

日独シンポジウム「地方創生ためのチャンスとして温暖化  
対策 ―日本とドイツにおける再生可能エネルギー―  
パネルディスカッションが「持続可能な地方行政に向けての  
ステークホルダーの関係」

# 農山村の持続可能な地域づくり ― 高千穂郷・椎葉山地域における バイオマスビレッジへの展望 ―

2015年10月5日

大和田順子

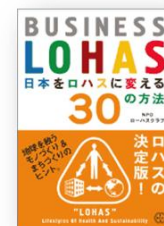
一般社団法人ロハス・ビジネス・アライアンス 共同代表

# 大和田順子 自己紹介

- ▶ 東急百貨店マーケティング部、東急総合研究所生活行動研究室研究員、ザ・ボディショップ（イオンフォレスト）コミュニケーション部長・販促部長、イースクエアマーケティングディレクター等を経て2006年独立。
- ▶ 2002年に日本にLOHAS（ロハス）を紹介。宮城県大崎市、福島県いわき市、埼玉県小川町など、全国各地で有機農業や生物多様性、再生可能エネルギーを活かしたサステナブルな地域づくりに参画。企業と農山村をつなぐCSR・CSV活動にも注力
- ▶ 環境カウンセラー／消費生活アドバイザー／総務省 地域資源・事業化支援アドバイザー／世界農業遺産 専門家会議委員／農水省バイオマス専門家会議委員



日本で初めてロハスを紹介した記事



『日本をロハスに変える30の方法』  
(2006年 講談社)



『ロハスビジネス』  
(2008年 朝日新書)



『アグリ・コミュニティビジネス』  
(2011年 学芸出版社)

# 再生可能エネルギー関連

## 市民が主体の、地域の資源を活用した再エネ地域づくり

地域	内容	活用事業・関わり
宮城県大崎市	・蕪栗沼 葦ペレット製造・利用	2011年～総務省緑の分権改革調査事業 アドバイザー
福島県いわき市	・市民による再エネ導入：市民主体の法人「いわきおてんとSUN企業組合」設立 ・太陽光発電（ソーラーシェア含む）50kw ・再エネ普及啓発：再エネ電源車「おてんと号」	2012年～総務省緑の分権改革調査事業 アドバイザー
岩手県紫波町	・市民による「里エネ紫波」ネットワーク設立 オガールタウンへのバイオマス熱供給、町内での分散型1M太陽光（サステナジー社）	2014年～W-BRIDGE委託研究 アドバイザー
長野県池田町	カミツレの里 バイオマスボイラー導入 「ハーバルヘルスツーリズム」	2013年～長野県、池田町 地方創生交付金 アドバイザー
全国	2013年～14年 「まちエネ大学」	資源エネルギー庁、講師

<委員会（2015年度）>

滋賀県：「新しいエネルギー社会づくりを考える懇話会」委員

農水省：「バイオマス活用推進専門家会議」委員

# 日本が直面する逆境

- ▶ 人口減少
- ▶ 過疎、高齢化
- ▶ 耕作放棄地の増大
- ▶ 森林の荒廃
- ▶ 獣害
- ▶ 低い木材自給率
- ▶ 低い食糧自給率
- ▶ 低いエネルギー自給率
- ▶ 進む都市集中
- ▶ 進む気候変動

