


# Policy**brief**

## What prevents tree planting in Viet Nam?



Trees are an important source of income for local people in Viet Nam, but planting is primarily constrained by lack of knowledge on suitable species, and other obstacles related to market, financial capital, land suitability, and access to quality seedlings.

### Key messages

- 1 Local people's knowledge on tree species other than native species and those introduced by foresters through the reforestation program is limited.
- 2 Farmers lack knowledge about where to plant, and how to manage trees, especially if they were to be mixed with crops, e.g. agroforestry. This led to low tree species' diversity.
- 3 In addition, poor market access, limited financial capital, low quality seedlings, and limited land availability have all limited tree planting.

### Recommendations

- Equip extension workers with knowledge and skills on planting/integrating new and potential tree species, and support farmer training.
- Enable knowledge sharing and exchange between farmers, extension officers, authorities and researchers about tree planting.
- Improve the credit system to facilitate easy access to capital with low interest rates and extended payback period.
- Support local tree-based processing industries such as for pulp and paper, furniture, timber (sawmills), and fruits (e.g. dehydrated fruits).
- Assist local nurseries to produce quality seedlings for both native and exotic timber, fruit, and commercial tree species, to promote diversification.



## Background

Tree-based systems have been proven to benefit livelihoods through diversifying products, while simultaneously providing environmental services (Hoang et al., 2014; van Noordwijk et al., 2014). Despite the recognition of these multiple benefits, adoption of tree-based systems remains limited, particularly mixed tree and annual food crop systems (Simelton et al., 2015).

Appreciation from farmers and local partners on the different trainings organized by the World Agroforestry Centre (ICRAF) on tree management techniques such as pruning<sup>1</sup> and grafting<sup>2</sup> indicates openness to new knowledge and willingness to learn and adopt tree planting.

## NORTHEAST VIET NAM

In Bac Kan province, a study on the barriers of tree planting was conducted in 12 communes through focus group discussions (FGDs) and analytic hierarchy process (AHP) (Saaty, 1990). Based on the government's classification, two socio-economic groups of farmers (poor and non-poor) were interviewed in each commune; each group had 5 famers.

For poor farmers, lack of knowledge about tree species is the first barrier to tree planting, while it is the 5<sup>th</sup> for non-poor farmers. Compared to poor farmers, non-poor farmers identified more barriers to tree planting including sensitivity to pest and disease, plot damage from flash flood, seedling damage by animals, and lack of irrigation water (Figure 1).

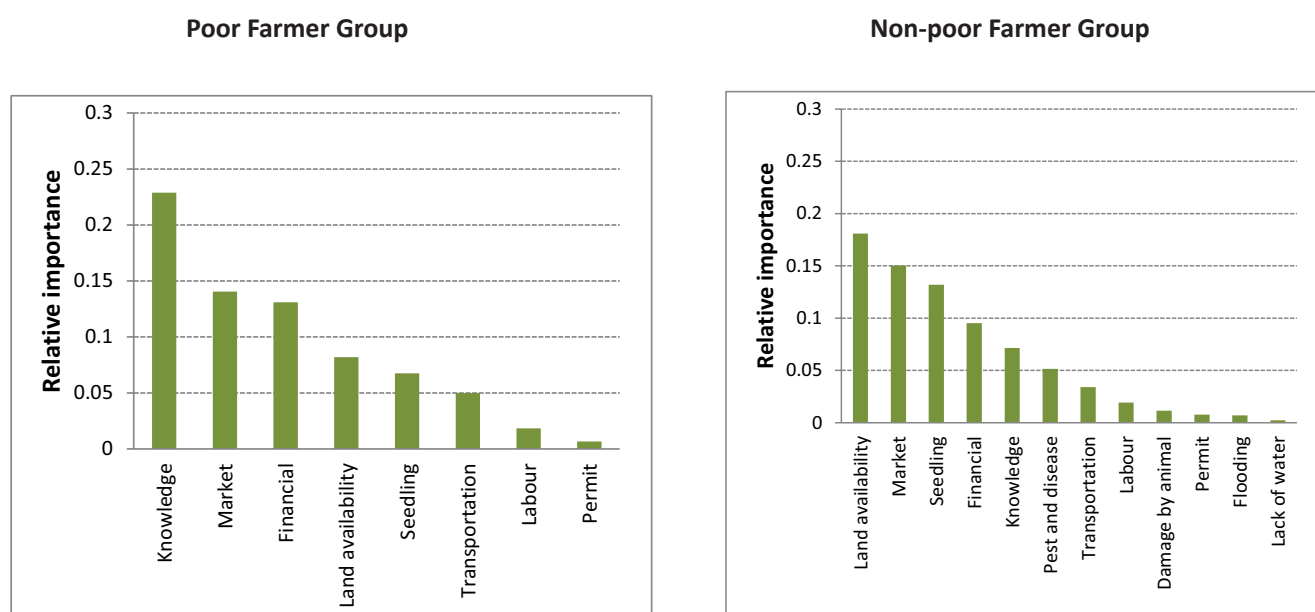


Figure 1: Barriers to tree planting in northeast Viet Nam



## NORTHWEST VIET NAM

In Son La, Dien Bien and Yen Bai provinces, a total of 228 males and 66 females were surveyed in order to characterize decision-making on adoption of agroforestry. Within non-adopters, about 37% of males and 39% of females noted that they did not have sufficient knowledge regarding planting timber or fruit trees. For commercial trees, the percentages were slightly lower at 31% for males and 29% for females (Table 1).

