

**Devolution of Forest Management:  
Development of Assessment Methods for  
Forest Land Allocation in Dak Lak, Vietnam**

**September 18, 2000**

**Proposal handed in by**

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**Sustainable Management of Resources  
in the Lower Mekong Basin Project (SMRP)**

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## **1 Executive Summary**

### **Country**

S.R. Vietnam

### **Proposal handed in by**

Dr. Hans Helmrich, Sustainable Management of Resources in the Lower Mekong Basin Project (SMRP, PN 98.2007.7-001.100)

### **Cooperating institutions**

- Ministry of Agriculture and Rural Development, Vietnam
- Department of Agriculture and Rural Development, Dak Lak province, Vietnam
- Social Forestry Unit, Tay Nguyen University, Dak Lak province, Vietnam
- Institutes of Economics and Ethnology, Vietnam
- Fachgebiet Ressourcenökonomie, Humboldt Universität Berlin

### **Researchers**

- Mr. Tran Ngoc Thanh, currently staff of the Department of Agriculture and Rural Development, Dak Lak province
- German Ph.D. student in natural resource economics (to be identified).

### **Problem analysis**

Deforestation depletes timber supplies, leads to land degradation, causes adverse downstream effects, reduces biodiversity, and decreases carbon absorptive capacities. The negative impacts have motivated large government efforts to protect forests. Yet many government-led protection efforts have failed. Their failure has led to calls for new forms of governance over forests. In particular, increasing understanding that sustainable forestry needs to involve local people has supported calls for the devolution of rights to forest resources to local people. While the rationales given in support of devolution differ, they typically presume that local people are better forest managers because they possess better knowledge of local conditions, value forests higher than outsiders, or dispose of more effective institutions for forest protection.

The theoretical assumptions underlying devolution have been juxtaposed by a lack of empirical assessments of the processes and outcomes of devolution. The problem is two-fold. First, there is a lack of research on the effects of devolution on livelihoods, equity and forest conditions. Or, put another way, it is unclear under what conditions - in terms of devolution process and external factors - devolution leads to economic, distributional and ecological improvements. Second, decision-makers at local and national levels do not have adequate methods to assess the outcomes of devolution. They need tools to evaluate policy outcomes in a timely and concise way.

### **Development goal**

Forest land allocation has become an integral part of sustainable rural development in Dak Lak province, as it facilitates improvements in local livelihoods, equity, and forest conditions.

### **Purpose**

The Dak Lak Department of Agriculture and Rural Development is in a position to apply and develop assessment methods for forest land allocation, with support in the form of scientific expertise and active research collaboration provided by Tay Nguyen University.

### **Expected results**

1. The outcomes of forest land allocation have been assessed and synthesized.
2. Methods for the assessment of forest land allocation have been developed.
3. Knowledge, skills, and institutional capacities have been strengthened at the Dak Lak Department of Agriculture and Rural Development and Tay Nguyen University.

### **Relevance for the sector, partner organizations, and target population**

The proposed research addresses a key concern of decision-makers in Dak Lak province. Over the past two years, the provincial decision-makers have focused much attention on forest land allocation. They expect allocation to contribute to a variety of goals: improve local livelihoods, generate equitable access to an important resource, and protect forests against agricultural expansion driven by international markets and migrants. The proposed project aims to generate empirical findings and develop methods that help the decision-makers learn from the first round of forest land allocation and incorporate learned lessons into following rounds of allocations.

The search for new forms of forest governance has also received significant attention by national policy-makers. The Vietnamese government has recognized that financial and technical innovations do not suffice to achieve the national goal of increasing forest cover by five million hectares by 2010. They are in the process of discussing options for further devolution of land and resource rights, following the initial step taken through the Land Law in 1993. In particular, they have given Dak Lak authorities the official mandate to experiment with new forms of forest land allocation. This project will demonstrate methods that allow empirical assessment of forest land allocation and can readily be applied all over the country.

Forest land allocation will have significant impacts on people living in upland watersheds in Vietnam, the ultimate target group. Land is the primary productive resource in rural Vietnam. In upland areas, most land is classified as forest land. In addition, forest resources pose significant values to local people in many upland areas of Vietnam. A policy that increases local people's rights over forest land and resources therefore has the potential for significant impact on upland livelihoods. Methods for assessing policy impacts will help policy-makers improve policy design and implementation and thus make an important contribution to poverty alleviation and economic development in the uplands.

Finally, the methods will be very relevant as an evaluation tool for forestry projects supported by multilateral and bilateral donors beyond Vietnam.

## 2 Problem Analysis

### 2.1 Development Context

#### 2.1.1 General context

Deforestation has been identified as a major problem in sustainable natural resource management. Deforestation leads to loss of soil fertility and land degradation, with detrimental effects on local livelihoods. Loss of vegetation cover and associated watershed degradation cause negative down-stream effects, such as seasonal water shortages coupled with a higher occurrence of floods, siltation of reservoirs and irrigation canals, and increased levels of seasonal salinity intrusion in coastal areas. At the global level, deforestation implies losses of biodiversity and absorptive capacity for carbon.

Researchers and development practitioners have paid growing attention to the role of people in forest management (Fox *et al.* 2000, Sayer *et al.* 2000). They recognize that very few forests remain untouched. Numerous case studies exist that attest to the diverse ways how local people interact with forests. In addition, many of the case studies suggest that local people have appropriate knowledge, values and/or institutions for sustainable forest management (Poffenberger 1990; Agrawal and Gibson 1999; Ostrom 1999). As a consequence, it is increasingly understood that forestry can only be sustainable if it involves local people (Sayer *et al.* 2000).

