The five million hectare reforestation programme in Vietnam – lessons and policy implications

Quang Ngoc Nguyen*, Danny Wildemeersch and Jan Masschelein

Laboratory for Education and Society,
Faculty of Psychology and Educational Sciences,
Catholic University of Leuven,
Andreas Vesaliusstraat 2, B-3000, Leuven, Belgium
Fax: 00-32-16-326200
Email: quangnguyenvn@gmail.com
Email: Danny.Wildemeersch@ppw.kuleuven.be
Email: Jan.Masschelein@ppw.kuleuven.be
*Corresponding author

Abstract: The nationwide five million hectare reforestation programme (5MHRP) was adopted by the Government of Vietnam as a comprehensive policy to address deforestation and poverty in the mountainous regions all over Vietnam. The programme started in 1998 and ended in 2010. It received significant national and international interests. Scholars and practitioners have commented on the effectiveness and/or ineffectiveness of the performance of the 5MHRP and its relevant policies, but there have been no or only few documents consolidating either theoretical or practical lessons learnt from the implementation of this programme. Synthesising from large archival records and empirical studies on the results of the implementation of the 5MHRP, this paper discusses the specific achievements and limitations of the programmes. It especially questions the effectiveness and efficiency of the supported policies in relation to forest management and livelihood improvement of the people living in mountainous areas. It finally draws out seven key lessons learnt and five policy implications which are hopefully to serve as references for policy makers when setting up future programmes, strategies and policies for mountainous development in Vietnam.

Keywords: five million hectare reforestation programme; 5MHRP; production forest; protection forest; special use forest; policy; mountainous regions; Vietnam.

Reference to this paper should be made as follows: Quang N.N., Wildemeersch, D. and Masschelein, J. (2015) 'The five million hectare reforestation programme in Vietnam – lessons and policy implications', *Int. J. Environment and Sustainable Development*, Vol. 14, No. 1, pp.40–55.

Biographical notes: Quang Ngoc Nguyen is a PhD candidate in the Laboratory for Education and Society, Faculty of Psychology and Educational Science, Catholic University of Leuven. His PhD research topic is on participation, culture and power relations in natural resource management in mountainous region in the north of Vietnam. He has 15 years of professional experience as a project manager, project coordinator and consultant in rural development sectors focusing on poverty reduction and natural resource management.

Danny Wildemeersch is Emeritus Professor of Social and Intercultural Pedagogy at the University of Leuven in Belgium. He was also a Full Professor of Social Pedagogy and Andragogy at the University of Nijmegen in the Netherlands. He is a member of the Leuven Research Centre on Education, Culture and Society. His research focuses on a variety of themes such as intercultural education, social participation, education and democratic citizenship, environmental education, transitions from school to work, and development cooperation. He is editor of the *European Journal for the Research and Education of Adults* (*RELA*).

Jan Masschelein is Professor of Philosophy of Education and Director of the Laboratory for Education and Society at the KULeuven, Belgium. His primary areas of scholarship are educational theory, critical theory, and social philosophy. Currently, his research concentrates on the public character of education and on 'mapping' and 'walking' as critical research practices. He directed various research projects on development issues: 'Development as participatory learning process', 'Integrated capacity building through research-based geopark development in N.E. Vietnam' and 'Improving multi-stakeholder collaboration for conservation of the Pu Luong – Cuc Phuong limestone landscape'. He has published extensively within his areas of research.

1 Introduction

Developing countries depend in a number of important ways on their natural resources. Many countries today rely on timber for export earnings. At the same time, millions of people in tropical countries still depend on forests to meet their everyday need. These large blocks of ecologically-intact natural forest are valuable because they house indigenous cultures, shelter global biodiversity, provide ecosystem services, store carbon, contribute to local and national economic growth (UNEP, 2000). Unfortunately, the pace of global deforestation has been increasing at an alarming rate over the past decades (Nguyet, 2004). While biodiversity loss and climate change due to deforestation have become global concerns, its adverse impacts resulting in unsustainable livelihoods (e.g., loss of people and shelters due to flooding, hunger and poverty because of forest resource scarcity) for millions of people, especially those who live in the mountainous regions have even been more severe (Baland and Platteau, 1996; Agrawal and Angelsen, 2009). Among the factors causing this environmental problem, 'policy failures' (environmentally adverse policies) have been highlighted by different scholars (Ostrom, 1999; Heltbeg, 2001).

