Following the formation of farmer learning groups in late 2015, this new Smart-Tree Invest workshop imparted vital skills in tree-based farm management to local government staff. Participants expect that the newly acquired know-how will allow them to improve the livelihoods of local farmers.

When the Smart-Tree Invest project was kicked off in Buol, it was found that local extension office and rural advisory staff lacked the knowledge to properly advise farmers. In late 2015, the project then established eight farmer learning groups in Central Sulawesi’s struggling Buol District, to facilitate knowledge sharing on agroforestry and nursery management. Participants learned about and practiced tree pruning and grafting, organic fertilizer production, and building nurseries. Each group’s village now runs an independent nursery with up to 5000 cacao, durian, pepper, and nutmeg seedlings.

Replicating the project activities to increase the reach, Smart-Tree Invest now conducted an agroforestry and nursery management workshop on 6–7 September in Buol. Thirty-six participants attended, including staff from various government offices, independent and contracted farming field instructors, and local farmer champions. The workshop was organized in collaboration with the Buol District Extension Office.

**Strengthening government capacity**

The workshop set three objectives; The first two are to help Buol’s field officers to better understand what agroforestry is, and to strengthen their agroforestry management capacity with innovative techniques, such as tree cultivation methods, organic fertilizer production, and farm design to maximize commodity production. The third objective is to practice nursery building and management to increase seedling availability in the district. Participants at the workshop are expected to share their knowledge with farmers across Buol.
The rationale behind involving the government is that officials may find better use for their budgets to scale up the acquired sustainable and innovative techniques, and help establish more nurseries. Government involvement is also essential to the development of co-investment schemes to improve or maintain ecosystem services. Informed government bodies are better able to accommodate such schemes in which public, private and community interests butt heads.

Two days packed with activities
After opening remarks by the secretary of the Buol Extension Office Muchlis, the workshop started with sessions about the functions of soil as plant growing medium, nursery building and plant cultivation techniques. The afternoon was devoted to seedling grafting, one of the most important skills in plant cultivation. Participants practiced grafting in groups of nine with durian and cacao seedlings. Many had never grafted before.

The second day used illustrations to discuss ideal agroforestry designs with explanations on the planting distance and tree shading. The session drew attention from local farmers who shared the conditions on their own farms whose designs also produce good yields. An enlightening discussion followed about the pros and cons of shading on farms. The day was concluded with a demonstration on compost and fertilizer production. Participants agreed that daily farming activities could greatly benefit from these techniques.

Home to a vast population of farmers and spanning a whopping 3507 km², Buol district has a great agricultural potential. However, poor land management and intensifying floods and droughts are causing productivity to lag behind, resulting in low yields. Scientists believe that agroforestry is a promising approach to tackle these problems. Good agroforestry management can enhance rural livelihoods by increasing farmers’ economic incomes, while maintaining the quality of the environment in order to mitigate the effects of climate change.