Increasing recognition of local people's role in forest management and growing dissatisfaction with state management has led to calls for devolution. Today devolution is a core theme in forest management. It found its expression in terms such as community forestry, community-based resource management, and joint forest management (Perry and Dixon 1986, Arnold 1990, Poffenberger 1990).

The question today is no longer *whether or not* governments should devolve rights to forest land and resources, but *under what conditions* and *how* they should devolve authority over forest management (Fisher 1999, Meinzen-Dick and Knox 1999). Yet decision-makers lack empirical knowledge and analytical tools to evaluate the outcomes of devolution, identify the conditions conducive for devolution, and develop appropriate processes of devolution (Agrawal and Ostrom 1999, Meinzen-Dick and Knox 1999). As government are initiating devolution policies and programs, there is an urgent need for assessment methods that serve decision-makers need for timely and concise information about policy implementation and outcomes.

#### 2.1.2 Regional development problems

Deforestation and related land degradation are the major processes of watershed degradation in the Lower Mekong Basin. On-site erosion and depletion of soil fertility endanger the livelihoods of a large number of ethnic minority groups living in the upper watersheds. Watershed degradation also causes concern by national government for its down-stream impacts. Yet while the phenomenon of watershed degradation is quite general, the causes underlying degradation are heterogeneous.

Land use dynamics in Dak Lak province of Vietnam illustrate the heterogeneity of causes underlying deforestation in the Lower Mekong Basin. Integration into international markets is driving the expansion of commercial coffee and rubber plantations in some areas. In other areas, the subsistence requirements of a rapidly growing indigenous population require the cultivation of a growing area for food. Both processes are exacerbated by large flows of in-migrants. Altogether these factors have caused a rapid decline of forest cover from 63 per cent in 1992 to 52 per cent in 2000. As a consequence of declining forest cover and rising agricultural demands, rivers in Dak Lak now experience seasonal water shortages and floods. The hydrological system of Dak Lak has been severely disturbed and now contributes less water to the Mekong river system than in the past.

In response to deforestation and watershed degradation, the Vietnamese government and Dak Lak authorities have taken steps toward devolving forest management to local people. The Vietnamese government, in particular the Ministry of Agriculture and Rural Development (MARD), has elaborated a new policy framework in the 1990s that aims to shift authority over natural resources toward local people. Nationwide programs have promoted land allocation, land use planning, financial subsidies for farm forestry, and village forest protection regulations in support of local forestry. The Dak Lak authorities have gone much beyond national policy in their effort to devolve forest management. In Dak Lak, local people receive management rights to existing forests, which they do not in other provinces.

### **2.1.3 Brief description of the MRC - German TC project**

The Sustainable Management of Resources Project (SMRP, PN 98.2007.7-001.100) has the objective to support the Mekong River Commission, its member states and relevant partner organizations in the Lower Mekong Basin in "developing, promoting and implementing strategies in participatory natural resource management". The Project implementation strategy includes both regional and national activities. National activities are initiated and supported in partnership with national Government agencies, NGOs, and international projects and programs. Regional activities aim to assist the Secretariat of the Mekong River Commission in its role as a regional networking and information dissemination body. Regional activities also link up with international projects and programs active in the region.

The Project's products and services are focused on institutional aspects of watershed and natural resource management. In a broad sense, they promote new institutional approaches to the relations between civil society, local communities and government in natural resource management as well as the development of policy frameworks supportive of new institutional arrangements. In more concrete terms, the project assists participatory approaches to watershed management, land use planning, land allocation, and forest management through information management and dissemination at national and regional levels. A significant share of Project support has focused on pilot development of innovative approaches to land use planning and forest land allocation in Dak Lak province of Vietnam, the site of the proposed research.

## **2.2 Research Focus and Justification**

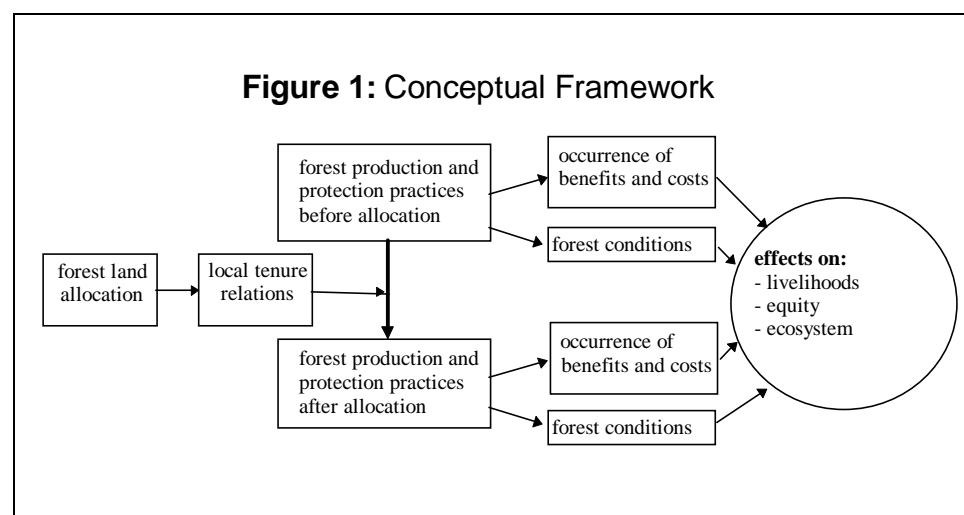
### **2.2.1 Research needs in the MRC - German TC project**

