GERMANY

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1. Introduction

Germany's forests have traditionally been managed by their owners following the principle of sustainability which was officially "invented" in 1713 by Hans Carl von Carlowitz in Saxony. The biggest challenge today is to adapt the forest stands to the effects of climate change and maintain proper management of stands owned by new types of owners that have been emerging.

State forests are typically owned by the federal states. State owned companies or forest administrations are entrusted with the management of these areas. The second biggest share of public forests is owned by local authorities, namely towns and villages. The public forests are usually managed by forest professionals following management plans which cover a period of 10 to 20 years. A forest inventory assessment provides the basis for harvesting, thinning and juvenation measures. Monitoring systems, ownership responsibility and high training standards of forest professionals make sure that forests stay in good condition. All in all the publicly owned forests are managed according to societal demands. In the recent past, e. g. according to CBD, public forests were partially taken out of production to provide greater for nature conservation areas (National Parks with high proportion of forests in the states of Thuringia, Rhineland-Palatine, Baden-Wuerttemberg and Hessen). In trying to meet stakeholders' and the public's demand for information, the management of public forests has become more transparent. Figures about timber production, nature protection measures and efforts to improve recreational opportunities in the forest are provided in annual reports or online in a much more detailed manner than 20 years ago. It can be concluded that public forests are managed sustainably and on behalf of the citizens. The nationwide inventory (Bundeswaldinventur - BWI) confirms this impression showing a moderate increase of the standing stock over the last period and the increase of mixed uneven aged stands, dead wood and habitat trees.

Much of the research efforts in Germany in the last 15 to 20 years have been focused on the private forest sector and in particular on small scale owners' aspects. Private forest ownership (48 % in Germany) is much more diverse than the public forests. Given the numerous owners (almost 2 million private owners) and their respective diverse goals we great variety of management а philosophies including no management at all. management requirements forest concerning private forests, which are defined by the Forest Act, are not as demanding as those related to public forests. Big forest holdings (> 20 hectares) thus typically follow an economic rational. Timber production is here viewed as the most valuable outcome of forest management. However, the vast majority of private forest owners (e.g. Bavaria 98.8 %) hold forest properties smaller than 20 hectares. Table 1 shows the distribution by forest holding size. More than 57 % of the privately owned forest holdings are smaller than 20 hectares.

Table 1: Distribution of privately owned forests in Germany by holding size (Source: BWI)

Ownership-Size-Classes	Private Forest area in ha		
from 0 to 20 ha	2.759.825		
from 20 to 50 ha	391.322		
from 50 to 100 ha	272.647		
from 100 to 200 ha	241.872		
from 200 to 500 ha	327.211		
from 500 to 1000 ha	256.150		
over 1000 ha	574.696		
Aggregate	4.823.722		

Small scale forest holdings present a challenge with respect to meeting current public policy goals. Among the issues are:

- Undesirable subdivision of forest land (fragmentation), mainly caused by property distribution among multiple new owners.
- Increasing number of private forest owners.

Apart from restitution of previously statemanaged forests after the reunification of West and East Germany, the number of forest owners listed in the land register is increasing, mainly forced by unprepared successions.

 Structural deficits often prevent economically viable and costcompetitive management.

Unclear boarders of the property, lack of access-roads, fragmented parcels, several co-owners, small amount of timber per measure etc. result in unreasonable transaction costs for owners as well as potential trade partners.

 Increasing share of forest owners following an "urban" life style.

These owners are characterised by different preferences and motivations with regard to forest ownership compared to traditional (mostly farming) owners. They are not dependant on income generated on their forest and typically do not have a connection to the land use sector such as farming or forestry.

2. Methods

According to the aims of the country report which is to give a comprehensive overview of forest ownership issues in the country, a mix of methods is applied. They include a literature review, secondary data, expert interviews as well as the expert knowledge of the authors.

Data include quantitative data (from official statistics and scientific studies) as well as qualitative data (own expert knowledge, expert interviews and results from studies). A literature review explicates the state-of-knowledge in the countries and contributes to a European scale state-of-art report. Case examples are used for illustration and to gain

a better understanding of mechanisms of change and of new forest owner types. Detailed analyses of the collected data and case study analyses are done in subsequent work steps in the COST Action.