Among developing countries, Vietnam is not exceptional to suffer from serious environmental problems caused by deforestation. As one of the causes to biodiversity loss, deforestation is claimed to be a key factor of climate change and soil degradation, adversely affecting livelihoods of approximately 30 million people living in mountainous areas (i.e., 36.14% of Vietnam's total population of 83 million in 2004) (MARD, 2004). In the past 50 years, forest cover has dropped from over 43% to less than 28% of the total land area, leaving more than 13 million hectares of 'barren hills'[1] (Chung et al., 1998). Centralised forest planning and management with erroneous policies, favouring state enterprises over private sector and household arrangements, are to be criticised for the vast loss of forest coverage (Ha, 2003).

In order to cope with the problem of deforestation, the Vietnamese government has adopted various policies in recent times. Among these, the nationwide five million hectare reforestation programme (5MHRP), is considered the most comprehensive programme and covers all forestry and its related issues ranging from forest planting to forest protection, from state forest management to 'forestry socialisation'[2], and from forest conservation to mountain livelihood improvement (MARD, 2010). Scholars and practitioners have commented on the effectiveness and/or ineffectiveness of the implementation of the 5MHRP and its relevant policies, but there have been no or only few documents synthesising either theoretical or practical lessons learnt from the implementation of this programme. The objective of this article is to examine the performance of the 5MHRP from 1998–2010 through a review of extensive empirical studies. Insights emerging from the review process may particularly serve as references for the government of Vietnam, when setting up strategies and policies that address sustainable forest management for mountainous areas in Vietnam.

2 Methodology

This study is based on a qualitative analysis of archival material and secondary literature from library and online sources. Since the 5MHRP is a governmental programme widely implemented in all mountainous regions in Vietnam, the data and information of the programme were systematically recorded by the Ministry of Agricultural and Rural Development (MARD). The programme, which was surveyed for the present study, also received remarkable international attention. Moreover, as Kelly (2005) argued, all researchers are influenced by their background, whatever work they undertake and whichever way they interpret data. In line with this, discussions and arguments in this study are in close connection with the experience and interests of the first author who spent more than 15 years working in the mountains of Vietnam for the development of these regions.

3 The 5MHRP

3.1 Key legal basis for the 5MHRP

3.1.1 Forest protection and development law

Based on the success of the agricultural renovation[3], the Law on Forest Protection and Development was adopted. The Law was first promulgated in 1991 and then revised in 2004. Four major domains were stipulated in the revised version. First, the government stressed the importance of forests for socio-economic development. Second, the government classified forests into three types: *protection forest, special use forest and production forest*. Third, although still overall controlling the management of forests, the government allocated forests and forest land to organisations and individuals for stable and long-term protection, development and utilisation in accordance with state planning. Fourth, the government provided financial and technical support for reforestation efforts such as preferential credit and investment incentives (MARD, 2004).

3.1.2 Land law

The Land Law was first adopted in 1993. It was revised in 1998, 2000 and 2003. The Land Law of 2003 provided to people extensive use rights concerning agriculture and forest lands. It stipulated that long-term usufruct rights for most lands should be issued to legal non-state entities, including households, groups of households, communities and organisations. In this context, use rights including permission to *transfer*, *donate*, *lease*, *mortgage*, *guarantee* and *capitalise* were elaborately defined with extensive guidance provided. The Land Law of 2003 still clearly stated that the state controls overall management of the land resources.

2.1.3 Program 327

Program 327 was formalised in decision 327/CT "policy on the use of bare lands, denuded hills, forests, alluvium shores and water bodies" in 1992. The programme aimed to achieve:

1 re-greening of the major part of the degraded hills all over the country

2 utilisation of bare lands in hilly areas and of coastal alluvial flats and water bodies for the production of goods and supply of industrial raw materials

3 implementing the programme for fixed cultivation and resettlement

4 creating income for the state and consolidating national security.