The authorities of Dak Lak province have completed the first round of forest land allocation in the first half of 2000. With technical assistance by the SMRP, they have allocated more than seven thousand hectares of natural forest to households and user groups. The authorities of Dak Lak province thus have gone beyond national policy and other provincial authorities, which have so far allocated barren forest land only. The innovative approach in Dak Lak has steered significant interest by decision-makers at the national level and in surrounding provinces. There is a crucial need to evaluate the processes and outcomes of forest land allocation before its large-scale application in Dak Lak and potential dissemination to other provinces and formulation as national policy. Such an evaluation will yield important insights into the conditions that need to be in place for successful forest land allocation. These conditions comprise process conditions, that is the forms of implementing allocation, and external conditions, such as economic and demographic contexts.

The Project plans to continue its assistance to forest land allocation in Dak Lak. In addition to direct support to the Department of Agriculture and Rural Development, it supports a Consultative Working Group in Dak Lak, which includes key decision-makers from several administrative departments and Tay Nguyen University. In the coming years, a primary goal of the Consultative Working Group will be to monitor and evaluate forest land allocation. Yet provincial decision-makers lack empirical knowledge of the outcomes of forest land allocation. For its innovative nature, there are no methods readily available that they could employ to assess the outcomes of allocation. The lack of empirical knowledge and suitable assessment methods has become a key constraint on the wider implementation of forest land allocation in and beyond Dak Lak. The proposed research project is intended to fill this gap, through scientifically sound and empirically founded advice at a level that goes beyond the resources available to the SMRP.

### **2.2.2 Research hypothesis**

The proposed research assesses the processes and outcomes of forest land allocation and develops methods for such assessment to be undertaken by decision-makers. It starts from the organization and practice of forest protection and use prior to forest land allocation (see Figure 1). Forest protection and use cause benefits and costs to local people. Benefits may include the extraction of timber and forest products, the availability of land for cultivation, and off-farm employment opportunities. Costs may comprise participation in forest protection, labor used in forest exploitation, and fines levied on illegal exploitation. Benefits and costs influence people's livelihoods, and they are likely to affect people in different ways. Protection and production practices also affect forest conditions.



The research presumes that forest land allocation modifies the organization and practice of forest protection and use. Allocation affects local land and tree tenure relations, that is the rules and rights (claims) governing the use of forest resources in villages. Its concrete effects depend on its form of implementation. As a consequence of allocation, protection behavior changes. Allocation also influences labor allocations in the households that receive forest land. Changing labor allocations lead to different production strategies. Taken together, changes in protection and production practices affect the occurrence and distribution of benefits and costs, as well as forest conditions, hence local livelihoods, the distribution of income and assets among local people, and local ecosystems.

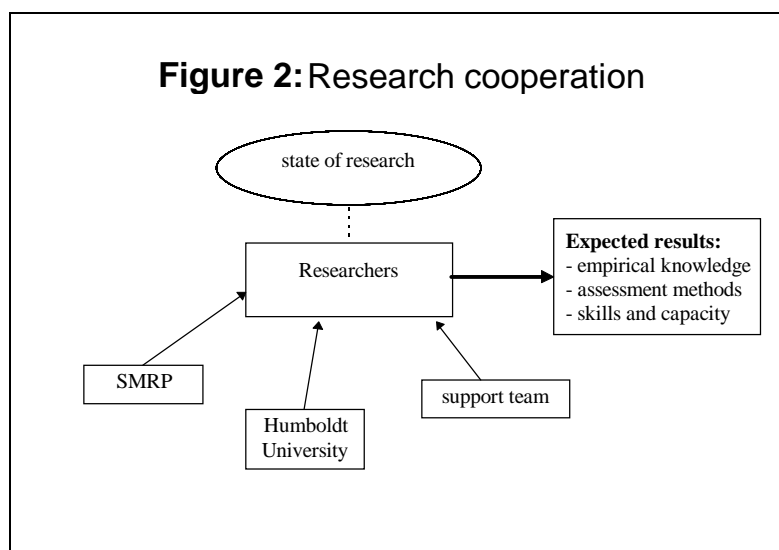
The research posits as its main hypothesis that forest land allocation improves the effectiveness and efficiency of forest protection and use. Allocation strengthens the effectiveness of forest management in terms of its impacts on local livelihoods, equity and forest conditions. Allocation also better the efficiency of forest management by raising benefits relative to costs.

The research will generate empirical knowledge and methods to assess the outcomes of forest land allocation. It will help decision-makers identify the conditions that facilitate the desired improvement in effectiveness and efficiency. Given the knowledge and methods, decision-makers will be able to identify elements in the allocation process that contribute to successful outcomes. They can revise the allocation process accordingly. Decision-makers will also improve their capacity to recognize the external conditions that facilitate successful allocation outcomes. They can target forest land allocation to areas with suitable conditions.