# Revitalization of Rural Areas $\Rightarrow$ Shift to a Sustainable Society

Oil-dependent mass-production and mass-consumption economy and society

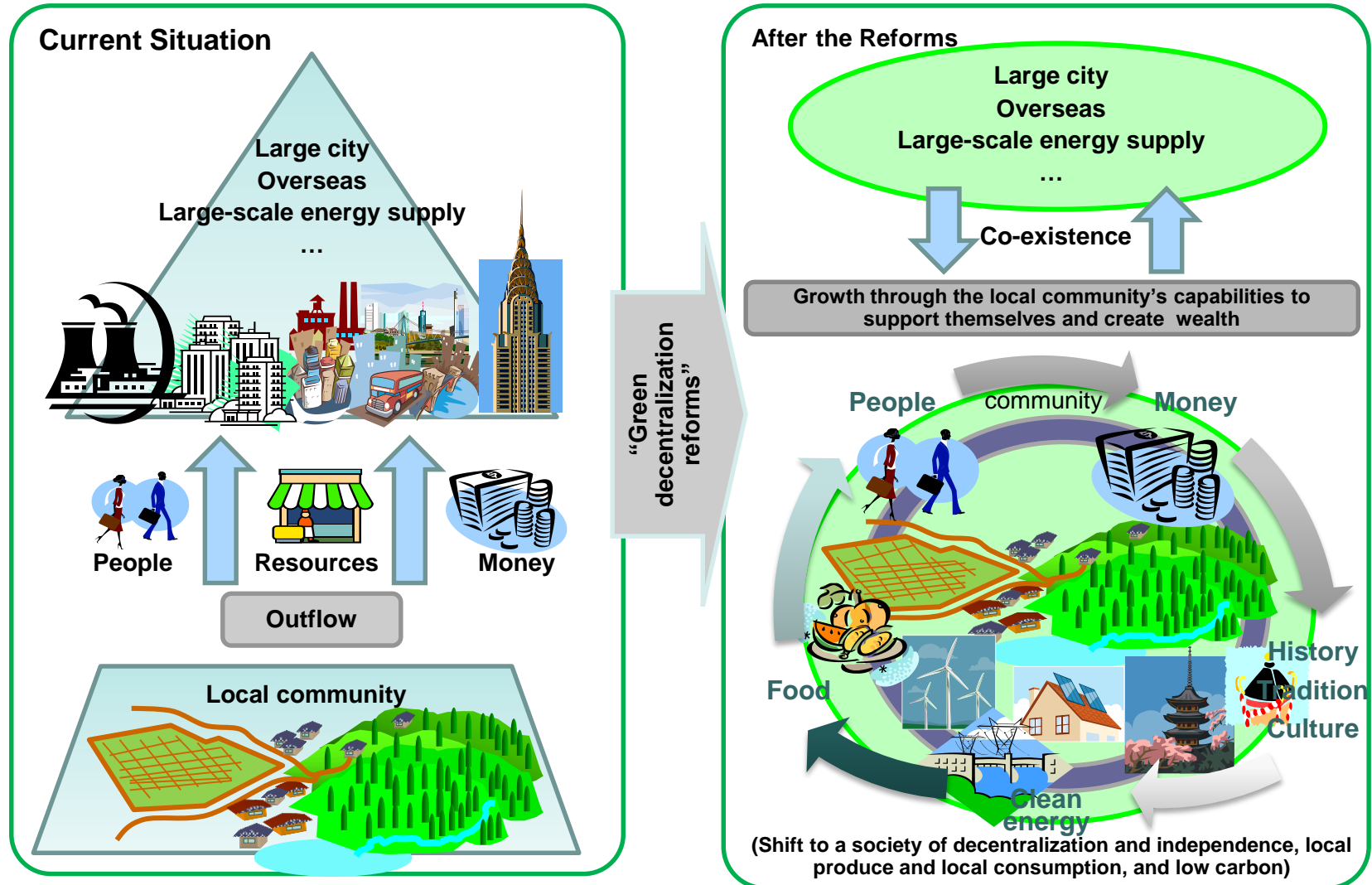


Creation of “*satoyama* community economy” with a focus on natural energy, regional resources, and local production



Source: *In Transition 2.0: a story of resilience and hope in extraordinary times*, Transition Network (U.K.)

