

# VI Specific Efforts Actions for the Regeneration of Forests and Forestry

Ministries and agencies concerned are working together for the regeneration of forests and forestry in Fukushima Prefecture, taking action to secure the safety of living environments, restore satoyama forest around residential areas, conduct future-oriented investigative research, work on communication, and disseminate information.

## Satoyama Forest Restoration Model Project

In March 2016, the Reconstruction Agency, the Ministry of Agriculture, Forestry and Fisheries, and the Ministry of the Environment compiled “Comprehensive Efforts towards the Regeneration of Forests and Forestry in Fukushima”. The main measure in this project is the “Satoyama Forest Restoration Model Project”.

The “Satoyama Forest Restoration Model Project” aims to comprehensively advance action to promote satoyama forest restoration in selected model areas according to community requests, and to reflect the

results in reliable measures, which includes the following point measures:

- (1) Create radiation maps in model areas
- (2) Implement appropriate decontamination in the forests where people have daily access and use as a place for relaxing
- (3) Implement measures on forest management for timber production and scenic improvement.

Various projects have been promoted such as air dose rate monitoring, decontamination works, and forest management in selected 14 districts as of June 2018.

Creation of a radioactivity map  
Measurement of exposure dose for individuals



Decontamination of public square

Decontamination of mushroom bed log laying yard

Decontamination of walking trail

Maintenance of broad-leaved forest

Maintenance of bamboo forest

Satoyama

Installation of new woody biomass boilers in public facilities

[Figure] Illustration of the Satoyama Forest Restoration Model Project

Reference : Reconstruction Agency website “Satoyama Forest Restoration Model Project (summary)”, “Comprehensive Efforts towards Regeneration of Forests and Forestry in Fukushima” (March 2016)

# Fukushima Forest Regeneration Project

If thinning and other forest management slow down, forests degraded increase, and the multiple functions that forest previously had are no longer fully available. For example, there is concern that functions for watershed conservation and preventing landslides could decline, impacting everyday living.

Since FY2013, Fukushima Prefecture has been working on the “Fukushima Forest Regeneration Project”, which improves forests to maintain and enhance their public functions, and performs radioactive substance countermeasures that are necessary for the implementation of such improvements. The Fukushima Forest Regeneration Project is led by municipalities and other public entities, and implements forest management etc. on intensive

survey areas of contamination etc. (including areas for which evacuation orders have been lifted). Main measures in the project include the following:

- (1) Surveying air dose rates and obtaining the consent of forest owners
- (2) Measures to suppress movement of soil material (installation of log terracing, etc.)
- (3) Forest management (thinning, regeneration cutting, etc.)
- (4) Development of Road network maintenance (construction of forestry operation road etc.).

Since 2013, so far, the project has been implemented in 44 municipalities. By the end of March 2018, it had performed work such as thinning on 4,888ha, and built 559km of forestry operation roads.

Forest surveys etc. to select areas for validation	Forest management by public entities	Validation of countermeasures for radioactive substance	
<ul style="list-style-type: none"> <li>Overview surveys of forest radiation levels etc. to select validation areas</li> <li>Investigation of validation target forests for the purpose of studying working plans</li> <li>Providing forest owners with explanations and obtaining their consent.</li> </ul>	<ul style="list-style-type: none"> <li>Thinning etc. by public entities, such as prefectures and municipalities, for planted forests where maintenance is difficult due to the effects of radioactive substances.</li> </ul>	To counter the impact of radioactive substances, <ul style="list-style-type: none"> <li>Crushing, packing, and migrating foliage produced in the course of forest management</li> <li>Installing terracing to suppress the movement of radioactive substances are implemented as validation.</li> </ul>	
 <p>Overview surveys etc.    Obtaining consent</p>	 <p>Appropriate forest management through thinning etc.</p>	 <p>Validation of crushing</p>	 <p>Installation of log terracing</p>

[Figure] Summary of the Fukushima Forest Regeneration Project

# Validation Project for Forestry Regeneration

With efforts making progress towards residents' return, such as the lifting of areas under evacuation orders, it is important to resume the forestry and timber industries, which are core industries for the region, in order to secure places for residents to live and work. From FY2014, the Forestry Agency has been working on validation projects

against radioactive substances, using knowledge gained so far. These projects target districts where evacuation instructions had been issued, and are intended to enable the smooth resumption of forest maintenance and forestry livelihoods and activities (Figure).

<p style="text-align: center;"><b>Safety measures for working in forests</b></p>  <p>Use of elite trees to save work on undergrowth clearing</p>  <p>Raising working efficiency to shorten radiation exposure time</p>	<p style="text-align: center;"><b>Forest management measures to suppress movement</b></p>  <p>Movement suppression through thinning</p>
<p style="text-align: center;"><b>Measurement of concentrations of radioactive substances</b></p>  <p>Measurement of radioactive concentrations in each part of trees</p>  <p>Measurement of concentrations of radioactive substances in the bark of living trees</p>	<p style="text-align: center;"><b>Changes in air dose rates associated with forest management</b></p>  <p>Measurement of air dose rates at harvesting / planting site</p>

[Figure] Validation Project for Forestry Regeneration in Districts Where Evacuation Orders Have Been Lifted

Reference : Forestry Agency “Summary of the Validation Project for Forestry Regeneration in FY2016 in Districts Where Evacuation Orders Have Been Lifted” ; Ministry of Agriculture, Forestry and Fisheries “Action to Regenerate Forests and Forestry in Fukushima Prefecture”, February 5, 2016