This report was compiled based on a literature review and quantitative data. We relied on a combination of academic and grey literature on the subject of private forest ownership, as well as statistical data provided by forest administration and other studies.

3. Literature review on forest ownership in change

The COST Action national representatives aimed to review and compile information on changes in forest ownership in their countries based on scientific and grey scientific literature, including reports and articles in national languages and official statistics, formal guidance or advisory notes from official websites, etc.

The scope of the literature review is as follows:

 Forest ownership change (with a specific focus on new forest ownership types), private forest owners' motives and behaviour, management approaches for new forest owner types, and related policies and policy instruments.

The literature review consists of the following three steps: collection of all literature as defined relevant, detailed description of 10 most relevant publications, and a 1-3 pages summary according to the structure given in the guidelines. The full list of literature includes grey literature, i.e. literature not easily accessible by regular literature search methods (unpublished study reports, articles in national languages, etc The 10 detailed descriptions of publications can be found in the full single country report (website: http://facesmap.boku.ac.at/index.php/library2/ cat_view/94-country-reports). The literature review contains the following questions: Which research frameworks and research approaches are used by research? What forms of new forest ownership types are identified? Which specific forest management approaches exist or are discussed? Which

policies possibly influence ownership changes in the country and which policy instruments answer to the growing share of new forest owner types?

3.1. Research framework and research approaches

Literature about new forest ownership types has focused on the evolution of ownership change (Schraml, 2003, 2012), description and characterization of new forest owners (Bittner & Härdter, 2003; Härdter, Schlecht & Westermayer, 2003: Schraml, 2003), the challenges this new clientele creates for counselling and outreach efforts by the forestry administration, and how to overcome these (Bittner, 2003; Kraft, Beck, & Suda, 2003; Ziegenspeck, Härdter, & Schraml, 2004). A smaller amount of literature is dedicated specifically to new private forest owners resulting from restitution and privatization efforts in East Germany (Froese & v. Oldershausen, 2010; Spinner, 2003). A recently initiated project is looking into a fairly new field of research: forest ownership by environmental/conservation organization and foundations (Jäkel, 2013).

Research is primarily carried out in the four forestry faculties and the research institutes of the state forest administrations. Some applied studies were recently carried by consultants. Funding for these studies is most often provided by the ministries in charge of forest policy in the respective states, the Federal Ministry for Food and Agriculture, as well as the Federal Ministry for Education and Research. In some cases, funding is provided by the German Environmental Foundation (Deutsche Bundesstiftung Umwelt - DBU) or the German Research Foundation (Deutsche Forschungsgemeinschaft - DFG).

The methods employed range from quantitative surveys to qualitative interviews and case studies. Oftentimes a combination of different methods is applied. Most of the studies are regional scope, focusing mainly on Southern Germany, for example on parts of Bavaria or the Black Forest area in Baden Württemberg.

3.2. New forest ownership types

Private forest ownership change in Germany has been shaped by large-scale, long-term socio-economic developments as well as the reunification and subsequent privatization of previously state-owned forest land in the country's eastern states (Schraml & Volz, 2003). Both have resulted in new private forest owner types and more heterogeneous small scale private forest ownership overall.¹²

Until about the 1950s, small scale private forests were mostly owned by farmers who managed their forests primarily for wood production. Yet the link between agricultural profession and forest ownership has to a large extent disappeared as a result of modernization and social change. Two causal drivers are typically distinguished: one, the development of a service-based economy and associated changes in the agricultural sector, including overall reduction in the number of farms and agricultural employment. While agricultural land tends to be sold or rented to other farmers in the process, forest land often remains in family ownership. As a consequence, a much of today's private forest owners are not associated with agriculture by profession or ownership of agricultural land. The second driver of change is systemic-sociological in nature. It refers to the increasing complexity social and economic systems, necessitating higher levels of education and leading to questioning of traditional norms and values. As a result of both of these non-agricultural private owners often lack the technical expertise and equipment, as well as the time and physical proximity to manage their land, as it is no longer part of their occupation. Instead, forest management has become a leisure activity to this relatively new type of private forest owner, often associated with non-monetary management goals, such as conservation or recreation (Härdter, 2003; Volz & Bieling, 1998).