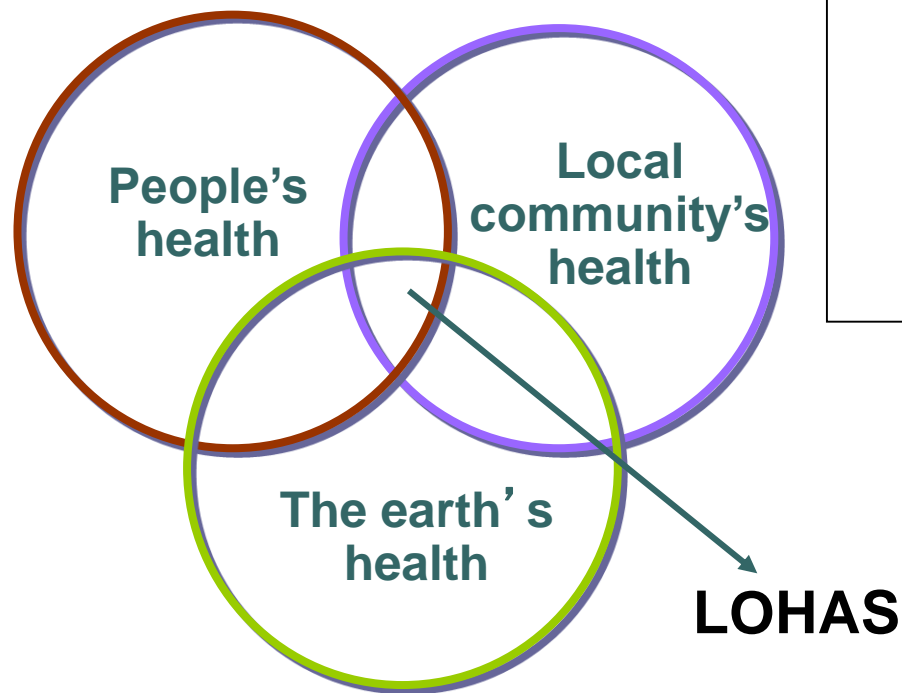
# Key to Revitalization of Rural Areas – Creation of Economic Schemes for Ensuring a Circular Flow in Local Communities





# Lifestyles with Consideration for Health and Sustainability

## LOHAS: Lifestyles Of Health And Sustainability



<Consideration for three items>

Consideration for the  
**next generation**

Consideration for  
**developing countries**

Consideration for  
**other animals and plants**



# LOHAS LIFESTYLE 2

## <Eating>

- Domestic production (local production and local consumption)
- Organically grown produce
- Additive-free foods
- Macrobiotic
- Food mileage & water mileage

## <Wearing>

- Organic cotton, bamboo cloth, corn
- Reuse & recycling
- Organic cosmetics

## <Living>

- Houses made of natural materials & low-energy houses
- Use of solar power, wind power, biomass (firewood & pellets), and rainwater
- Domestically grown materials
- Kitchen gardens





# LOHAS LIFESTYLE 2

## <Sightseeing & Tourism>

- Appreciating the magnificence of nature with the five senses
- Green tourism
- Forests & biodiversity
- Local seasonal foodstuffs and seasonal views
- Pleasure of study, interaction, and creation