### **2.3 Available Experiences and Knowledge**

The research project brings together highly valuable sources of knowledge and experience (see Figure 2). It is based upon a thorough review of the literature. In addition, it draws on the experience of the SMRP, Humboldt University, and a Vietnamese support team. The SMRP contributes primary experience with forest land allocation. Humboldt University furnishes strong theoretical backgrounds in institutional economic theory and study of transformation economies as well as

experience with field research in Vietnam. The Vietnamese support team adds long-standing experience with ethnographic, economic, and forestry research among upland people of Vietnam. In addition, the support team is envisioned as a crucial link between Humboldt University and the researchers.



### 2.3.1 State of research

The research will draw on three bodies of theory. New institutional economic theory will provide a framework to examine the efficiency of forest land allocation. Microeconomic theory will be utilized to analyze the effects of allocation on household labor allocation and production strategies. Ethnographic theory will add important insights into complexity and nature of land and tree tenure relations.

New institutional economic theory rejects the general claim by the classical property rights school that private property is the most efficient way to manage resources (for a classical statement, see Posner 1977). Instead, it develops a more nuanced treatment of property rights attention by including so-called 'transaction costs'. Transaction costs arise in the process of defining and enforcing property rights to the resource. The new institutional framework thus suits forest land allocation because of its attention to production costs and output born by land-receiving households as well as the costs of allocation and enforcement.

Institutional economic research has highlighted the ways in which various types of transaction costs lead to the heterogeneity of land tenure relations observed in practice. Much research has focused on explaining the persistence of common property regimes. The research has identified transaction costs that make common property arrangements more efficient than private property (Baland and Platteau 1996, Larson and Bromley 1990). For example, the costs of policing investment in a tree or enforcing one's land title against local power holders may be too high for individual property owners and suggest common property management as the more efficient strategy (Cheung 1970, Allen 1992).

Microeconomic research has analyzed the effects of different tenure regimes on resource use practices (Feder and Feeny 1991). For example, much discussion on land tenure in Africa in the 1980s has focused on the question whether or not indigenous land tenure constrains agricultural productivity (Place and Hazell 1993, Bruce 1993). Research in Thailand and Kenya has investigated the effects of land certification on agricultural production (Feder *et al.* 1988, Place and Migot-Adholla 1998). This body of literature offers useful conceptual tools to the proposed research, though much of it has focused on agriculture.

Ethnographic research demonstrates that land and tree tenure relations are very complex. Schlager and Ostrom (1992) differentiate five different elements of property, including access, withdrawal, management, exclusion and alienation. Fortmann and Bruce (1988) point out that property rights to trees may differ from the rights to the land on which they stand. Ethnographic approach also highlights the influence of history and local context on actual land tenure relations in contexts such as the Central Highlands of Vietnam (Berry 1989, von Benda-Beckmann and von Benda-Beckmann 1994). Tenure relations may display significant difference from policy and official regulations. The literature on land tenure thus provides valuable insights for the relationship between forest land allocation and changes in tenure relations.

### **2.3.2 Experiences accumulated in the SMRP**

The SMRP has accumulated useful experience for the proposed research. Through its direct support to DARD, the Project has gained valuable insights into the allocation process. The Project has worked with all State Forest Enterprises and local authorities involved in the allocation process. It also has direct experience of the processes and costs of allocation. Various technical reports provide important background knowledge on local resource use practices and ethnic minorities. In addition, the Project is gaining useful knowledge of land use changes through its support for research on 'Development of a Watershed Information System'. The research is funded by TÖB and was initiated in late 1999. Its findings on the nature and determinants of land use changes will provide important background information for this research.

### **2.3.3 Experiences accumulated by Humboldt University**

The Resource Economics Division at Humboldt University, under the leadership of Prof. Hagedorn, has gained an outstanding reputation for research on new institutional approaches to resource management. The research has examined the efficiency of different institutional arrangements for the management of land, forest, water and biodiversity in many parts of the world, including many developing countries. The Division combines this theoretical excellence with a specialization on transformation economies. Research programs funded by the Volkswagen Foundation and European Union have examined the effects of transformation on resource management and developed appropriate institutional design for more sustainable management. Relevance for decision-makers has been a key concern in the design and implementation of the programs. Its theoretical orientation, specialization in transformation economies, and experience with policy advice thus put the Resource Economics Division in an excellent position to provide scientific advice to the proposed project.

Dr. Sikor's extensive experience with research and policy advice in Vietnam complements the expertise of the Resource Economics Division. Dr. Sikor holds a Ph.D. from the University of California at Berkeley. His dissertation examined the effects of agricultural reforms, in particular land allocation, on livelihoods, equity, and land use in ethnic minority villages (Sikor 1999, Sikor and Dao 2000). His subsequent research examined various aspects of land allocation in Vietnam (Sikor 2000a, 2000b). In the coming two years, he will serve as scientific advisor to research and training project on land tenure in the Vietnamese uplands funded by the Ford Foundation. Through consultancies for the World Bank, the Swedish International Development Agency, Vietnam's National Assembly, and GTZ, he has become familiar with the needs of decision-makers. He has spent more than three years in Vietnam, speaks Vietnamese fluently, and has gained first-hand knowledge of Dak Lak through two short-term consultancies for the SMRP.

#### **2.3.4 Experiences accumulated by the proposed support team**

The SMRP proposes the formation of a support team with the objectives of strengthening the link between Humboldt University and the researchers and support researchers between back-up visits by Dr. Sikor. The support team would comprise renowned Vietnamese scholars in the fields of economics, ethnology and social forestry. All three scholars have already participated in collaborative research projects with foreign researchers. As a whole, the research support team combines experience and skills for the proposed project that is outstanding in Vietnam.