After various restructuring processes, the programme was suspended in 1997 when the government recognised various challenges. First, the target of planting five million hectares of forest in ten years was not reached (San and Gilmour, 2001). Second, the contribution of the programme to improving the livelihood conditions of ethnic minorities was considered limited and unsustainable (San and Gilmour, 2001). Third, the participation of local people, especially ethnic minorities was constrained (Lang, 2007). These failures result from many issues ranging from inappropriate planning, lack of funding, spreading investment over too many activities, too much subsidisation, unsecured land-use rights, and unclear incentive policies (San and Gilmour, 2001).

3.2 The 5MHRP

Building on the results of Program 327, the 5MHRP was introduced in 1998 in the government Decision 661/QD-TTg. The programme aimed at establishing five million ha of new forest through a variety of means in the period from 1998 to 2010 (MARD, 2005). To meet this aim, three main objectives were set:

- to establish five million hectares of new forest in order to increase the national forest cover from 28% in 1998 to 43% by 2010 [MARD, (2005), p.14]
- to use areas of barren lands effectively to create jobs for local farmers, contributing to the eradication of famine and the alleviation of poverty [MARD, (2005), p.14]
- to supply timber for industrial purposes, to make forestry an important contributor to socio-economic development in the mountain regions [MARD, (2005), p.14].

Table 1 Targets of the 5MHRP

Divided by forest categories	*Divided by period*
1 Protection and special use forest (2 million ha): • 1 million ha of natural regeneration with enrichment planting in suitable areas. • 1 million ha of new forest for protection purposes in critical regions (such as water catchment areas, coastal eroded areas or areas needing urgent ecological restoration). Efforts will be concentrated on northern mountainous areas of low forest cover and central regions that are flood prone. 2 Production forest (3 million ha): • 2 million ha of industrial forest plantation with major species consisting of acacia, bamboo, pines and eucalyptus, with some special purpose and high value species. • 1 million ha of commercial cash crops such as rubber, tea, coffee, medicinal plants and fruits.	• *1998–2000:* 700,000 ha of new forest (of which, 260,000 ha of protection forest and special use forest); regeneration with enrichment planting of 350,000 ha. • *2001–2005:* 1,300,000 ha of new forest (of which, 350,000 ha of protection forest and special use forest); regeneration with enrichment planting of 650,000 ha. • *2006–2010:* 2,000,000 ha of new forest (of which, 390,000 ha of protection forest and special use forest).

Source: MARD (2005, p.18)

Table 2 The 5MHRP implementation results, 1998–2010

No.	*Target*	*Objective to 2010*	*Actual implementation until October, 2010*	*Implementation/ target ratio 1998–2010*
A	*Volume (ha)*			
1	Forest contracted to manage and protect	2,000,000	2,263,361	113%
2	Forest regeneration	1,000,000	723,450	72%
3	Forest planting	3,000,000	1,401,667	35%
3.1	Protection and special use forest	1,000,000	631,317	63%
3.2	Production forest:			
	• Industrial materials, agro-forestry products	2,000,000	683,396	34%
	• Industrial crops and fruit trees	1,000,000	86,954	9%
B	*Investment capital (million VND)*	*33,000,000*	*5,811,538*	*18%*
1	Central budget	8,500,000	3,317,848	39%
2	Local budget		409,513	
3	Credits		1,190,483	
4	Foreign capital (for reforestation)		371,077	
5	Business's own capital		338,178	
6	Natural resources taxes		184,439	

Note: Exchange rate by October 2010: 1 US$ = 19,500 VND.

Source: MARD (2010, p.42)

Table 2 The 5MHRP implementation results, 1998–2010 (continued)

No.	*Target*	*Objective to 2010*	*Actual implementation until October, 2010*	*Implementation/ target ratio 1998–2010*
C	*Key targets*			
1	Forest coverage (%)	43	36	
2	Permanent job created (million)	2	__	
3	Rate of poverty reduction as contributed from the programme	--	--	
4	Supply of timber for industrial purposes (million m^3)	150	--	

Note: Exchange rate by October 2010: 1 US$ = 19,500 VND.

Source: MARD (2010, p.42)

The programme set specific targets for reforestation for each forest type in different periods to the year 2010 as described in Table 1.