## <Mental and Physical Health>

Yoga & meditation

<Alternative Medicine>

Herbal medicine, traditional

Chinese medicine, traditional

Chinese breathing exercises

Homeopathy

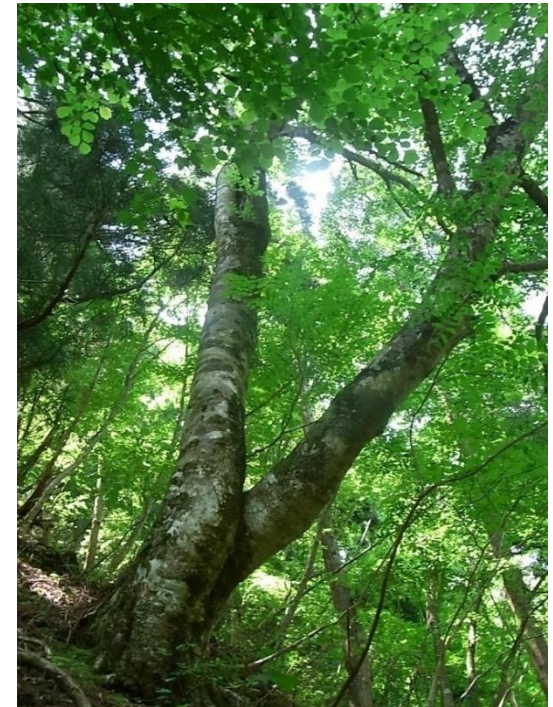
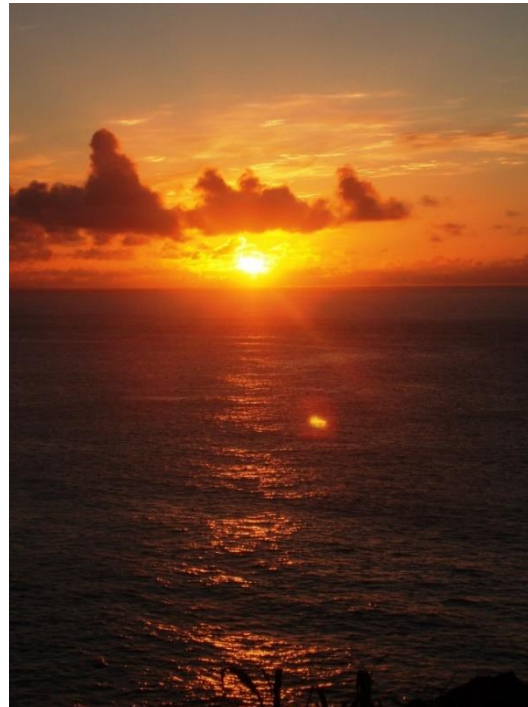
Ayurveda

Aromatherapy

Acupuncture & osteopathy

Forest therapy, etc.

<Integrative Medicine>



# SUSTAINABLE ECONOMY

## Sustainable Economy and Society

- High-level food sufficiency
- High-level energy sufficiency: natural (renewable) energy
- Urban planning: sustainable city, compact city, smart city
- Transportation: public transportation, car sharing, bicycle use
- Architecture: green building
- Investment: social responsibility investment (SRI), investment by citizens, and more



# Globally Important Agricultural Heritage Systems (GIAHS)



- Globally Important Agricultural Heritage Systems (GIAHS)
- This is a project launched in 2002 by the Food and Agriculture Organization (FAO) of the United Nations.
- Thirty-one areas in 13 countries in the world are certified (as of June 2014).
- Behind the establishment of the systems is the fact that excessive emphasis on productivity as a result of the progress of modern farming has generated environmental problems around the world, such as deforestation and water pollution, and has also led to the destruction of distinctive local cultures, scenery, biodiversity, and other characteristics.
- The purpose of Globally Important Agricultural Heritage lies in systematic maintenance and preservation of a “local system,” which consists of 1) traditional farming practices and methods, 2) land use with biodiversity being preserved, and 3) rural culture and scenery, all of which are now being lost in the progress of modernization, but should be protected through the full use of the environment of respective land, and entrusting of the local system to the next generation.

・国連食糧農業機関（FAO）が平成14年（2002年）から開始したプロジェクト。次世代に継承すべき伝統的な農林業の「システム」を認定し、その保全と持続的な利用を図るもの。（農林業そのものだけでなく、それによって生み出された景観や生物多様性、文化なども含む）





**1** Sado's *satoyama* in harmony with crested ibis, Japan

In Sado, Niigata Prefecture, there are paddy fields, including terraced ones, developed through the history of gold mines. In such fields, winter-time lake irrigation and other farming methods for nurturing living things are promoted. In addition, Sado City has launched a certification system regarding such farming methods. Moreover, these farming methods have ties with the development of various forms of farming culture, such as *noh* performances and *onidaiko* drum playing, enabling the preservation of Sado's unique nature, scenery, culture and biodiversity.



**2** Noto's *Satoyama* and *Satoumi*, Japan

Featuring beautiful farming scenery, Noto, Ishikawa Prefecture, has inherited excellent scenery of *satoyama* containing terraced fields and reservoirs, and traditional skills utilizing *satoumi* resources, such as catching shellfish and fish by female divers and salt production using brine pumped up out of the ocean. In addition, the area has rich customs and culture tied with farming, such as Aenokoto and the Kiriko Festival.