Dr. Bao Huy is Deputy Dean of the Agriculture and Forestry Faculty at Tay Nguyen University. Coming from a background in silviculture, Dr. Huy has increasingly concentrated his research on social aspects of forest management. He has researched and prepared several fine reports on local forest management for the SMRP. Also, he has headed efforts at Tay Nguyen University to develop a curriculum for social forestry and supervised students conducting field research on local forest use and management.

Dr. Vu Chi Loi is a researcher at the Institute of Economics in Hanoi. Dr. Loi holds a Ph.D. in Economics from Hanoi National University and a Master's in Development Economics from Williams College, USA. Dr. Loi has concentrated on the economics of farm production in various regions of Vietnam. He has served as the principal investigator of a research project on labor markets in Vietnam and supported research on the effects of international trade policy on farmers. Dr. Loi has also participated in an evaluation of a widely-recognized project in the forestry sector that provided crucial support to forest policy reforms, including forest land allocation, in the first half of the 1990s.

Dr. Vuong Xuan Tinh is a researcher at the Institute of Ethnology in Hanoi. His research has examined land tenure institutions in the Vietnamese uplands (Vuong and Hjemdahl 1996; Vuong Xuan Tinh 1997a, 1997b, 1999). Dr. Tinh collaborated with Swedish researchers in examining the effects of economic reforms on rural differentiation (Liljestroem *et al.* 1998). He currently advises policy research on the effects of land policy on ethnic minorities conducted by Göteborg University. And in the next two years, he expects to collaborate with Dr. Sikor on the above-mentioned research and training program.

### **3 Description of the Planned Research**

#### **3.1 Objectives of the Planned Research**

##### **Development goal**

Forest land allocation has become an integral part of sustainable rural development in Dak Lak province, as it facilitates improvements in local livelihoods, equity, and forest conditions.

##### **Purpose**

The Dak Lak Department of Agriculture and Rural Development is in a position to apply and develop assessment methods for forest land allocation, with support in the form of scientific expertise and active research collaboration provided by Tay Nguyen University.

#### **3.2 Expected Results and Activities**

##### **Expected result 1**

The outcomes of forest land allocation have been assessed and synthesized.

##### **Activities**

- Present research outline and process to DARD and MARD
- Select two villages as study sites
- Describe tenure relations and resource use practices before allocation
- Describe process of forest land allocation
- Describe changes in external factors (population, markets, technology)
- Document changes in tenure relations since allocation
- Document changes in resource use practices since allocation and analyze their implications for livelihoods, equity and forest conditions
- Relate forest land allocation to changes in tenure relations and resource use practices
- Synthesize findings in brief report

##### **Expected result 2**

Methods for the assessment of forest land allocation have been developed.

The second result will be achieved upon completion of the following three main activities.

##### **Main activity 2.1**

Design methods for the assessment of forest land allocation.

##### **Activities**

- Present findings of two village cases to DARD and MARD
- Identify measures for changes in tenure relations and resource use practices
- Develop indicators for linkages between forest land allocation, on the one hand, and tenure relations and resource use practices, on the other
- Use measures and indicators to compile assessment methods
- Discuss assessment methodology with DARD and MARD

### **Main activity 2.2**

Apply the assessment methods on a pilot basis and refine them.

- Train junior research staff of Tay Nguyen University in assessment methods
- Select four villages for testing methods
- Supervise application of methods in four villages
- Guide synthesis of experiences in brief report
- Discuss experiences with DARD and MARD
- Refine assessment methods

### **Main activity 2.3**

Apply and evaluate the assessment methods.

#### **Activities**

- Instruct junior research staff about changes in methods and improved application
- Select twenty villages for application of methods
- Apply methods in twenty villages
- Supervise report writing
- Synthesize findings and methods in two brief reports
- Discuss findings with DARD and MARD
- Finalize and print the reports on findings and methods
- Discuss findings and methods in national workshop

### **Expected result 3**

Knowledge, skills, and institutional capacities have been strengthened at the Dak Lak Department of Agriculture and Rural Development and Tay Nguyen University.

#### **Activities**

- Provide Ph.D. training to DARD staff
- Train Master's students from Tay Nguyen University
- Train junior research staff at Tay Nguyen University in application of assessment methods
- Supply necessary equipment (desktop computers, printer, etc.) to support research activities of Tay Nguyen University
- Organize series of workshops to involve DARD staff in development of methods
- Help improve basic understanding and clarify methodology of socio-economic research with concepts of
  - problem orientation
  - hypothesis formulation
  - question of replicability of results
  - methods for analysis
  - report writing
- Support information management at DARD and Tay Nguyen University
- Establish and develop working relationship at provincial level
- Invite and facilitate participation of key national decision-makers in development of methods