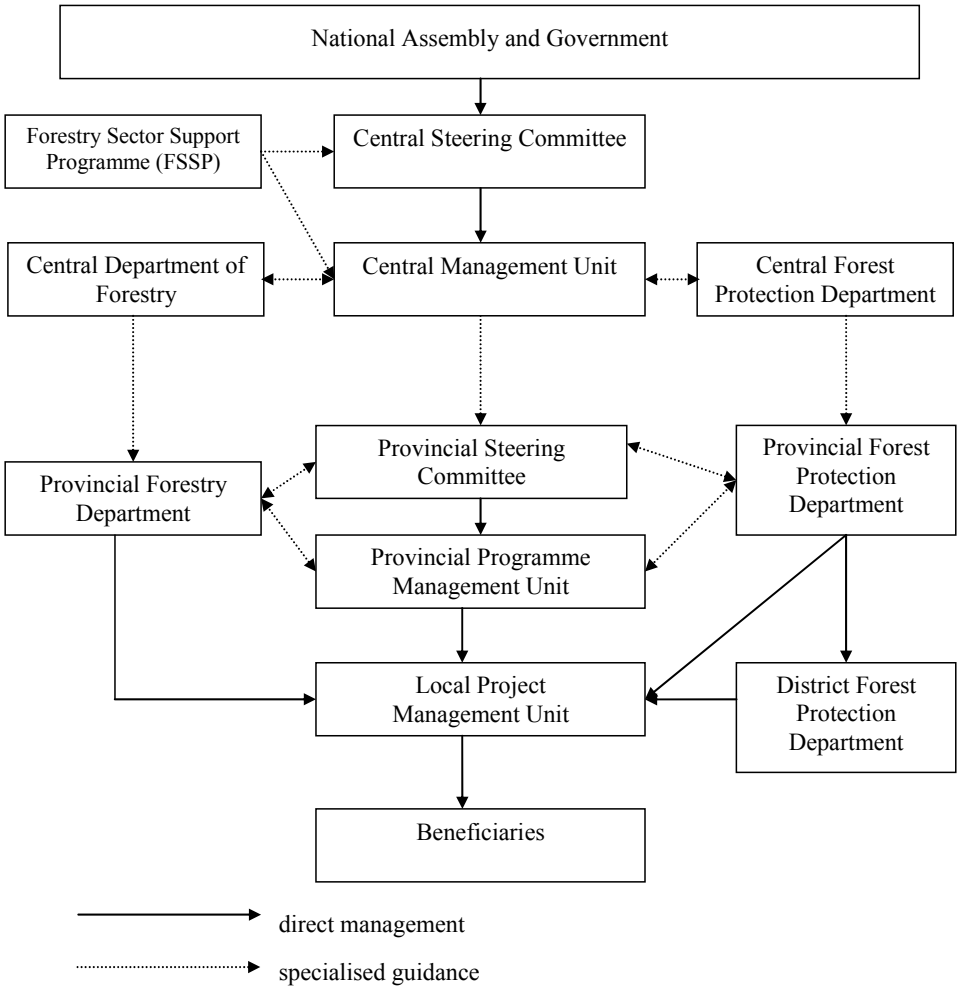
The 5MHRP claimed to be the biggest reforestation programme ever in Vietnam since its reunification in 1975. It received not only special attention from the government, but also from various big multilateral donors including the World Bank, the Asian Development Bank and the European Union through financial contributions as indicated in Table 2.

The programme involved all 61 provinces of the country in the implementation with the specific request that each province investigates and identifies the available barren lands, then develops a plan for reforestation of these lands within the time framework of the programme. Based on the annual plans sent by provinces, the Central Steering Committee (Figure 1) would review and allocate the implementation budgets. The reforestation process was scientifically supported by the government's forestry institutions. By 1999, when the reforestation was commencing, fast growing trees including acacia and eucalyptus were introduced; and mono-tree planting (single specie or monoculture) was recommended in all areas of production and protection forest under the cover of the 5MHRP. Labour forces for producing nurseries and planting forests were mainly workers of state owned forest enterprises and local farmers who have available barren lands covered by the 5MHRP (MARD, 2005, 2010).

While supporting the implementation and management of the programme, the government has established a management system, structured from the central to the local level (Figure 1). The major guiding principle for the implementation of the programme is that it will be implemented within the framework of projects involving local participation. Decision 661/QD-TTg [MARD, (1998), p.7] states that "local people in mountain regions are the main driving force for the implementation of protection, regeneration and forestation and they are also beneficiaries of forestry activities".