**3** Traditional tea-grass integrated system in Shizuoka (Local name: Chagusaba), Japan

In and around Kakegawa, Shizuoka Prefecture, farmers are engaged in a traditional farming method using *chagusaba*. In this system, *chagusa* (dried grass) from *chagusaba* (fields of Japanese pampas grass or other plants) near tea fields is used to enrich the soil of the tea fields. While enhancing the quality of the tea leaves, the system contributes to the preservation of biodiversity unique to such semi-natural grasslands.



**4** Managing Aso Grasslands for Sustainable Agriculture, Japan

In Aso, Kumamoto Prefecture, there is a more than 1,000-year-old tradition of *noyaki* (field burning). This grassland management method prevents excessive growth of plants, while securing grass resources necessary for growing *akashi* cattle. Thus, the sustainable agriculture contributes to the maintenance of the magnificent natural scenery.



**5** Kunisaki Peninsula Usa Integrated Forestry, Agriculture and Fisheries System, Japan

Usa, Kunisaki Peninsula of Oita Prefecture, is Japan's largest producer of dried *shiitake* mushrooms cultivated on withered tree logs, as well as being Japan's only place where there is a combination of paddy rice cultivation and Chinese-mat-grass growing. Thus, in the area, residents are engaged in a wide variety of forms of agriculture, forestry, and fisheries, which are sustainably maintained by the country's largest Japanese chestnut oak forest and reservoirs linked with the forest.



**6** Ifugao Rice Terraces, Philippines

The Ifugao tribe's terraced-field system through the cultivation of a paddy-rice species resistant to the severe environment of land 1,000 m above sea level, as well as a skillful irrigation method



**7** Rice-fish Culture, China

About 2,000-year-old system in which rice fish protect paddy fields from harmful insects and weeds, and also serve as alternative fertilizer, food, and a source of income



**10** Xuanhua Traditional Vineyard System, China

More than 1,300-year-old urban agricultural system in which grapes, the area's specialty, are cultivated in household gardens



**11** Wannian Traditional Rice Culture, China

System in which native rice is grown and the area's traditional rice culture has been handed down



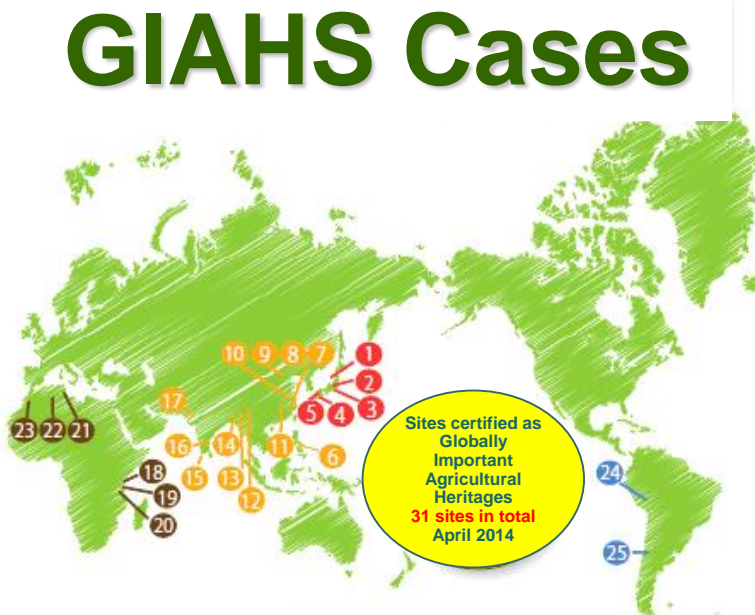
**14** Pu'er Traditional Tea Agrosystem, China

System in which tea plants are nurtured for more than 1,800 years in this tea production area and the ancient tea culture has been inherited



**15** Kuttanad Below Sea Level Farming System, India

System in which people grow rice and other crops in paddy fields on land below sea level, while they are also engaged in fisheries



6 sites in Africa

23 sites in Asia

2 sites in South America



**8** Kuajishan Ancient Chinese Torreya, China

About 2,000-year-old system for planting Chinese Torreya, using grafting skills, in order to obtain high-quality fruits



**9** Aohan Dryland Farming System, China

A dryland farming system in which foxtail millets and common millets are grown, and Chinese ancient farming practices are connected with the grassland culture