Unlike in West Germany, where agricultural forest ownership decreased over several decades, private forest ownership in East

¹²Capital investments companies (e.g. timber investment companies, real estate investment trusts) do not play a major role in Germany.

Germany experienced a more abrupt end to agricultural forest ownership under Soviet rule. Following reunification, efforts were made to restitute forest land to the previous owners or their descendants. The resulting new type of forest owner shares many of the characteristics of the new forest owner in West Germany: lack of specific forestry expertise or equipment, great distance between place of residence and forest property, and no monetary expectations or ambitions towards their forest. However, unlike in West Germany, studies report a negative attitude towards their forest among East German new owners of restituted land (Spinner, 2003), whereas research found positive attitude in West Germany, often associated with pride (Ziegenspeck et al., 2004). In addition to restitution, forest land was privatized - often in larger parcels of up to 1000 hectares - starting in the mid-1990s (Spinner, 2003).

3.2.1. Types of private forest owners and their motives

Until the early to mid-1990s the dichotomous distinction between farming and non-farming forest owners was deemed sufficient. Yet more and more, it became apparent that forest counselling and advising programs targeted at farming forest owners were reaching few of the non-farming forest owners. Thus, a more refined characterization and differentiation among non-farming forest owners had become necessary (Schlecht & Westermayer, 2010). A good amount of literature has since been dedicated to describing and categorizing the new forest owners that have emerged over the past few decades. The terms used to refer to this group often reflected the "missing" features of new forest owners in comparison to the traditional farming forest owner. Among the terms used were non-farming forest owners, non-resident or absentee owners, nonindustrial private owner etc. Yet no single typology has been established in the policy field or management practice (Schraml, 2012). The most commonly used approach to characterize the 'new' clientele is that of (Schlecht 'urban forest owners' Westermayer, 2010). While still viewed as the counterpart to farming forest owners, the focus is on the forest owner's lifestyle and the features they do have. The term 'urban' refers to the ongoing social process of urbanisation, which has changed people's lifestyles in terms of occupation, place and type of residence, norms and values, as well as the relationship to forests. Individuals can be placed on a continuum ranging from 'relatively traditional' to 'very urban', reflecting the extent to which urbanization and modernization are reflected their lifestyles. Thus, geographic location is not the deciding factor in where on the spectrum an individual falls (Schraml & Härdter, 2002).

Generally speaking, individuals placed on the 'rather traditional' or 'rather urban' end of the spectrum differ in terms of age, household professional occupation and income. standing. Forest owners on the 'traditional' end of the spectrum tend to be retirees, have low to medium income, engage in forest management activities themselves, and have both monetary and non-monetary interests their forest property. Yet the economic interest is often limited to avoiding expenses associated with the ownership of the forest, rather than making a profit. Non-farming forest owners with a high level of urbanization tend to be members of the active workforce with relatively high income, limited leisure time in which they pursue many different activities. This group has neither the financial need, nor the time to dedicate to active forest management. As a result, they are much more willing to outsource management of their forest to third party providers. As of early 2000, about 60% of non-farming forest owners can be considered very urban, and about 40% traditional (Bittner & Härdter, 2003; Härdter, 2003; Schraml, 2003).

An overview on different typologies of small-scale private forest owners is provided by Schaffner (2001), showing the diversity of approaches to describe this group of forest owners, reflecting both structural characteristics, behavioral patterns, and values.

Overall, studies have found evidence that non-farming forest owners generally do take interest in their forest property. However, with increasing levels of urbanization, their interests are less production oriented and instead more consumption oriented (recreation, conservation, pride) and also less likely to engage in forest management

activities themselves (Bittner & Härdter, 2003).