The central vertical pillar, as illustrated in Figure 1, is the backbone for implementing the 5MHRP. The offices that comprise this pillar are directly involved in implementing the programme. The left and right pillars include agencies which mainly provide technical guidance.

Figure 1 Institutional arrangement for implementation of 5MHRP



Source: MARD (2010, p.31)

By May, 2010, the final evaluation of the 5MHRP was completed by the Ministry of Agriculture and Rural Development. Table 2 provides quantitative results which were officially reported by the MARD to the National Assembly in October 2010.

Although many important indicators were put forward when the objectives were formulated, such as the number of permanent jobs created, the rate of poverty reduction, and the quantity of timber provided for industrial purposes, these indicators were not applied at the moment of the evaluation; Table 2 clearly indicates that most of the programme's physical reforestation targets were not reached. It was recognised that:

1 the programme was unable to reach the objective of increasing forest coverage to 43% in 2010 (36% instead)

2 the management and plantation of protection and special-use forests were on schedule, whereas the management and plantation of production forests were behind the schedule

3 the areas of natural forests defined as special-use and protection forests tended to increase, yet the quality has only slowly improved, and even decreased in some regions

4 within the implementation process, there has been a lack of close coordination among the line agencies

5 the beneficiary policy towards forest planters has been issued but has not yet been sufficiently attractive for people to be involved in forest planting and development, particularly poor people living in or adjacent to forests

6 the reform of the management of state forest enterprises has not been carried out smoothly; hence investment in the area of forest and land under their management has not yet been effective (MARD, 2010).

4 Discussion

With the data provided in Table 2 and the conclusions of the final evaluation indicated above, it is obvious that after ten years of implementation, most of the physical targets of the 5MHRP have not been successfully reached. The Vice-Minister of the MARD acknowledged that tree planting was far behind schedule (Lang, 2007). Meanwhile, the World Bank described the programme as not realistic (MARD, 2010). Since the programme is not only nation-wide, but also internationally recognised by the multilateral donors including the World Bank, the Asian Development Bank, the implementation results of the programme received vast attention and feedback from both national and international researchers (e.g., Hieu, 2004; Lang, 2007; Clement et al., 2007; MCElwee, 2009). This section will explore their concerns about the implementation results of the 5MHRP based on a review of the extensive empirical studies of those researchers.

To some extent, one cannot overlook the achievements of the programme present in many dimensions ranging from government policy to the life of local people living in mountainous regions. First, through the implementation of the 5MHRP, Vietnam has actively subscribed to many important international protocols such as the Convention on International Trade in Endangered Species, and the Convention to Combat Desertification. Through this participation, Vietnam has improved its profile in forest management and attracted more attention as well as investment from the donor communities (MARD, 2004). Second, decision makers at all levels are more active in responding to the practical needs of the implementation of the 5MHRP. As a result, a series of legal documents have been promulgated such as Decision 186/TTg on natural forest management, and Decision 245/TTg on decentralisation of forest management (QN, 2005). Third, the state has less involvement in forest management through the renovation process of state forest enterprises. The programme is opening more space for participation of the private sector as well as local communities in forest management and

development (World Bank, 2005). And last but not least, the increase of production forest volume thanks to the implementation of the 5MHRP has contributed to economic development through timber processing and export, hence contribution to poverty alleviation (MARD, 2004).

However, while the government has been trying to provide measures to support the implementation of the 5MHRP with the main aim to pursue the objectives of increasing forest quality and quantity, the expected outcomes have not been achieved because of the following shortcomings:

4.1 Inappropriate perception of forest and forest management

Arguing that fast growing trees (acacia, eucalyptus) can bring in both environmental and economic benefits, almost all areas of production and protection forests under the 5MHRP have been requested to reforest by planting mono-trees. However, many of the attributed environmental benefits to mono-tree plantations have been challenged. Research works questioned a wide range of usually taken for granted narratives such as 'forests reduce erosion', 'forests increase dry flows', or 'forests reduce floods' [Clement et al., (2007), p.12]. Results from the research of Clement et al. (2007) in various 5MHRP sites suggested that monoculture plantations usually acidified soil and it was found that silviculture, especially evergreen plantations such as eucalyptus, dramatically reduced stream flows after a few years of planting. Similarly, the research of Clement et al. (2007) also questioned economic benefits of monoculture plantations. The research demonstrated that tree plantations were not perceived as an acceptable economic option for a majority of farmers in the areas under study. The complex system mixing forestry trees (e.g., bamboo, indigenous trees, fast growing trees) and agricultural trees (e.g., peanuts, cassava, maize, tea) will provide regular incomes, with likely environmental benefits higher than eucalyptus plantations. A previous comparison of agro-forestry systems with eucalyptus showed that the former were financially more profitable than the latter.

