Forest Environment Subcommittee utilizing KODOBOKU technology

Social Issues Area : forest conservation
Content of Efforts : Restoring rich forests for Biodiversity

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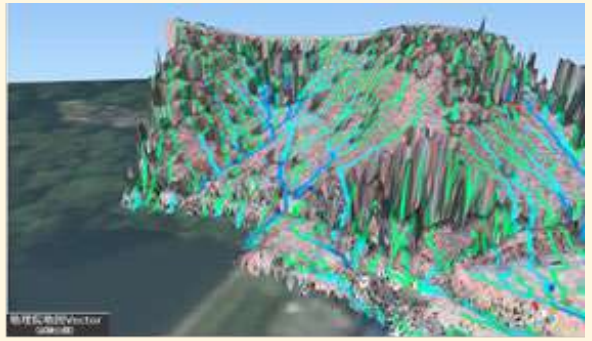
BiocK
Biocommunity Kansai

Goal of KODOBOKU technology (Modern Human powered Civil Engineering)

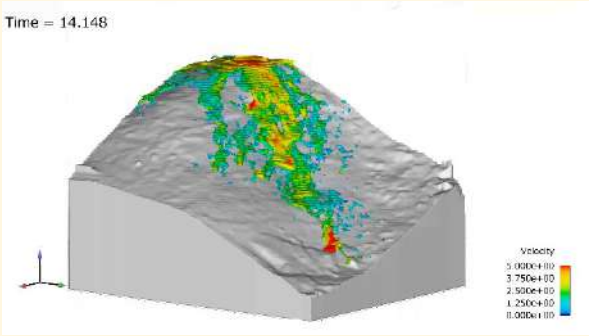
■Characteristic of KODOBOKU technology

1. Disaster mitigation and prevention by visualizing the causes of disasters using flowing water analysis technology.
2. Realize manual construction without using construction equipment
3. Forest protection technology using local materials (earth / wood / stone)
4. Use of plastic-free materials that don't generate wastes

1. Flowing water analysis technology



Stereoscopic Topography Falling Water Diagram



Surface water flow simulation

2. Examples of on-site construction

Before

After (One year later)

3. Examples of application of local materials

Stone bag

4. Plastic-free materials

Sandbag of stainless steel

Restoration of forest environment utilizing KODOBOKU technology

About the name

KODOBOKU has three meaning : old civil engineering, small civil engineering, and individual civil engineering

About the technology

KODOBOKU is a small-scale civil engineering technology based on a traditional tech for Japanese ancient castles, making use of the restoring force that forests originally have. KODOBOKU has a high potential that could be applied to everywhere even in a steep mountainous area, because it is a kind of human-powered technology that requires no construction equipment and that utilizes natural materials on site.
So, it obviously guarantees complete nature affinity as well as huge cost-effectiveness.

Key development points

◆Simple measures instead of afforestation
(Measures against landslide disaster)
◆Minimize environmental impact
(Plastic Free, Low carbon)
◆Strengthening community connections
(Activation of the mutual assistance)
◆Ecosystem considerations (Maintaining diversity)

Expected effects

◆Water source conservation
(Controlling running water during heavy rain)
◆ CO_2 reduction during construction
(No concrete required)
◆Local communities
(Disaster Prevention Education, Regional exchange, Human resources development)
◆Maintenance of luxuriant forests , Resources protection
(Measures against animal damage, 30 by 30*) *Target to conserve at least 30% of the country's land area as natural environmental areas by 2030

Disaster-resilient forest
Biodiversity luxuriant forest

Participating Organizations , Examples of Initiatives

Participating Organizations, Benefit Creation

Participating Organizations (Industry-academia-government collaboration)

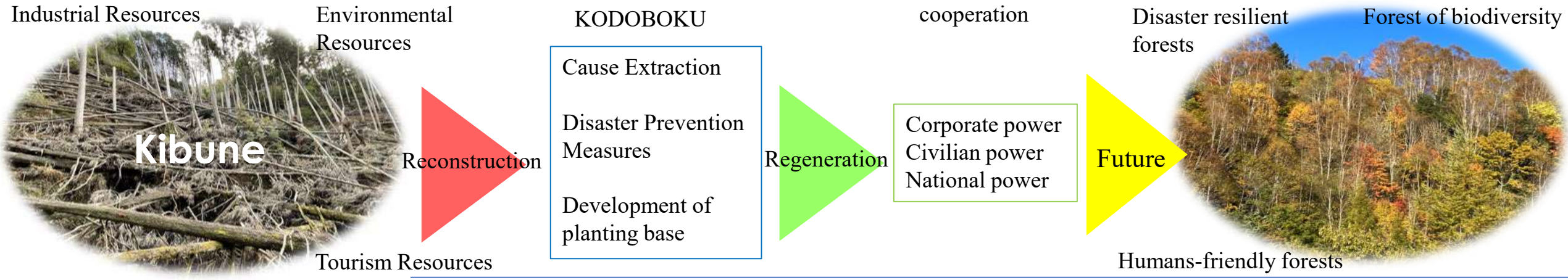
C-TECH CORPORATION, Chubu Electric Power CO., Inc, Affiliated companies, the national and local governments, Universities, Geo-environmental solution and technique, Forestry Cooperatives, Landscape gardeners, etc.

Expansion of nature symbiosis areas and creation of social and economic benefits in forest environment conservation activities

1) Improving corporate value through activities to expand areas of nature symbiosis that are coordinated by local communities
2) Further social contribution through efforts toward the international trend of “nature positivity”
3) Achieving corporate goals for carbon neutral
4) Creating advantages of entering the environmental business and realization of system networks

Examples of Initiatives

[Kyoto Forest Restoration Project]



Five-Year Plan

Efforts	contents	2024	2025	2026	2027	2028
Utilization of KODOBOKU technology	Selection of symbiosis nature areas	PR to the national and local governments and companies				
	Creation and education of engineers		Selection of supervisory engineers		On-site guidance	
	On-site construction		Examination of construction methods		construction	
Forest environmental conservation activity	Development of material technology		Sharing on-site issues with companies and product development			
	Creation of corporate forests		Promotion activities for corporate forest ownership			
	Area Certified Symbiosis with Nature		PR for registration		Register with OECM* *A region in harmony with people and nature	