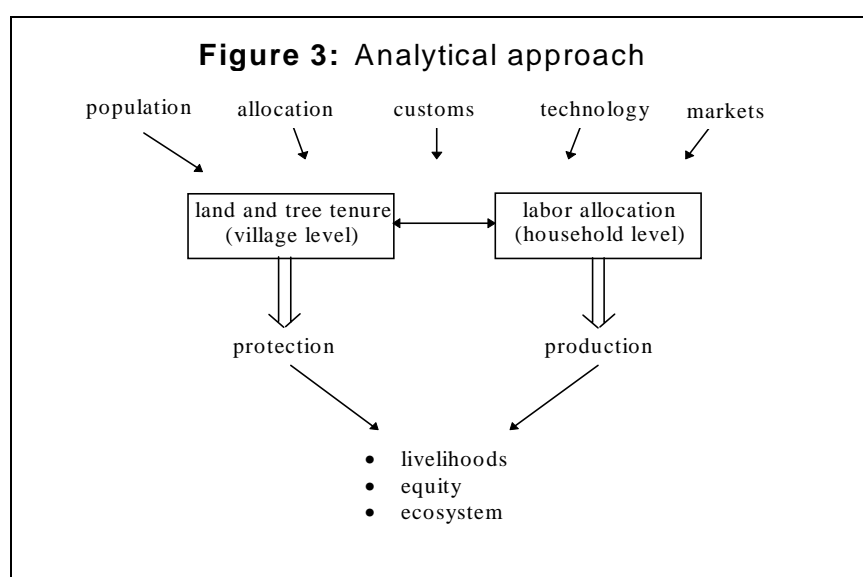
- Establish and develop working relationship between provincial research and national decision makers

### 3.3 Research Method

#### 3.3.1 Analytical strategy

The analytical strategy rests on two pillars. First, the research will compare protection and production practices before and after forest land allocation. This approach promises a direct assessment of the impacts of forest land allocation, but it suffers from a lack of baseline data. Recall methods will facilitate the collection of only limited, typically qualitative data on past protection and production practices. Second, the research will compare protection activities in villages with and without forest land allocation and production strategies of households with and without forest. This second approach avoids the data availability problems of the first approach. Yet its validity is limited by the difficulty to identify comparable villages and households.

The research will aim to go beyond a mere comparison of situations with and without allocation. It will attempt to relate differences between situations with and without allocation to allocation and specific elements in the allocation process, such as its transparency, the participation of local people, and the form of allocation to groups or households. The goal is to attribute differences in protection and production practices to forest land allocation, against the influence of other factors, such as changing markets, technology and population. To achieve such a goal, the research project faces two empirical challenges (see Figure 3). First, the research needs to examine the relation between forest land allocation and protection practices. Second, it needs to assess the links between allocation and production practices. Both protection and production practices are influenced by a variety of factors, of which state policy is only one. For example, high levels of pepper pole extraction after forest land allocation may be due to growing market demand, improved extraction technology, or increased rights over forest resources. The challenge is to identify the relative influence of forest land allocation against the effects of other factors.



The project will have two Ph.D. dissertations at its core, each focusing on one of the two key analytical challenges. The German Ph.D. student will analyze household production strategies. It will assess changes in household production practices and attempt to relate them to forest land allocation. The dissertation will produce knowledge of production practices with and without allocation. It is also intended to determine the relative influence of forest land allocation on observed changes in production strategies against the effects of other factors.

The Vietnamese Ph.D. student will examine changes in the institutional framework surrounding forest protection at the village scale and between villages. It will draw on the ethnographic accounts of local tenure relations provided by two Master's theses, investigate the implementation of forest land allocation, and seek to link allocation to changes in local land and tree tenure relations. The dissertation will yield solid understanding of the rules surrounding forest protection with and without allocation and possibly establish the relative influence of forest land allocation on local tenure relations against the effects of other factors. It will also summarize the empirical findings of both dissertations in a comprehensive assessment of the distribution of costs and benefits arising from forest protection and production to different stakeholders with and without allocation.

### **3.3.2 Research process**

The field work in Dak Lak will be executed in four steps:

- Step I: the Ph.D. and Master's students conduct in-depth field research on the outcomes of forest land allocation in two villages.
- Step II: the Ph.D. students develop a methodology for the assessment of forest land allocation in collaboration with DARD and Tay Nguyen University.
- Step III: DARD tests and refines the assessment methodology in four villages with assistance by the research team and Tay Nguyen University.
- Step IV: DARD applies the assessment methodology in twenty villages with assistance by Tay Nguyen University and evaluates its utility with provincial and national decision-makers.

This gradual approach is motivated by two concerns. First, it reflects the action-oriented approach of the project. The Ph.D. students execute the research initially but reduce their involvement gradually. The role of the Ph.D. students, research support team and Humboldt University increasingly changes from research to facilitation and backstopping. Repeated workshops and briefing with provincial and national decision-makers will guarantee their involvement in the research process. The proposed project thus hopes to ensure a successful transfer of developed methods to DARD and Tay Nguyen University.

Second, the project gradually expands the number of village studies. Initial research is concentrated in only two villages to facilitate in-depth insights into the processes and effects of allocation. The newly developed methods will be applied in only four villages on a trial basis, providing the possibility for intensive monitoring and evaluation of the methods. The number of villages will reach a sizable number only after the method has been tested and refined. The village sample will include twenty

villages, a number that will yield generalizable findings about forest land allocation in Dak Lak.

The case villages will be selected on the following basis:

- The in-depth research (step I) will focus on two villages with forest land allocation to facilitate in-depth insights into the process and effects of allocation. The researchers will select two 'extreme' cases, one village that is highly integrated into commercial agriculture and one with a concentration on subsistence production.
- The trial application of the newly developed method (step III) will take place in two village pairs, that is a village with forest land allocation and a village without allocation in otherwise very similar conditions. One pair of villages will be selected from villages with commercial agriculture, the other pair from villages with subsistence agriculture.
- The method will be applied in step IV in ten pairs of villages. The pairs will be selected randomly on the basis of all villages that have participated in forest land allocation in Dak Lak.