In terms of forest management, Nguyet (2004) contended that forest management should be considered more broadly to avoid erroneous policy implementation. She quoted the definition of the Food and Agricultural Organization of the United Nations (FAO) in 1991 stating that forest management encompasses the administrative, legal, technical, social and environmental aspects of the conservation and the use of forests. She then concluded that in the implementation of the 5MHRP, little attention had been paid to social issues (e.g., social network, social movement, and communication and awareness raising in terms of forest planting and protection) and cultural practices (e.g., local customs, mutual trust of local people in forest management, community forest management system). As a result, at the micro level the programme could not successfully mobilise the dynamics and interests of individuals and communities. At the macro level, the programme lacks cooperation of other social sectors including the Ministry of Labour, Invalid and Social Affairs, the Women's Union (Nguyet, 2004; Clement et al., 2007).

4.2 Inadequate forest classification

In favour of conservation, in some provinces, the government classified most of the forests as special use or protection forests. As a result, local people in mountainous regions have almost no land for cultivation; they have to destroy forests for subsistence and/or cultivation (Sikor and Apel, 1998). This situation is described in the research by Sikor and Apel (1998, p.8) in Son La province as follows: "The government has classified almost three quarters (73%) of the province's area as forest land though only one tenth of the province is actually covered by forest. Of 73%, two thirds have been zoned as protection or special-use forest. Thus, many of Son La's residents have very limited access to local forest resources".

4.3 Inappropriate budget allocation for forest management

Inappropriate budget allocation for forest protection and forest plantation has been discussed for more than a decade since the implementation of Program 327. The inappropriateness is presented at both macro and micro levels.

At the macro level, the government's intervention through equal budget allocation to provinces has some limitations. First, some rich provinces in fact do not require funding from the government as they have plenty financial resources in their provincial budget (QN et al., 2002). Second, the investment cost of forest protection and plantation in mountainous regions must be much higher than in lowlands while the investment rate set by the government is the same all over the country (Anh, 2006). These limitations have led to misuse of the forestry budget by some local authorities. In 2007, Education Nature Vietnam reported that government audits had revealed that between 1998 and 2005, 35 billion VND (equivalent to 2.4 million US$-exchange rate in 2005) was misappropriated nationwide from a forestation fund and put to private use by provincial authorities (Lang, 2007).

At micro level, scholars and practitioners argue that 100,000 VND/ha/year (7 US$-exchange rate in 2002) for forest protection and 4,500,000 VND/ha (300 US$-exchange rate in 2002) for planting and tending for five years are not enough to effectively and efficiently protect or grow forests (Sam et al., 2002). Resulting from this low investment, the forests funded by the government are normally of lower quality than when local people or private companies would invest (QN et al., 2002). Low investment in forestry leads to low productivity and long tree rotations. In turn, low productivity leads to low income resulting in a vicious circle as low income leads to low investment (Hieu, 2004).

4.4 Limited coordination between the 5MHRP and other programmes

Besides the 5MHRP, there are many national and international programmes supporting either forest management or livelihood improvement in mountainous areas in Vietnam, such as Program 134 on upgrading local houses, Program 135 on upgrading key infrastructure of remote communes, the World Bank Northern Mountain Poverty Reduction Project, etc. Despite different means of implementation, all of these programmes have the same aim to contribute to poverty reduction in mountainous regions. However, they have rarely coordinated among and supported each other even when they are implemented in the same area. For example, in Son La province, while the

so-called 'silviculture roads' heavily invested by the Program 135 were unused due to building in wrong places, the 5MHRP management board of this province claimed that they were in shortage of budget for roads construction for timber transportation (Hieu, 2004); on another occasion, local people in one commune in Hoa Binh province at the same time have received double financial support for forest protection from two projects because these two projects were not connected each other (Anh, 2002). Thus, close coordination could help each project by not only reducing costs but also obtaining better outputs and outcomes.