**Table 1:** Barriers to tree planting in northwest Viet Nam

Barriers	Food crop with timber or fruit trees				With other commercial trees*			
	Male (n)	%	Female(n)	%	Male (n)	%	Female(n)	%
<i>Reason for not adopting</i>								
1 Lack of knowledge	78	37	22	39	68	31	17	29
2 Financial limitation	9	4	5	9	9	4	7	11
3 Labour shortage	47	22	12	21	20	9	7	12
4 Difficult to practice	24	11	2	4	45	21	6	10
5 Other reasons	52	25	15	27	74	34	22	37
<i>Reason for adopting</i>								
1 Increase livelihood	9	50	4	40	4	33	2	29
2 Soil improvement	2	11	4	40	1	8	0	0
3 Protect the environment	1	6	0	0	3	25	4	57
4 Other reasons	6	33	2	20	4	33	1	14
Total non-adopters	210	92	56	85	216	95	59	89
Total adopters	18	8	10	15	12	5	7	11
Total respondents	228		66		228		66	

\*Coffee, rubber, or tea

## NORTHCENTRAL VIET NAM

In Ha Tinh province, a study was conducted in two communes within the Ho Ho sub-watershed. In each commune, a group of five males and another group of five females were asked to identify and rank the barriers to tree planting. Based on averaged ranking, all interviewed farmers across the watershed, reported lack of knowledge, financial limitation, market instability, and seedling scarcity as the most significant barriers to tree planting (Table 2).

**Table 2:** Ranking of barriers to tree planting in northcentral Viet Nam (1 as most important)

Barriers	Male		Female	
	Upstream	Downstream	Upstream	Downstream
Lack of knowledge	3	2	2	2
Financial limitation	1	4	6	1
Unstable market	2	3	3	4
Seedling scarcity	7	1	1	5
Climate condition	5	-	-	3
Lack of irrigation	4	5	-	6
Pest	-	-	4	-
Low soil fertility	6	-	-	-
Land accessibility	-	-	5	-
Land availability	-	-	-	7

Description of obstacles to tree planting in intercropping systems with annual crops is given in <http://blog.worldagroforestry.org/index.php/2015/09/29/why-are-vietnamese-farmers-not-planting-trees-amid-annual-crops/>.

# Implications

- The local extension system is currently inadequate, in terms of training farmers on various aspects of tree planting - it should therefore be upgraded to include having the capacity to continuously train farmers on producing quality planting materials, planting and management.
- There is paucity in research on various tree species and integration of trees in farming systems; there is thus, a need to invest in research on the different aspects of tree planting, and ways of integrating trees on farms.
- Local authorities and farmers disclosed the inadequacy of current credit system - the system need to be more flexible with poor farmers, in terms of the loan requirements and procedures, interest rates, and longer payback period.
- Remote communities are poorly connected to markets due to distance and accessibility - therefore, there is a need to upgrade the road network and bridges, so that farmers can conveniently market their tree products.
- Tree-based industries are also needed to stimulate investments in tree planting by poor farmers.

## References

- Hoang, M.H., van Noordwijk, M., Fox, J., Thomas, D., Sinclair, F., Catacutan, D., Öborn, I., Simons, T. 2014. Are trees buffering ecosystems and livelihoods in agricultural landscapes of the Lower Mekong Basin? Consequences for climate-change adaptation. Working Paper No. 177. Bogor, Indonesia: World Agroforestry Centre (ICRAF) Southeast Asia Regional Program.
- van Noordwijk, M., Bayala, J., Hairiah, K., Lusiana, B., Muthuri, C., Khasanah, N., Mulia, R. 2014. Agroforestry solutions for buffering climate variability and adapting to change. In: Climate change impact and adaptation in agricultural systems (eds J. Fuhrer & P.J. Gregory): 216-232. CAB International.
- Saaty, T.L. 1990. How to make a decision: The analytic hierarchy process. European Journal of Operational Research 48 (1): 9-26.
- Simelton, E., Dam, B.V., Catacutan, D. 2015. Trees and agroforestry for coping with extreme weather events: Experiences from northern and central Viet Nam. Agroforest Syst DOI 10.1007/s10457-015-9835-5.

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Agroforestry system of AFLI project in Northwest Viet Nam  
Photo: ICRAF Viet Nam/Pham Huu Thuong