

# 张京林亚大学

## 博士学位论文

#### 越南北干省人工林发展政策对造林家庭户的影响

The impact of forest plantation development policies on afforestation households in BacKan province, Vietnam

陈刚- TRAN CUONG

指	导	教	师	谢屹				
学			院		经济	产管理		
学	科	专	业		林业组	<b>圣济管</b> 理	Į.	
研	究	方	向	林业经济管理与政策				
			-					
		二〇		年	月		B	

二一六二十二

#### DECLARATION AND COPYRIGHT

Author, certify that:

The work in this thesis is the result of my own field survey, and this thesis does not include material that has been accepted for the other degree or diploma in any university or other institution.

This thesis does not include any material previous that has been published or written by another researcher, except where due references has been made in the thesis.

I declare that data was collected and analyzed throughout the course of the research following to the Department of Agriculture and Rural Development of Bac Kan province and supervisor requirements of Beijing Forestry University.

In the future, there is no part of this thesis will be used in a submission in my name, for any other degree in other university without the prior approval of Beijing Forestry University.

This thesis contains those papers that have been published by author or paper which prepared for publication, all of them has been co-authored agreed.

## 答辩委员会成员信息

姓名		职称	工作单位	
主席	王立群	教授	北京林业大学	
	张彩虹	教授	北京林业大学	
	侯方淼	教授	北京林业大学	
	何友均	研究员	中国林业科学院	
委员	柯水发	教授	中国人民大学	

#### 摘要

越南人工林发展政策不断创新,《土地法》、《林业保护与发展法》、《林地分配政策》、《越南林业发展战略(2006-2020 年)》等法律法规和政策文件相继颁布实施。由此,越南北部山区逐步建立并扩大了人工商品林种植规模,其中具有代表性的主要树种为马占相思树(Acacia mangium Willd)、桉树(Eucalyptus urophylla S.T. Blake & Eucalyptus camaldulensis Dehn)和桂南木莲(Manglietia conifera Dandy)。本研究旨在从造林行为、造林经济效益评估和造林户家庭收入三个视角,分析越南人工林发展政策对该国北部山区造林户的影响。

本文选择了越南北干省巴贝和纳里地区 6 个社区的 360 个农户作为研究对象,其中造林户 287 户和未造林户 73 户;通过实地调查,获取一手资料;采用描述统计和计量分析相结合的研究方法,分析了农户的造林行为和农户家庭收入现状及其影响因素;采用净现值法(NPV)、内部收益率法(IRR)和效益成本比法(BCR),分析了造林经济效益;探析了人工林政策对农户造林行为、收益和家庭收入的影响,进而提出了对策建议。

研究结果表明:第一,户主文化程度、家庭规模、家庭土地持有规模、土地永久性所有权、非农就业、信贷获得能力对农户造林行为具有显著影响,而家庭社会经济特征、地块到道路或市场中心的距离、造林经验、林业推广人员每年到访家庭的天数和家庭年总收入等对造林行为没有显著影响。比较而言,农户近年来造林行为受到能否得到林业发展政策支持的影响程度大,鲜有考虑生态因素。第二,采用 6%的折现率,对马占相思树、桉树和桂南木莲三个树种进行了造林成本效益分析,结果表明桉树产生的净现值最高,桂南木莲产生的内部收益率和效益成本比最大。第三,得到政策支持的农户从轮伐期为七年的人工商品林中得到了正向财务回报,而未得到政策支持的农户则没有得到正向财务回报。第四,家庭成员多、土地面积大、土地权益有保障、外出务工、有能力获得信贷的农户较其他家庭更有可能参与发展人工林。第五,在人工林发展政策下农户的生活收入支出、资产价值和营林收入均增加,人工林发展政策对农户家庭福利产生积极影响。

本研究为人工林发展政策的影响及其影响机制提供了重要的实证证据,有助 于为制定人工林发展政策提供决策参考依据,帮助减少阻碍农户获得土地和财政 资源的因素,提高家庭参与非农业活动的能力,以及帮助人们更多地参与农业推广活动。此外,本研究还有助于为进一步提高人工林发展政策的重要性提供科学依据,维持发展人工林来带来显著的经济效益,提高人工林可持续发展带来的生态环境效益。

关键词: 政策,人工林发展政策,人工林,影响,造林户

#### The impact of forest plantation development policies on afforestation households in BacKan province, Vietnam

#### **ABSTRACT**

Since the emergence of innovations in forest plantation development policies such as the Land Law, law of forest protection and development, forest land allocation policy, Vietnam forestry development strategy for the 2006-2020 period, etc. Forest plantations for commercial purposes have been established and more expanded in Northern mountainous region of Vietnam. The major tree species grew in this area were *Acacia mangium Willd, Eucalyptus (Eucalyptus urophylla S.T. Blake* × *Eucalyptus camaldulensis Dehn)*, and *Manglietia conifera Dandy*. This study aims to understand the impact of forest plantation development policies on afforestation households on three aspects as analyze behavior establishment plantation, assess economic performance and impact of forest plantation development policies on afforestation household welfare in study area.