**12** Dong's Rice Fish Duck System, China

More than 1,000-year-old system in which the Dong tribe grows fish and ducks, in addition to a wide variety of agricultural produce, in paddy fields



**13** Hani Rice Terraces, China

Rice terrace system established in the mountain village of the Hani tribe and maintained through the use of the forest and a unique irrigation system



**16** Traditional Agriculture Systems, Koraput, India

Systems in which many ethnic minorities live primitive agricultural lives, and a wide variety of species of rice and indigenous plants are grown



**17** Saffron Heritage of Kashmir, India

More than 2,500-year-old system that 17,000 households still use for growing indigenous saffron



**18** Cattle Breeding by the Maasai Tribe, Tanzania/Kenya

The Maasai-Dabado tribe's cattle breeding system based on their long-established customs and traditional knowledge handed down to the natives



**20** Shimbwe Juu Kihamba Agro-forestry Heritage Site, Tanzania

System in which a wide variety of items, such as coffee and food crops, are grown together with bananas, and also trees used as lumber



**21** Oases of the Maghreb, Tunisia and Algeria

System in which a wide variety of fruits and vegetables are produced in the oases that have been maintained for a few thousand years in the severe environment of the Maghreb region



**22** Oases System in the Atlas Mountains, Morocco

System in which a wide variety of trees and crops are grown in the oases established by the native Pelupelu tribe in the Atlas Mountains



**24** Andean Agriculture, Peru

System in which ditches are constructed around potato fields 4,000 m above sea level, and water is heated by sunlight, and the heated water is flown into the fields during the nighttime



**25** Chiloé Agriculture, Chile

System in which about 200 varieties of indigenous potatoes are grown based on ancestral practices transmitted orally by native people, mostly women

# Five Domestic Sites Certified as GIAHS

Area	Agriculture, forestry, fisheries method	Biodiversity	Culture and festival	Scenery	Major agricultural produce
Sado	Farming method for nurturing living things	Crested ibis and living things in terraced fields	<i>Noh</i> performances and <i>onidaiko</i> drum playing	Terraced fields	Rice
Noto	<i>Haza-hoshi</i> rice drying Catching shellfish and fish by male divers	Living things in terraced fields	Aenokoto, an agricultural ritual	Senmai terraced fields and archetypal images of agricultural, mountain and fishing villages	Rice and marine products
Shizuoka	<i>Chagusaba</i> method	Seven autumn flowers Kakegawa Melanoplinae	Tea culture	Tea fields	Tea
Aso	Agricultural method using grassland	Grassland animals and plants	Onda Festival and a fire-swing Shinto ritual	Extensive grassland	<i>Akaushi</i> cattle, vegetables, rice, and flowering plants
Kunisaki Peninsula	Reservoirs and Japanese chestnut oak forest	Horseshoe crabs and Oita salamanders	Rokugo Manzan culture, Shujo Onie Festival, and Doburoku Festival	Rural scenery of Osaki, Tashibunosho	<i>Shiitake</i> mushrooms cultivated on withered tree logs, and rice





# 2014年10月、新たに3地域が国内認定！

## 岐阜県 長良川上中流域 【里川における人と鮎のつながり】

鮎を中心とした内水面漁業が盛んな長良川は、流域の人々の日々のくらしや水質保全活動により清らかな流れが保たれ、その清流により鮎が育ち、地域の人々が鮎からの恩恵を享受。人の生活・水環境・漁業資源が相互に関連する長良川の里川システム。

## 和歌山県 みなべ・田辺地域 【みなべ田辺の梅システム】

養分に乏しい礫質の斜面を利用し、梅林としての利用と周辺には薪炭林を残すことで水源涵養や崩落防止等の機能を持たせ、薪炭林に生息するニホンミツバチと梅との共生等、地域資源を有効活用して高品質な梅を持続的に生産する農業システム。