4.5 Decentralisation or de-concentration in forest management?

Decision 245/1998/QD-TTg has opened up the space for more involvement of stakeholders in forest management. According to this decision, commune people's committees have been given more power and responsibilities for forest management. While this so-called 'decentralisation decision' has been applauded by many people as it provides self-governance to communes in forest management (Sam et al., 2007), challenges remain.

It was found in a comparative study by Anh (2002) that forest management has not improved since the promulgation of Decision 245. According to this research, in some areas, forest management has even worsened due to power abuse of local authorities. For Anh (2002), due to a lack of representation ensuring accountability to local people, local authorities have neglected their actual needs. As a result, in reporting to the government, most of the provinces referred to how well forest coverage has increased but rarely mentioned to what extent the local people could actually benefit from the forest (Anh, 2002).

Ribot (2002) indicated that real decentralisation will be effective if, next to power transfer, the necessary financial and technical resources and accountability transfers are implemented. In the case of Decision 245, the power and responsibilities for forest management seem to have been transferred partly to the communal people's committees, whereas this is not the case for the financial and technical resources. Financial resources are still managed by the district and provincial people's committees and are distributed annually based on their plans. Similarly, technical resources are mostly located at the provincial agencies far from the communes. Perhaps Decision 245 should be viewed as a form of 'de-concentration'. According to Ribot (2004, p.2), "de-concentration concerns transfers of power to local branches of the central state, such as prefects, administrators, or technical line ministry agents. These upwardly accountable bodies are appointed local administrative extensions of the central state".

4.6 Failure of supportive policies

To achieve the objectives of implementation of the 5MHRP, supportive policies such as preferential credit, benefit sharing and forestry extension policies have been enacted. However, these policies have partially missed their objectives. Some scholars point out that the supportive policies tend to benefit the people living close to the district or commune centres but not those living in remote areas (Sunderlin and Ba, 2005). In their research, Sunderlin and Ba (2005) conclude that the land allocation policy brings more benefit to the Kinh people who normally live close to the district towns and commune centres. In the same vein, the credit policy is criticised for favouring people living closely

to the credit centres due to its rigid procedures as well as the laziness of credit officers who avoid going to remote areas. With regard to the benefit sharing policy, the study of Sunderlin and Ba (2005) further points out that 60% of future returns in forest plantation go to the state while local people only acquire 40%. Finally, extension policy was also criticised to fail to respond to the needs of forest growers due to the low capacity of extension officers (Clement et al., 2007). Thus, mountainous regions with people living within them bear unique natural, cultural, socio and political characteristics that require particular interventions, if forest management and local livelihood are to be addressed (FFI and UWA, 2012). The errors of the supportive policies have not only undermined the implementation of the 5MHRP, but they have also created more social differentiations among people living in disadvantaged mountainous areas and those in advantaged lowlands due to the unequal interventions (Clement et al., 2007).

4.7 Forest use rights or land use rights?

Secure property rights in land use can lead to more rapid economic growth and poverty reduction, and avoid social conflicts (Deininger, 2003; Hyakumura and Lopez, 2007). The Law on Forest Protection and Development (MARD, 2004) has brought great opportunities to a range of stakeholders by allocating forest to some new actors as well as providing more use rights to them. However, the confusion of using two terminologies 'forest use rights' and 'land use rights' in the Law has constrained forest owners from taking full advantage of the six rights (*transfer*, *donate*, *lease*, *mortgage*, *guarantee* and *capitalise)* stipulated by the Law. First, it creates a suggestion among forest owners that they cannot undertake agro-forestry and that they are restricted to monoculture forest plantation on their allocated lands. Second, understanding that they have the right to forest use only, many local people do not dare to transfer or lease out their lands to others. And last but not least, local people are discouraged from deciding to invest in forest plantation as they are afraid that their forest can be claimed by the government at short notice (Sunderlin and Ba, 2005).

