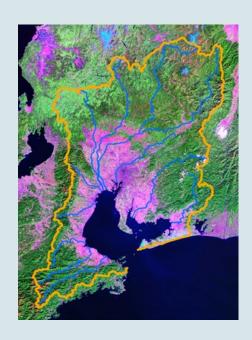


## COP10 Satoyama Lunchbox

## COP10 Satoyama Lunchbox <a href="From Satoyama">From Satoyama in Ise-Mikawa Bay watershed></a>

- The bounties of Satoyama
- Cooking ingredient from Ise-mikawa Bay watershed

Presented by: Ministry of the Environment of Japan (MOEJ) / United Nations University Institute of Advanced Studies (UNU-IAS)
Planning Supported by: RCE Chubu
Cooked by: Meitetsu Grand Hotel
"Oriental White Stork" Organic Rice is Donated by "The farming to call back the Konotori of Association" in Echizen City, Fukui



# Satoyama Lunchbox

# 品書き Menu

**★**=Non-Vegetarian Food

おにぎり三種 and Seaweed from Noma, Mihama, Aichi) Three Rice Balls (The "Oriental White Stork" Organic Rice in Echizen City, Fukui (福井 県越前市コ りを呼び戻す農法米と愛知県美浜町野间の板海苔

うめぼしのおにぎり (三重県熊野市)

Pickled Plum Rice Ball (Kumano, Mie) \*WARNING! Sour and Salty!

Mushroom (Buna-Shimeji and Shiitake) Rice Ball (Takayama/Ena, Gifu) ぶなしめじと推茸の炊き込み御飯の おにぎり (岐阜県高山

小女子山椒煮のおに ぎり (爱知県師時港

奥三河鶏の八丁味噌漬け Small Fish (Kounago) Rice Ball (Morozaki, Aichi) 🖈 (爱知県奥三河高原の鶏と岡崎市

Giant Clam in a Sea Bream Fish Cake (Irago, Aichi) ★ 大浅利のは Chicken (Okumikawa-Kogen) with Miso Sauce (Okazaki, Aichi) (爱知県伊良湖港) ※伊良湖産天然銅すり

栗の甘露煮 Stewed Chestnut in Soy Sauce and Sugar (Seki, Gifu, (岐阜県関市)

里芋の田舎煮 Country Style Boiled Taro (Minokamo, Gifu) (岐阜県美濃加茂市)

大根の Boiled Radish (Hirugano Kogen, Gifu) with Sweet Miso Sauce (Okazaki, Aichi) 風呂炊き甘味噌か it (岐阜県ひるがの高原)

守口大根 Pickled Radish (Oguchi-Cho, Aichi) (爱知県丹羽郡大口町

Sweet and sour lotus (Tatsuta-Mura, Aichi)

甘酢蓮根

(爱知県支田村)

Menu Paper (Mino Japanese Paper, Mino, Gifu) Gifu by NGO: Toki/Shonai River Support Center) Chopsticks (made of woods thinned from forests in Ena Bamboo Cup (Asuke, Toyota, Aichi) Bamboo Leaf for Wrapping (Ena, Gifu) (岐阜県恵那市の杉同伐村:NPO法人土岐川 (岐阜県美濃市の美濃和 白米 (福井県越前市) Rice (Echizen City, Fukui) Buna-Shimeji 大根 Radish 美滤和纸 行皮と同伐村着 Paper O O Bamboo lee 里芋 Taro O 守口大根〇 Moriguchi Radish 奥三河鸱 Chicken 莲根 lotus ONAGOYA O时间

Kounao

Umeboshi

(plum pickles)

O 3A Sea Bream

·三河湾流域圏

Ise-Mikawa Bay Watershed

JSE-MJKAWA BAY

行简

(爱知県豊田市足助)

センタ

行皮

(岐阜県恵那市)

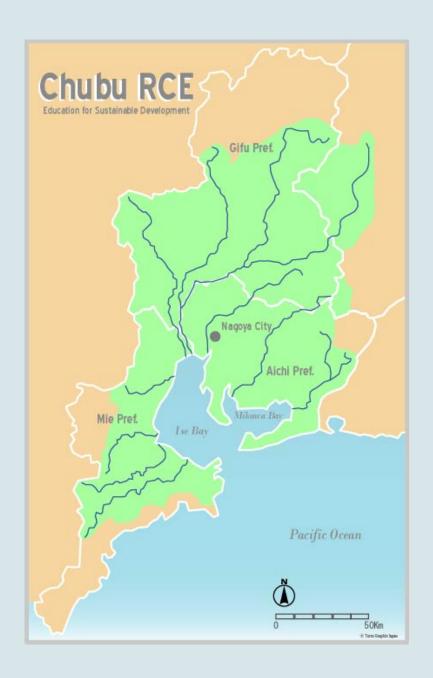
提供:環境省·国連大学高等研究所

Presented by: Ministry of the Environment of Japan (MOEJ) / United Nations University Institute of Advanced Studies (UNU-IAS) 企画協力:RCE 中部(中部 ESD 拠点:国連大学認定世界 77 箇所の ESD 〈持续可能な阉発のための教育〉地域拠点のひとつ) Planning Supported by: RCE Chubu (One of 77 UNU's "Regional Centres of Expertise on Education for Sustainable Development" in the world) 制作: 名鉄グランドホテル Cooked by: Meitetsu Grand Hotel

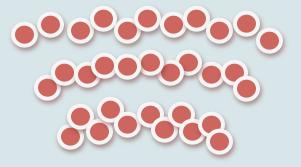
協賛:コウノトリ呼び戻す農法部会

"Oriental White Stork" Organic Rice is Donated by "The farming to call back the Konotori of Association" in Echizen City, Fukui

※ 里山の恵みだけで作った里山弁当から出る廃棄粉は、里山で堆肥にして土に返しますので、収集にご協力ください。 \* As these all organic ingredients and natural packages will be composted to a sustainable Satoyama landscape, we thank you for your cooperation in collecting your containers.







