

Fact sheet

Motivation of farmers for SLM through Vanilla Cultivation

Background

Vanilla is a cash crop that can be grown successfully in mid and low country wet zone where the main growing areas are Kandy, Nuwara Eliya, Matale, and Kegalle districts. In Sri Lanka vanilla is mainly confined as home garden and grown in the back yards. Vanilla grows as vines with support trees.

Vanilla has been identified as an ideal alternative crop for unproductive tea small holdings and home gardens. Low labor requirement and higher income are main advantages of vanilla cultivation and therefore women can use their free time for vanilla cultivation.

Another advantage would be that the Vanilla only needs organic fertilizer. A vanilla tree can produce nearly a kilo of vanilla a year and average market price would be around Rs. 6,000/ Kg.

Objectives:

- Introduce SLM in home gardening
- Introduce vanilla cultivation as a sustainable source of income for women, encourage them to effectively use their free time for income generation
- Add economic and esthetic value for back yards and home gardens.
- Increase environmental awareness among women and inculcate positive attitude towards environmental protection

RDAL has organized training programs on SLM to the farmer communities and women introducing vanilla cultivation in home gardens. 100 vanilla plants were distributed for each family and expected annual yield from a plant is 1 Kg after 3 years. Expected annual income of a beneficiary is LKR 600,000.

Number of beneficiaries = 40 families

Existing HG.





Women interest in HG is very high.
Use of waste materials for planting
Non of the plant generate income



Court yard. Soil erosion, unpleasant home surrounding



Training programs to introduce vanilla cultivation



Training : SLM and planting



Training : SLM and planting



Training on SLM practices in vanilla cultivation



Support for field implementation



Farmers enthusiastic on SLM



The SAVA Region in north-eastern Madagascar is the global centre of vanilla production. Here, around 70,000 farmers are estimated to produce 70-80% of all global bourbon vanilla. Yet, little is known about the farming population, their livelihoods, and the impact of vanilla cultivation on biodiversity. This publication presents the results of the Diversity Turn Baseline Survey (DTBS) that was conducted in 2017. The survey provides baseline data on the socio-economic characteristics and living conditions of the local population, and farming of vanilla as well as the most important other crops (n=1,800 households). As international demand for natural vanilla has increased considerably, special emphasis is placed on the vertical integration of vanilla farmers into the global vanilla value chain. This integration is increasingly accomplished through contract farming arrangements between vanilla farmers, collectors and exporters. After a first rise in vanilla prices in 2015, the current vanilla boom took off in 2016 and was still in full swing in 2017. Consequently, the start of the price boom coincides with this survey and its retrospective questions often address the situation in 2016. The large majority of the surveyed households (HHs) in the study region practice vanilla farming (83%). Of these, only 15% conclude formal contracts while the majority of farmers (63%) sell their vanilla in informal spot markets often depending on several middlemen. Our data show that the socio-economic situation of smallholder vanilla farmers has recently improved when considering vanilla prices received, education, access to electricity and ownership of assets. However, under the high vanilla prices, theft and crime are now key constraints for vanilla farmers. In addition to descriptive statistics, this publication compares selected data between male- and female-headed HHs, poor and non-poor HHs, and HHs with- and without contracts. Members of female-headed HHs have significantly lower education, lower labour availability, smaller fields and lower vanilla harvests than male-headed HHs. HHs with contracts possess more assets, are better educated, have higher labour availability, larger vanilla plots, and larger vanilla harvests than HHs without contracts. The DTBS confirms a number of benefits for smallholders who conclude contracts with vanilla exporters or collectors. Among these benefits are the significantly higher vanilla prices even during market peaks. However, the distribution of HHs with or without contracts is skewed indicating entry barriers for certain groups of smallholders. For example, female-headed HHs were significantly less likely to have a contract than male-headed HHs, and it appears that HHs with a contract had already been less poor than HHs without a contract prior to entering contract arrangements.

Cash crops farmed in agroforestry systems can be an economically attractive opportunity for farmers that are potentially ecologically sustainable alleviating negative impacts on biodiversity and ecosystem functions. Whether such a win-win situation can be realised is, however, highly context-dependent. Here, we study the impacts of vanilla agroforestry in North-Eastern Madagascar - a biodiversity hotspot which loses forest cover at high rates to agriculture. This forest cover loss is mainly attributed to subsistence rice farming but the current vanilla boom driven by prices of up to 600€ per kilo may also lead to the encroachment of plantations into forests, thus reducing understory complexity and tree cover locally. However, vanilla plantations can also be established on open fallow land already highly disturbed by slash-and-burn practices (“tavy”) leading to a potentially more sustainable land-use. We compared tree cover, biodiversity, and vanilla yields (a) of forest conversion plots vs. fallow conversion plots and (b) along a canopy cover gradient to investigate (i) how vanilla farming shapes canopy cover locally, (ii) how vanilla yields vary between plantation types and under different shade regimes, and (iii) how plantation type affects tree cover, biodiversity and associated ecosystem functions. We hypothesize that vanilla agroforestry negatively affects biodiversity inside primary forest, but that it may have positive effects if established on open fallow land leading to tree regeneration and thus an increase in tree cover. Yields are expected to peak at mid-canopy cover – potentially incentivising tree clearance under high canopy cover and tree regeneration under low canopy cover. Thereby we investigate how the cultivation of the same cash crop might have very different outcomes for biodiversity and sustainable land-use depending on initial land-use. This knowledge may result in management advice or certification schemes that are sensitive to land-use prior to vanilla cultivation.

The average land size of home gardens in the Central Highlands of Sri Lanka is about 0.25 ac – 0.5 acre. Fruits and spice trees are randomly existing in these land plots. The top soil is always disturbed due to daily human activities. Apart from run-off water from upper lands, roof top drainage flows all directions causing soil erosion. Therefore, the home gardens are the least attended land plots in terms of conservation.

Vanilla SLM model is an economically attractive opportunity for women in the potential areas. Ideal environmental conditions are existing in the area. The soil conservation techniques should be applied. The objectives of the approach are to arrest the soil erosion in the home gardens due to human activities and introduce a cash crop with economic benefits; promote SLM awareness among the community.

The strategy is to motivate land owners for SLM through income generation. Women groups were selected as most suitable target group for the approach. Income generation through the approach help them to improve their social and financial status.

The women groups went on an exposure visit to well managed Vanilla cultivation and their awareness on Vanilla cultivation and importance of SLM practices were explained. As the next step practical training on individual farm planning, selection and implementation of SLM techniques according to farm plan and Vanilla cultivation were conducted. The extension officer visited each home garden supported to prepare each farm plan and implementation of SLM. The project supported the women group with planting materials.