### **3.3.3 Techniques for data collection and analysis**

Field research will employ a variety of techniques of data collection. Semi-structured household interviews will be at the center of each village study. Key informant interviews with village leaders and local government officials as well as review of government documents will produce additional insights into forest land allocation and the organization of forest protection. Direct observation and informal conversations will yield insights into protection practices. Finally, simple forest inventories conducted by State Forest Enterprise staff employing the methods of the inventories conducted as a part of allocation will allow a comparison of forest conditions before and after allocation.

As for techniques of data analysis, the research will use qualitative and quantitative techniques. It is assumed that certain variables, such as changes in household labor allocation and production strategies, are suitable for statistical analysis. Statistical software, such as TPS and possibly Excel, will yield quantitative estimates of relationships between allocation and other external changes and observed variables. Changes in other variables, such as protection rules and activities, will be described and analyzed in qualitative ways. Finally, the overall assessment of costs and benefits will be performed on Excel.

### **3.4 Relevance and Applicability of Expected Results**

The proposed research addresses a key concern of decision-makers in Dak Lak province. Over the past two years, the provincial decision-makers have focused much attention on forest land allocation, including its pilot implementation. They understand allocation as an initial step towards a new framework for resource management under which people enjoy much more extensive control over natural resources than in the past. The expectation is that allocation will eventually help achieve a variety of goals: improve local livelihoods, generate equitable access to an important resource, and protect forests against agricultural expansion driven by international markets and migrants.

The proposed project will provide empirical findings and develop methods that allow provincial decision-makers to learn from the first round of forest land allocation. It will also strengthen their capacity to apply and develop the methods in the future. Its gradual and process-oriented approach is motivated by the ambition to develop methods that will be relevant, applicable, and adaptable for provincial decision-makers. In particular, the proposed project will help decision-makers

- assess the outcomes of forest land allocation,
- identify elements in the allocation process that contribute to favorable outcomes, and
- understand suitable external conditions for successful allocation and positive outcomes.

The search for new forms of forest governance has received significant attention by national policy-makers. The Vietnamese government has recognized that financial and technical approaches do not suffice to achieve the national goal of increasing forest cover by five million hectares by 2010. They are in the process of discussing options for further devolution of land and resource rights, following the initial step taken through the Land Law in 1993. In particular, the national government has given the official mandate to Dak Lak authorities to experiment with new forms of forest allocation and governance. This project will demonstrate methods that allow empirical assessment of forest land allocation and can readily be applied all over the country.

Forest land allocation will have significant impacts on people living in upland watersheds, the ultimate target group. Land is the primary productive resource in rural Vietnam. In upland areas, most land is classified as forest land. In addition, forest resources pose significant values to local people in many upland areas of Vietnam. A policy that increases local people's rights over forest land and resources therefore has potential for significant impact on the lives of upland people.

At a conceptual level, the methods will be very relevant as a tool for forestry projects supported by multilateral and bilateral donors beyond Vietnam. Though the concrete settings of the projects may be different from Dak Lak, the key analytical challenges to assessing the outcomes of devolution will be similar. The methods developed by the proposed research therefore will be relevant beyond Vietnam.

## **4 Implementation**

### **4.1 Cooperation with Organizations in Vietnam**

The SMRP will cooperate with several organizations in the execution of this research project. The primary partner for execution will be the Department of Agriculture and Rural Development (DARD) in Dak Lak. DARD will release one of its key staff members to receive Ph.D. training under the research. The Department will provide institutional and technical support for the research. And it will take the lead representing the interests of Dak Lak decision-makers in the development of assessment methods for forest land allocation.

The official counterpart of the proposed project will be the Ministry of Agriculture and Rural Development (MARD), in particular the Forest Development Department (FDD). MARD will sponsor the required research permits and visas. The researchers will report their findings to the FDD and the National Working Group on Community Forest Management, which includes staff from relevant MARD departments. In addition, the proposed project will invite the participation of selected staff from MARD's Policy Department throughout the research process. The SMRP will support collaboration with the Policy Department organizationally and financially.

The SMRP will implement the research project in collaboration with the Department of Silviculture and Forest Management of Tay Nguyen University. The Department will select two Master's students for participation in the research. It will also provide junior staff for the application of the assessment methodology in Step III and Step IV. Dr. Bao Huy, a senior lecturer in the Department, will serve as a member of the research support team. The SMRP will provide funds for the purchase of equipment to strengthen institutional research capacity at the Department.

The Institutes of Ethnology and Economics will provide scientific backstopping for the research team. Within the project, Dr. Vuong Xuan Tinh and Dr. Vu Chi Loi will serve as a crucial link between Humboldt University and the research team. In addition, they will serve as important bridges between the research and the scientific community in Vietnam.

### **4.2 Transfer of Know-how and Counterpart Training**

The proposed research has the explicit purpose to produce and transfer knowledge to be used by Vietnamese decision-makers in rural development and forestry. In addition to in-depth field research conducted by the research team, it includes concrete steps to transfer research findings and methodology to the Vietnamese counterpart. The methodology itself will consider the objectives of DARD as well as the resources available to the department. A series of workshops and briefings at the provincial level will provide avenues for close coordination of the research agenda, discussion of findings, development of methodology, its trial application and refinement, and final evaluation of utility. Participation of Policy Department staff will ensure close linkages between the development of assessment methods at provincial level and national decision makers. Finally, a national-level workshop and brief reports

published at the end of the project will facilitate the dissemination of research findings and assessment methods across Vietnam.