5 Conclusions and some policy implications

Seeking to examine the performance of the 5MHRP through synthesising the extensive empirical studies, this paper concludes that the 5MHRP has attained some achievements such as improving the profile of Vietnam in forest management among international communities; increasing the capacity of decision makers; opening up more space in forest management and development for the private sector and for local communities, and contributing to economic development through timber processing and export. However, it was also recognised that the implementation of the 5MHRP has lagged far behind schedule, therefore could not have been achieved in time.

Findings from this study highlight various important policy implications. Firstly, stable policy is a key requirement to secure sustainable forest management. Too many policies, promulgated within a limited number of years under the 5MHRP, have made people feel uncertain to invest in forest management (Clement et al., 2007). It is understandable and reasonable for policy to change in order to better reflect reality. However, the situation in Vietnam shows that the policy changes are partly due to weak planning as well as lack of consultation (Sunderlin and Ba, 2005). The latter suggests that

policy must not only reflect government needs but also local needs. Bottom-up consultation in policy development will result in policy of the people and with the people, rather than only for the people (Phuc, 2009).

Secondly, governments may tend to assume that society is static and apply policies uniformly across the whole society. In fact, inside a society there are many sub-societies with different classes, ethnicities and interests (Agrawal, 2001). Each has its own institutions either formal or informal. Individuals living in a sub-society tend to follow the institutions set by the sub-society rather than the regulations set by the larger society (Sikor and Tan, 2011). Thus, when promulgating policy, the government should consider and/or make use of these institutions as they reflect the characteristics as well as the needs of that sub-society (Clement et al., 2007).

Thirdly, the vicious circle of low input – low productivity discussed above requires policymakers to rethink budget allocation. Careful planning with priority for those regions that need more investment would be the most appropriate tool to break this vicious circle.

Fourthly, the failure to achieve the objectives of the 5MHRP raises the question, 'is five million ha enough?' The 5MHRP tends to assume that 'bare lands' are suitable for reforestation but in fact out of the 1.16 million ha which are classified as bare lands in the Central Coast Region, only 180,000 ha are considered available and suitable for intensive plantation development (Sunderlin and Ba, 2005). Although this should have occurred earlier, re-inventory as well as re-classification of forest lands should be done to re-schedule the implementation of the programme.

Last but not least, many indigenous people are traditionally and continuously forest dependent (AFN, 2009). The dependence goes beyond the economic realm as limitedly defined by many government policies. It definitely also concerns the inter-relations between local cultures and the forests they manage (Sikor and Tan, 2011). Current economic and lowland favoured forest policies have, on the one hand, not ensured sustainable forest management or livelihood improvement of the indigenous people; on the other hand, they have undermined and assimilated local cultures leading to the decline of social capital which is an important dimension in sustainable forest management (AFN, 2009). As the UN Declaration on Rights of Indigenous People (UN, 2007) has indicated, the future forest policies must not only recognise cultures and identities of indigenous people, but also take into account their cultural integrity, human security, self-governance, capacity to negotiate and seek redress, and sustainable and equitable development (UN, 2007; AFN, 2009).

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Notes

1 The term 'barren hills' (*Đồi núi trọc* – in Vietnamese) is criticised by Nikolic et al. (2008, p.1) as not adequately ecologically characterised. However, this term has been used broadly in all forestry policies of Vietnamese Goverment, and by various national and international scholars (e.g., Chung et al., 1998; Sunderlin and Ba, 2005; Sikor and Tan, 2011). To avoid any other confusion, we keep using this term. 'Barren hills' in this article refer to the forest areas that have been almost destroyed after unsustainable (legal and illegal) logging. What is left in these 'barren hills' are often burned-out lands, grasslands, grassland and bushes, scrubland with sparse trees.

2 'Forestry socialisation' (*Xã hội hóa lâm nghiệp* – in Vietnamese) is one of the terms used in the 5HRFP, its policies and other publications (e.g., San and Gilmour, 2001; Ha, 2003; Lang, 2007; MARD, 2005, 2010). This means offering more room in forest planning and management for other stakeholders to participate, including the private sector, local communities, groups of individuals, and households.

3 The government of Vietnam officially declared to shift from centralised planning to market integration economy in 1986. Following the declaration, the government revoked most of agricultural lands from state owned agricultural cooperatives and enterprises to allocate to households. As a result, poverty has been significantly overcome. Vietnam moved from a subsistence farming country to the second biggest rice export country in the 1990s (MARD, 2010).