Nurseries of excellence in Aceh: Foundation Germplasm for Agroforestry Systems

World Agroforestry Centre
TRANSFORMING LIVES AND LANDSCAPES

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NOEL Nurseries of Excellence

Photos by: Pratiknyo Purnimosidhi (1&2) & James M. Roshetko (3&4)


1. Problems/Issues

Common agroforestry systems in Aceh include rubber, cacao, oil palm, coconut, areca-palm, and fruits. These multiple species tree garden systems are the main sources of income generation for most communities. The 2004 tsunami caused great destruction of the gardens near the coastal area. Efforts to revitalize tree gardens as a major source of income have been undertaken by the local and central governments, as well as, by local and international NGOs. The seed and seedlings used in these efforts came from outside the province. In most cases, that imported germplasm provided to be expensive and of low quality. To address this issue, World Agroforestry Centre (ICRAF) and Winrock International, through the supportive of the Canadian International Development Agency (CIDA), are accelerating agricultural recovery in Nangroe Aceh Darussalam by enhancing local access to high quality germplasm and local skills to establish and manage tree nurseries.

2. Aims/Objectives

Tree nursery development takes place in the districts (kabupaten) of Aceh Jaya, Aceh Barat and Pidie, with provincial coordination centered in the Banda Aceh. In each district a number of nurseries will be developed: 2 large district nurseries developed in collaboration with government agencies or INGOs, each with a capacity of about 100,000 seedlings; and 7 community nurseries in collaboration with farmer groups or local NGOs each with a capacity of about 10,000 seeds. Based on geography and access, these nine nurseries are grouped into clusters for collective training and follow-up.

3. Implementation

Nursery development is accomplished through 3 steps: 1. training; 2. follow-up activities to establish and manage the nursery; and 3.monitoring by NOEL staff to evaluate group progress and needs. Trainings are implemented over 2-3 days according group availability. The first half day of training covers theory. The remainder of the training focuses on practical issues. Step focuses on nursery establishment and seedling production.
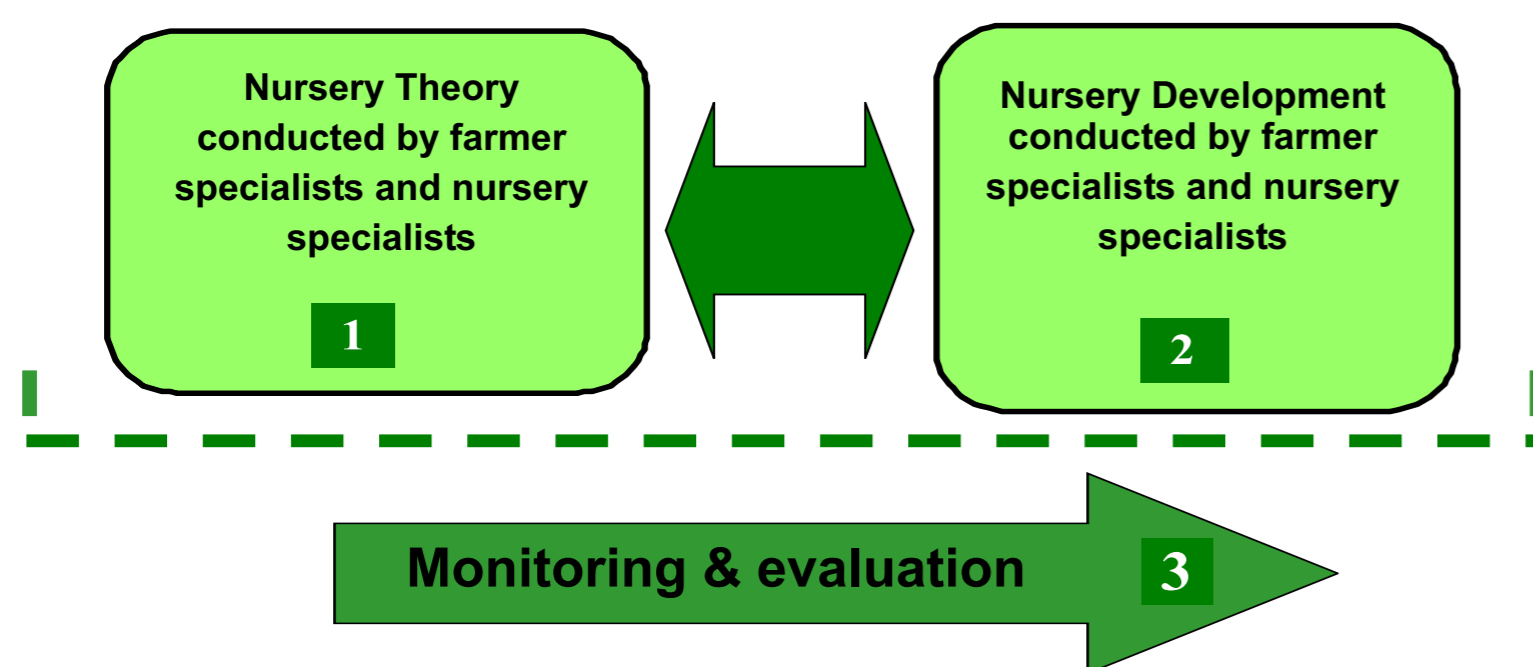

4. Training Strategy

Trainings are conducted in clusters guided by 3 farmer specialist and nursery specialists. Farmer and nursery specialists live in community where nurseries are established to be available for informal training and discussions.