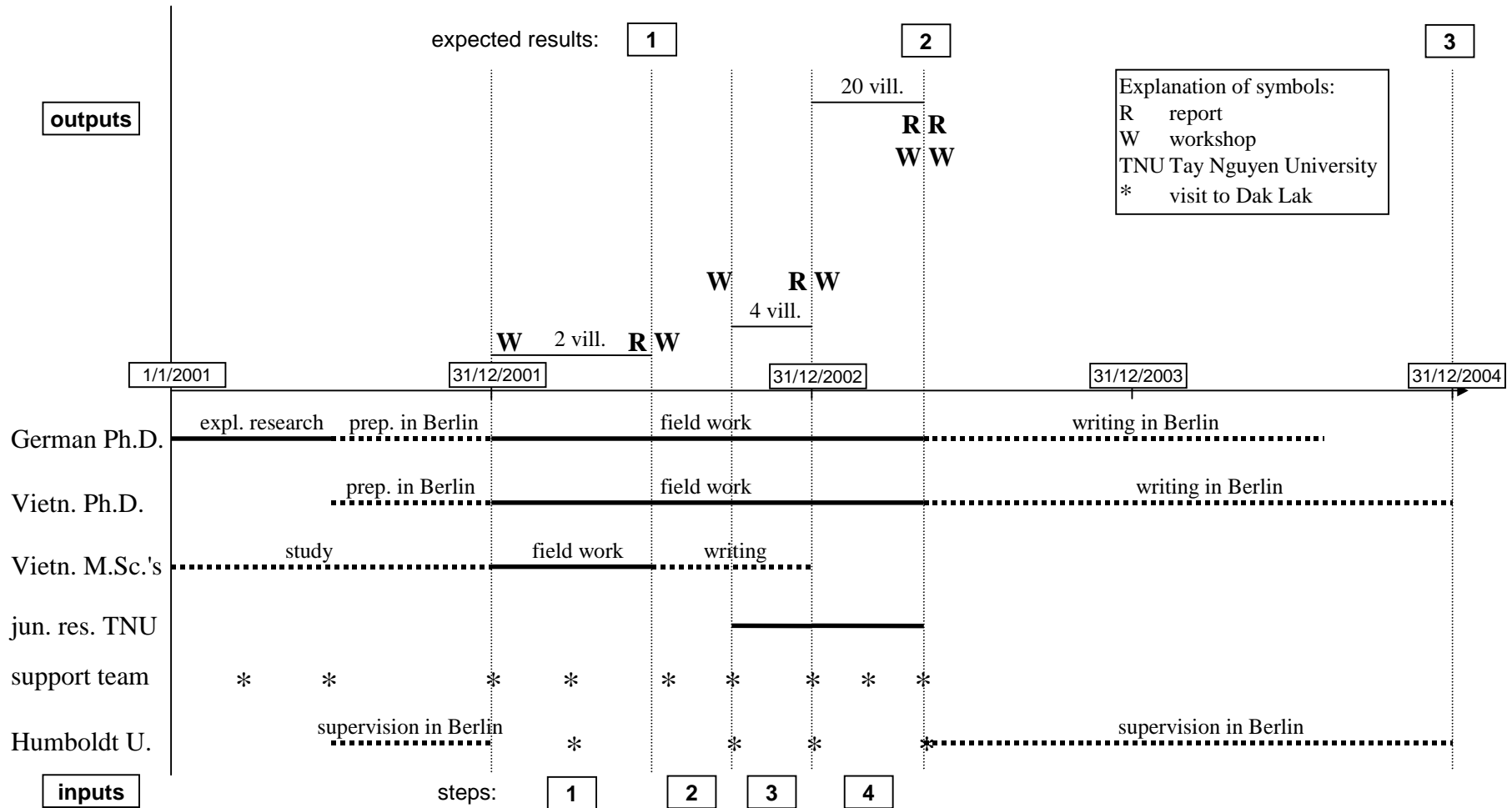
The research incorporates scientific training for several Vietnamese. Most importantly, a staff member of DARD Dak Lak will receive Ph.D. training under the project. This is a special achievement as very few Vietnamese from outside Hanoi and Ho Chi Minh City have received overseas Ph.D. training so far. In addition, two Master's students from Tay Nguyen University will take part in the research, receiving support from the Ph.D. students, support team and Humboldt University. DARD staff will improve their analytical skills through participation in seminars and workshops organized by the research project. Finally, several junior staff at Tay Nguyen University will gain experience in social science field research by applying the assessment methodology in the field.

### **4.3 Logistics and Technical Equipment**

The existing facilities in DARD are considered to be by and large sufficient. Equipment is needed for documentation, first analysis, and report writing in the field stations, for which desk top computers and a laptop computer need to be purchased. Budget lines have been created for the purchase of computers, consumables (ink, paper, etc.), communications and literature. Space for work stations is sufficiently available in the SMRP's office Buon Ma Thuot.

Journeys within Dak Lak will be carried out on motorbikes, which the researchers will lease on their own expense. Travel between Buon Ma Thuot and Hanoi will be by air. The requested budget covers the necessary funding for a minimum mobility by the research and support teams to ensure adequate supervision and sharing of experiences.

### 4.4 Time Table



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