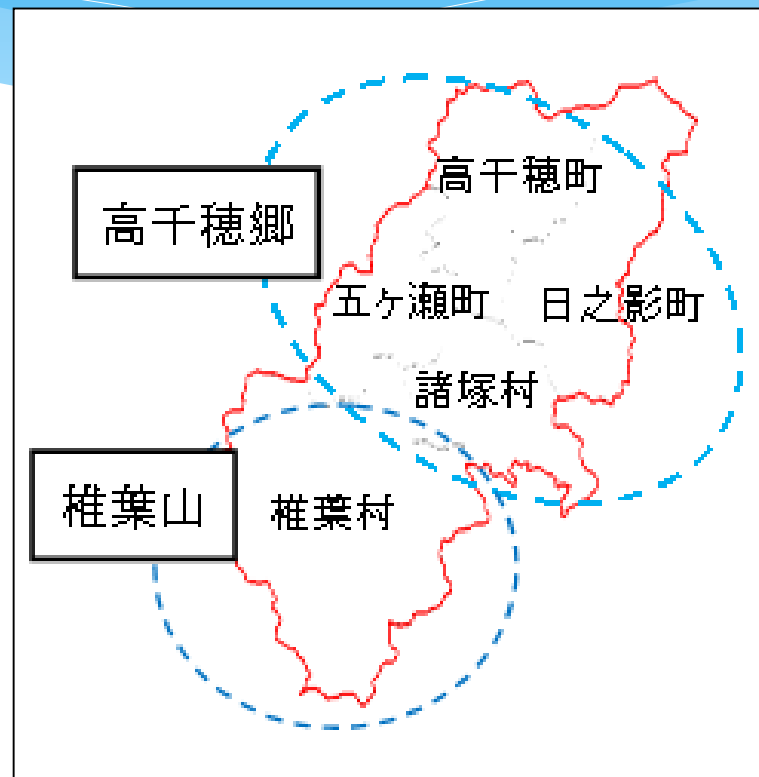
## 宮崎県 高千穂郷・椎葉山地域

【高千穂(たかちほ)郷(ごう)・椎葉山(しいばやま)の森林保全管理が生み出す持続的な農林業と伝統文化～森と農林文化が創る森林理想郷～】

険しく平地が少ない山間地において、針葉樹と広葉樹で構成されるモザイク林等による森林保全管理、伝統的な焼畑農業、急斜面に築かれた500km超の水路網を有する棚田の米作りなどの複合的農林業システムと神楽など特色ある伝統文化を継承。

## 4. 何故、高千穂郷・椎葉山地域で目指すのか

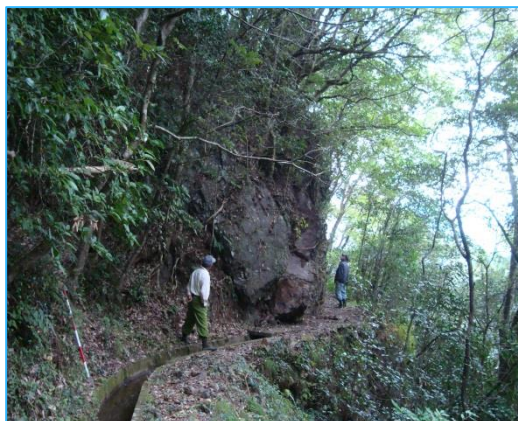
- \* 豊かな森林資源を保持しながら、特色ある山間地の伝統農林業と
- \* 「神楽」に代表される日本の貴重な伝統文化を継承
- \* 地域資源を活かした地域振興活動が行われている  
→先駆的な「フォレストピア構想」
- \* 世界の山村振興のモデルとなり得る



高千穂郷・椎葉山地域  
※江戸時代以前、高千穂町・日之影町・五ヶ瀬町・諸塚村を「高千穂郷」、椎葉村は「椎葉山」と呼ばれていました

## 5. 地域農林業の特徴

- \* 西臼杵（高千穂町、日之影町、五ヶ瀬町）の棚田（1,800ha以上、棚田百選が7箇所）
- \* 棚田を支える500km超の山腹水路網
- \* 高品質の肉用牛生産と日本一の釜炒り茶（西臼杵）