Training process in cluster:
- 3-4 clusters per district. Each cluster consists of 2-3 community or district nurseries and diverse government agency and farmer group partners. (Figure 1).
- In each cluster, spontaneous nurseries will develop from the interest of outside stakeholders and program partners to expand nursery resources.
- The raining process is illustrated in this figure:

Group	Weeks -								
	1	2	3	4	5	6	7	8	9
A									
B + spontaneous									
C									
D + spontaneous									
E									
F + spontaneous									
G									
H+ spontaneous									
I									

Training   Practice   Monitoring
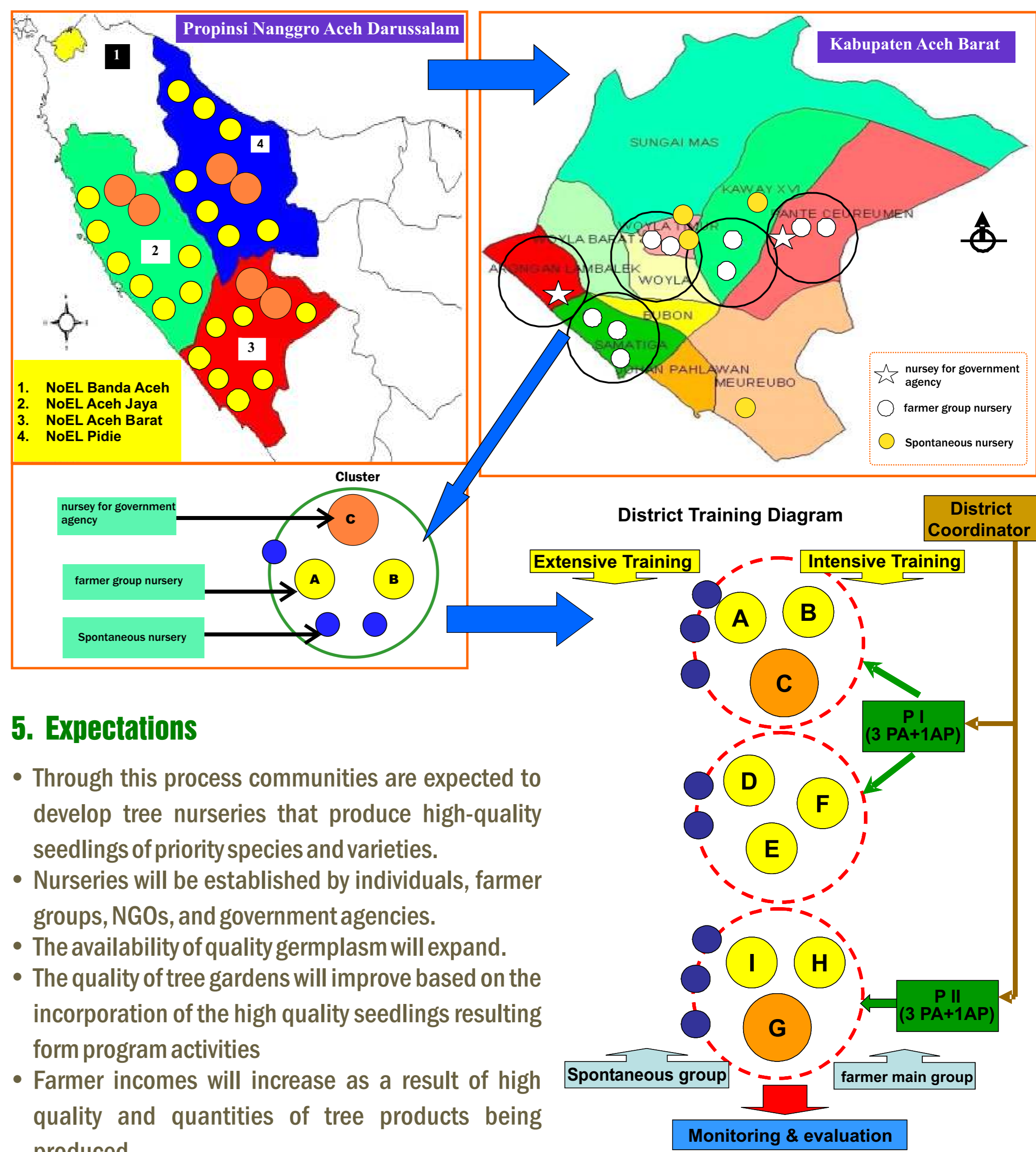
5. Expectations

- Through this process communities are expected to develop tree nurseries that produce high-quality seedlings of priority species and varieties.
- Nurseries will be established by individuals, farmer groups, NGOs, and government agencies.
- The availability of quality germplasm will expand.
- The quality of tree gardens will improve based on the incorporation of the high quality seedlings resulting form program activities
- Farmer incomes will increase as a result of high quality and quantities of tree products being produced.

Propinsi Nanggro Aceh Darussalam
1. NoEL Banda Aceh
2. NoEL Aceh Jaya
3. NoEL Aceh Barat
4. NoEL Pidie

Kabupaten Aceh Barat
nursery for government agency
farmer group nursery
Spontaneous nursery

Cluster
nursery for government agency
farmer group nursery
Spontaneous nursery

District Training Diagram
District Coordinator
Extensive Training   Intensive Training
P I (3 PA+1AP)
P II (3 PA+1AP)
Spontaneous group   farmer main group
Monitoring & evaluation

Nursery Theory conducted by farmer specialists and nursery specialists — 1
Nursery Development conducted by farmer specialists and nursery specialists — 2
Monitoring & evaluation — 3

Photos by: Pratiknyo Purnimosidhi