Based on a field survey from 360 households (include 287 afforestation households and 73 households had not afforestation activities) from six communities in Ba Be and Na Ri district of Bac Kan province of Vietnam. Results analysis revealed that households head education level, household size, size of household landholding, ownership of permanent land, off-farm work, ability access to credit were the important factors that affected to decision establish forest plantation of households. In contrary, those factors such as household's socio-economic characteristics, distance of the land plots to a road or market center, experience planted forest, and number of days per year in which forestry extension workers visited the household and the annual total household income were no effects on households' forest plantation decisions. The results implicated that, in recent years, household's decisions regarding whether to plant forests seem to base primarily on support from forest plantation development policies rather than ecological concerns. On the other hand, to explore the economic performance of plantations of afforestation households based on policies support for three trees sp: A.mangium, Eucalyptus and M.conifera, cost benefit analysis was employed to examine net present value (NPV), internal rate of return (IRR) and benefit cost ratio (BCR) on the basis of an annual discount rate of 6%. The results showed that Eucalyptus generated the highest NPV but A.mangium generated the greatest IRR and BCR; afforestation households earned positive financial returns from forest plantations with seven-year rotations than did not receive support household groups. Furthermore, the statistical analysis revealed that afforestation households with more member family, large land size, secure on land rights, off-farm work, ability access to credit have probability participate on forest plantation development policies than other household groups. Results from PSM analysis also indicated that forest plantations development policies have a positive impact on the afforestation household welfare through increasing their living expenditure, income, assets value and forest plantation income.

These findings provide important empirical evidences of the policy factors and special is the

mechanisms may be help through minimizing the factors that hinder afforestation household access to land and finance resources, improve capacity participation in non-farm activities as well as help households participate more in agricultural extension activities. On the other hand, this study also help aware the importance of forest plantation development policies when its not only aim significant economic but also ecological and environmental benefits for sustainable development of rural area of Bac Kan province in particular and Vietnam in general.

**Keywords:** Policy, forest plantation policy, Forest plantation, impacts, afforestation households

## 目录

摘要	I
ABSTRACT	III
1. 引言	1
1.1.研究背景	1
1.2.研究目的与意义	4
1.2.1.研究目的	4
1.2.2.研究意义	5
1.3.研究问题与假设	6
1.3.1.研究问题	6
1.3.2.研究假设	6
1.4.研究方法	7
1.4.1.研究区域选择与概况	7
1.4.2.研究方法	10
1.5.研究思路	22
1.6.研究内容	24
1.7.研究价值与创新点	26
1.7.1.研究价值	26
1.7.2. 研究创新点	26
2. 文献综述与理论基础	28
2.1.概念界定	28
2.1.1. 人工林与家庭收入的关系	28
2.1.2.人工林的定义	30
2.1.3.人工林发展的定义	31
2.1.4.森林政策的定义	31
2.1.5.森林政策的重要性	32
2.1.6.人工林发展政策与家庭福利的关系	32
2.1.7. 影响的定义	33
2.1.8.评估政策影响的重要性	33
2.2.文献综述	34
2.2.1.评估政策影响的研究	34
2.2.2.人工林建设的研究	39
2.2.3.长期成本收益分析的研究	44
2.3.理论分析框架	48
2.4.本章小结	51
3. 越南的人工林与林业政策情况	
3.1. 越南人工林与林业政策概况	
3.1.1.人工林特征概况	
3.1.2.林业政策概况	

# The impact of forest plantation development policies on afforestation households in BacKan province, Vietnam

3.2.北干省人工林与林业政策概况	78
3.2.1.北干省经济社会特征概况	78
3.2.2.北干省林业政策概况	83
3.2.3.人工林发展政策对北干省人工林发展的影响	86
3.3.本章小结	93
4. 人工林发展政策对农户人工林种植的影响	94
4.1.引言	94
4.2.材料与方法	96
4.2.1.文献综述	96
4.2.2.理论框架	97
4.2.3.方法	98
4.3.结果与讨论	101
4.3.1.描述性统计	101
4.3.2.农户对人工林种植的观点	102
4.3.3.农户人工林种植的影响因素	105
4.3.4.人工林发展政策对农户人工林种植的影响	108
4.4.本章小结	114
5. 人工林发展政策对人工林经济效益的影响	116
5.1.引言	116
5.2.材料与方法	117
5.2.1.数据收集	117
5.2.2.数据分析	118
5.3.研究结果分析	121
5.3.1.研究区的生长能力与林地特征	121
5.3.2.人工林种植的成本与收益分析	125
5.3.3.人工林经营活动的经济结果分析	133
5.3.4.敏感性分析	137
5.4.人工林发展政策对人工林的影响	139
5.4.1.人工林种植的经济动机	139
5.4.2.政策性成本项目对造林户的影响	140
5.4.3.政策性收益项目对造林户的影响	142
5.4.4.政策对造林户的综合影响	142
5.4.5.越南人工林种植的前景	143
5.5.本章小结	144
6. 人工林发展政策对造林户的影响	146
6.1.引言	146
6.2.材料与方法	148
6.2.1.样本与数据收集	148
6.2.2. 收入的界定与核算	149
6.2.3.理论与实证分析框架	151