## COP10 Satoyama Lunchbox

~ The Gustatory Declaration of Biodiversity Conservation ~





#### **Packages**

- Bamboo Leaf for Wrapping (Ena, Gifu)
- Bamboo Cup (Asuke, Toyota, Aichi)
- Chopsticks (made of woods thinned from forests in Ena, Gifu by NGO: Toki/Shonai River Support Center)
- Menu Paper (Mino Japanese Paper, Mino, Gifu)
- \*As these all organic ingredients and natural packages will be composted to a sustainable Satoyama landscape, we thank you for your cooperation in collecting your containers.



#### Thematic groups

- Health and ESD (Catherine Matheson, RCE-Sudbury, Zainal Sanusi, RCE Penang) (Aqualab)
- Biodiversity, Ecosystems & ESD (André Champoux, RCE Montreal, Reita Furusawa, RCE - Chubu, Shyamala Mani, RCE - Kodagu, Yoshi Natori, IAS-UNU) (Room Connexion)
- SCP (Zinaida Fadeeva, & Arimar Vieira, IAS-UNU, Jos Eussen, RCE-Rhine-Meuse) (Arts & Craft)
- Role of Higher Education Institutions (HEIs) for ESD (Kiran Chhokar, RCE Samara, Jim
- Youth (Jos Hermans, RCE Rhine-Meuse, Eko Ernada, RCE East Kalimatan, Mandla Mlipha, RCE Swaziland) (Conference Room)
- Better Schools for ESD (Okorie Okoro, RCE Lagos, Chuck Hopkins, York University) Room Connexion)
- E-Learning (Anjeela Jokhan, RCE Pacific, André Champoux, RCE Montreal)
   (Aqualab)
- Poverty & Environment (Ali Bukar, RCE Kano, Zinaida Fadeeva, IAS UNU)
   (Planet Bucky)
- Climate change (Lyle Benko, RCE Saskatchewan) (Arts & Craft Room)

## Objectives of DESD

- •Give an enhanced profile to the central role of education and learning in the common pursuit of sustainable development.
- •Facilitate <u>links and networking</u>, exchange and interaction among stakeholders in ESD.
- •<u>Provide a space and opportunity</u> for refining and promoting the vision of, and transition to sustainable development through all forms of learning and public awareness.
- •Foster increased quality of teaching and learning in education for sustainable development.
- Develop strategies at every level to strengthen capacity in ESD.

(UNESCO DESD Draft International Implementation Scheme (IIS), p.4)

## United Nations University's RCEs

An RCE is a network of existing formal, non-formal and informal education organisations, mobilised to deliver education for sustainable development (ESD) to <u>local and regional communities</u>.

Core elements of an RCE

An RCE should have four elements:

- 1. Governance addressing issues of RCE management and leadership
- 2. Collaboration addressing the engagement of actors from all levels of formal, nonformal and informal education
- 3. Research and development addressing the role of research and its inclusion in RCE activities, as well as contributing to the design of strategies for collaborative activities, including those with other RCEs
- 4. Transformative education contributing to the transformation of the current education and training systems to satisfy <u>ambitions of the region</u> regarding sustainable living and livelihood.



#### Acknowledged RCEs

#### Europe

Sweden Spain
Skane Barcelona
UK Portugal
East Midlands Creias-Oeste

Severn Porto Metropolitan Area
North East Southern North Sea

Vorkebirg 8

Yorkshire & Austria
Humberside Graz-Styria
Ireland Russia
Germany Samara
Hamburg

Nuremburg Munich Netherlands Rhine-Meuse

#### Asia-Pacific

China

Beijing

Anji

Pacific

Pacific

Kyrgyzstan
Kyrgyzstan
India
Japan Guv
Greater Sendai Dell
Yokohama Luck
Chubu Pun
Hyogo-Kobe Kod
Okayama Bang
Kitakyushu Philip
Korea Ceb
Incheon Nor

Guwahati Delhi Lucknow Pune Kodagu Bangalore Philippines Cebu Northern Minadanao Ilocos Thailand Cha-Am Trang Malaysia Penang Indonesia East Kalimantan Yogyakarta

Bogor

#### Middle East & Africa

Jordan

Egypt

Cairo

Maputo

Swaziland

Nigeria
Kano
Lagos
Ghana
Kenya
Greater Nairobi
Kakamega-Western Kenya
Uganda
Greater Mbarara
Malawi
Zomba
Mozambigue

South Africa Kwa-Zulu Natal Makana & Rural Eastern Cape

#### **Americas**

Canada
Saskatchewan
Greater Sudbury
Montreal
Toronto
USA
Grand Rapids
North Texas
Mexico
West Jalisco
Guatemala
Columbia
Bogota
Brazil
Curitiba-Parana

- ■Three Rice Balls (Organic Rice in Echizen City, and Seaweed from Noma)
  Pickled Plum Rice Ball (Kumano, Mie) \*WARNING! Sour and Salty!
  Mushroom (Buna-Shimeji and Shiitake) Rice Ball (Takayama/Ena)
  Small Fish (Kounago) Rice Ball (Morozaki, Aichi) ★
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