



National Seed Program to Support Forest and Landscape Restoration in Indonesia

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1. What are the roles of the government and other stakeholders

GOVERNMENT

The Minister of Environment and Forestry Decree No P.3/MENLHK/SETJEN/KUM.1/1/2020 on Management of Forest Tree Seed
→ Ensure the preservation and utilization of FGD
→ Ensure the availability of quality forest tree seeds and seedlings

Central Institutions

Under the Ministry of Environment and Forestry (MoEF)
→ the Directorate General of Management of Watershed and Forest Rehabilitation
→ The Directorate of Forest Tree Seeds (DFTS) →
So throughout Indonesia, there are
▪ 2 Forest Tree Seed Centers (Regional I for western Indonesia and Regional II for Eastern Indonesia)
▪ 32 Center for Management of Watershed and Forest Rehabilitation



Central UPT (Technical Implementation Unit)

Local/Provincial institutions

Under Governor (decentralization)

- 15 UPTs (Technical Implementation Unit) Certification and Seeding of Forest Trees
- Management → directly under local government



Local/Provincial UPT



2. What institutional mechanisms are in place to support programme implementation (e.g. coordination mechanisms, databases, funding schemes)?

COORDINATION

Directorate of Forest Tree Seed (DFTS), MoEF as central authority for management of forest tree seed in Indonesia

- All central UPTs and Local/provincial UPTs report all information related to forest tree seed such as certification of seed sources, testing of seed quality and seedling quality to DFTS
- Academic (University/research institutes) → support DFTS

FUNDING SCHEMES

- Central UPTs → The Ministry of Environment and Forestry
- Local UPTs → Local Government (Governor in the province)

DATABASES

Owned by DFTS as central authority holder in Indonesia

3. How is seed quality considered?

Regulated in

- a. The Minister of Environment and Forestry Decree No P.3/MENLHK/SETJEN/KU M.1/1/2020
- b. Indonesian National Standard (SNI)

1. CERTIFICATION OF SEED SOURCE

Also included in Indonesian National Standard (SNI 8806:2019 on Forest tree seed source & SNI 8862:2020 on Assessment of forest tree seed source

7 classifications:

1. Identified stands
2. Selected stands
3. Seed production areas
4. Provenance seed stands
5. Seedling seed orchards
6. Clonal seed orchards
7. Hedge orchards

- More than 6,000 ha of certified seed sources have been registered in the Directorate of Forest Tree Seed

2. CERTIFICATION OF SEED QUALITY

- SNI 8805:2019 on Testing of forest tree seeds → Determination of water content, analysis of purity, weight of 1,000 grains and germination ability
- SNI 7627:2022 on Physical-physiological quality of forest tree seeds → Standard of seeds fit for distribution
- SNI for handling generative seed (96 species), physical -physiology quality testing (86 species) and physical-physiological quality seeds (67 species)

3. CERTIFICATION OF SEEDLING QUALITY

Morpho-physiological test (general requirements: health, more than 50% stems are woody; special req: height, diameter, no of leaves, root structure etc.

SNI 8420:2018 on Forest tree seeds → standards of seedlings fit for distribution



4. What makes the approach successful?

- NDC targets to rehabilitate 12 million ha of degraded land, 2 million ha of peatland, and 600,000 ha of mangrove forest by 2030
- Acceleration of mangrove rehabilitation of 600,000 ha (Presidential regulation no 120 of 2020)
- Government regulation such as the obligation to use certified seed sources for 11 priority species groups
- Indonesian National Standard (> 13 SNI for Forest tree seed and nurseries)
- Many government programs such as
 - The appointment and development of seed sources
 - Establishment of permanent nurseries (57 nurseries) and large-scale nurseries (6 nurseries with a capacity of 5-15 million seedlings/year) throughout Indonesia
 - Community nurseries
 - Village nurseries
 - Distribution of free seedlings



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PUSAT PERSEMAIAN TORA (KAB. TOSA, KEC. AJUSATA)
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SLAMET (0812-7660-0122)
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PUSAT PERSEMAIAN RUMPIH (KAB. RUMPIH, KEC. ...)
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PP SUNDER (KAB. GUNUNG KIDUL, KEC. RATHUK)
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PP SEMARANG (KAB. SEMARANG, KEC. BERGASI MAJDA) (0812-5385-4932)
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PP SUNGSAI (KAB. KARANGANYAR, KEC. JUMANTONJO)
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RACE (0812-2456-2082)
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25. **PP TATURAO (KOTA BUKIT, KEC. MUALATA)**
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PP SETI SALAK (KOTA BANJUL BARU, KEC. LANDASAN ULIN)
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5. What lessons have been learned and what challenges or knowledge gaps remain?

LESSONS

- Decentralization of seed management affairs from the Central Government to Regional (Provincial) Governments
- Establishments of 15 UPTs (Technical Implementation Units) at the Provincial level
- Application of the certification system for seed source, seed quality and seedling quality

CHALLENGES

- The level of readiness of the local government (UPT) in implementing forest tree seed programs in each province → very diverse (human resources, infrastructure etc.) (Java Islands → better than outside Java)
- Seed distribution monitoring system → not optimum
- 80% certified seed sources are identified seed stands (Limited from breeding programs)
- The role of the government in seed production (permanent nurseries, large-scale nurseries) → too big → potential to reduce/deactivate seeds/seedlings business especially small-scale businesses
- Seed zone maps available (SK DIRJEN (SK.30/V-SET/2012) → less used
→ smart-climate seed zone maps is on progress
- The databases is still in paper-based → prone to overlapping
→ online database is on progress





Thank you