- ・椎葉村に残る日本最後の伝統的焼畑
- ・諸塚村の森林経営と地域づくり
- \*（モザイク林、村域全体がFSC森林認証を取得）



# ・かけがえのない農林業が育んだ伝統文化

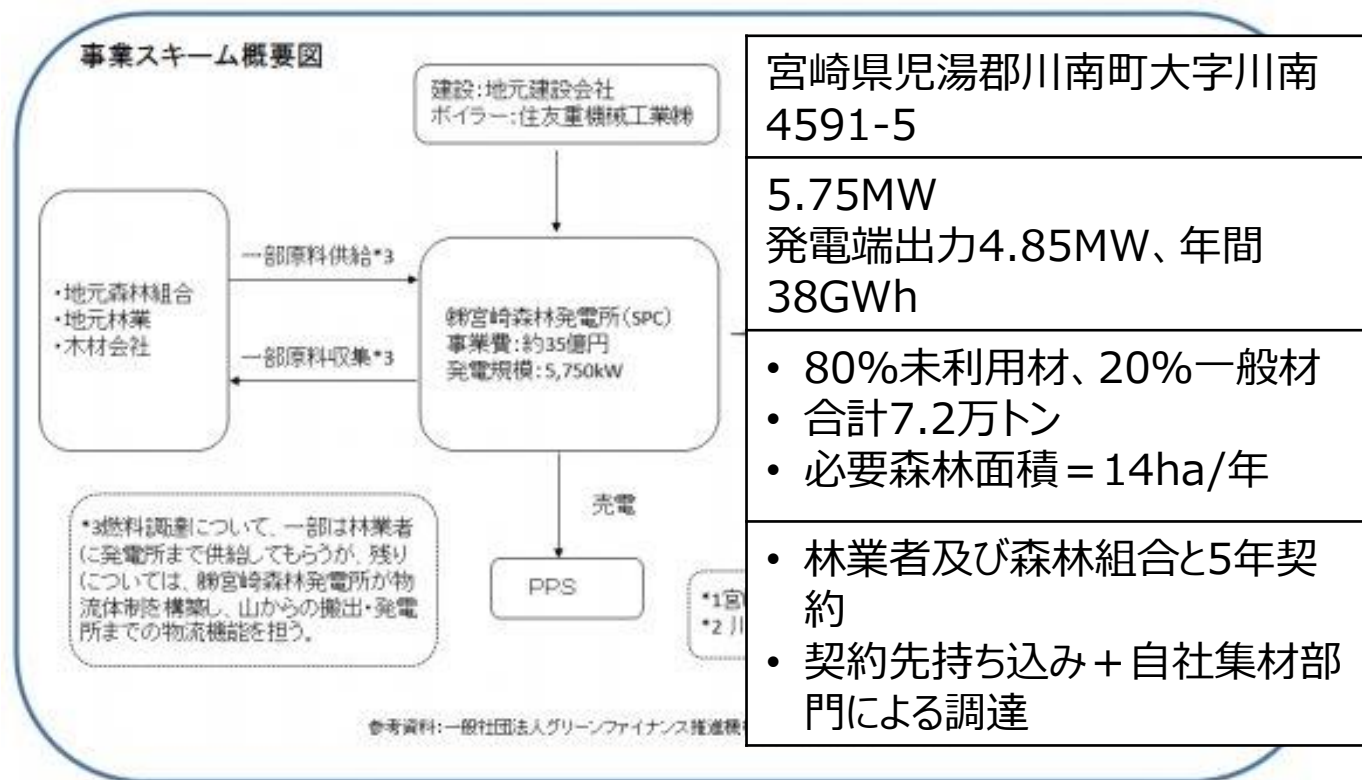
→日本神話と山里の文化を今に伝える





# 株式会社宮崎森林発電所（くにうみ森林発電株式会社）

**事業者がバイオマス燃料を直接収集する事業モデル。**くにうみアセットマネジメントの出資が民間資金の呼び水となり、安定電源としての期待が高く、地域活性化効果も高い木質バイオマス発電事業の普及・促進に貢献できることに鑑み、出資決定



# フォレストピア ー高千穂郷・椎葉山地域ー