3.3. Forest management approaches

One of the challenges at the local level resulting from the more heterogeneous private forest ownership is the inaccessibility of part of this group to the administration. Traditional outreach counseling programs implemented by forest administrations often do not reach all nonfarming forest owners. Bittner and Härdter (2003) suggest that forest administration should try to consider the non-farming forest owners preferences and limitations, for example in terms of location and timing of forest administration's events. The authors suggest that such efforts will not only benefit the more or less urban forest owner, but also the forest administration. As non-farming forest owners are in many ways similar, and connected to other parts of society than farming forest owners, building relationships with this group might prove valuable in creating a link between society and forest administrations at large. Likewise, many of the non-farming forest owners are interested to manage their property for conservation purposes. By supporting them the forest administration can come closer to reaching policy goals related to forest conservation. Finally, providing the kind of service that is likely to reach non-farming forest owners may also prove a profitable endeavor. A study looking at the same issue was conducted by Kraft et al. (2003). Similar to Bittner and Härdter (2003), the authors suggest trying to find new methods for communicating with and engaging the new clientele of non-farming forest owners, for example by using new technology and media outlets, as well as adjusting the timing of events to create a stronger awareness, in particular among the more urban private forest owners.

In particular non-farming forest owners on the 'very urban' end of the spectrum often do not engage in forest management activities themselves, but instead pay third-party providers or the forest administration to do the work. In the state of Baden-Württemberg, one in four very urban forest owners hired the forest administration to manage their forest (Bittner, 2003). Another alternatively, private forest owners may choose to join a forest owner association, which also provide a wide range of forest management services. The details vary between regions as the states have chosen different extension systems, privately or public organized. In general forest consulting services administrations and financial aid programs are decided upon and carried out at the state level.

CASE STUDY 1: FOREST OWNER ASSOCIATIONS IN BAVARIA

Bavaria has been supporting forest owner associations for decades. Their professionalization was pushed by regulations for financial support, so that they got bigger by the time (by merging). In addition, they employed more and more qualified personnel. Those associations offer every kind of service a forest owner needs to manage his forest. At the same time, the level of service provided by the forest administration was cut, leaving a gap for forest owners associations to fill. Those associations are underlying market rules so they have to be profitable. Currently, forest owner associations in Bavaria manage to be profitable in combination with subsidies given by the state (from 3 to 5 million € per year, when certain efficiency criteria are fulfilled). The associations offer their services to members and every forest owner that wants to be a member must be included. It seems as if equilibrium has been found, between the search of associations for new members on one hand and the demand of forest owners to be a paying member of an association on the other hand, which is essentially determined by the transaction costs. Another hurdle might be that most of the association members are traditional forest owners and the ways of communication are as traditional as the associations themselves. Small and "non-traditional owners" might thus not be reached by those associations. Those owners who are drifting away from being a forest owner may only have the choice to sell their parcels, give them up in a land consolidation measure, or sign a full-service contract with a forest association, which can receive subsidies from the forest administration every year per contract (up to 150 €) depending on the property size and the management measures appointed.

3.4. Policy change / policy instruments

Private forest ownership change in Germany has been shaped by large-scale, long-term

socio-economic developments. Apart from active policy intervention following reunification in the form of restitution and privatization efforts regarding previously state-owned forest land in the country's

eastern states (Schraml & Volz, 2003), private forest ownership change has not been the result of active policy intervention. In general, agricultural policy and rural development policies aim to slow down and ease the consequences of the ongoing processes.

4. Forest ownership

The aim of this chapter is to give a detailed overview of forest ownership in the country. The most detailed information on national level is often structured in different ways in different countries. In order to show the most accurate information, it was decided to use the national data sets in the country reports. In order to make this information comparable still, the information is also collected in an international format which is used in the Forest Resources Assessments by FAO. The transfer from national data sets international definitions is. however. not always easy. This report therefore critically assesses in how far the national categories and definitions may be transformed into the international FRA data structure or in how far there are inconsistencies between them.

4.1. Forest ownership structure

It is important to note that Germany is a federally organized country with significant authority given to the states, in particular in the area of forest policy. It is not possible to provide an exhaustive review of the situation reflecting the specificities of every state, as it would exceed the scope of this report.

4.1.1. National data set

The Federal Forest Act gives a definition of ownerships types. According to paragraph 3 of the Law on Forests for Germany, only three ownership types are distinguished:

- 1. Forest owned by the country or the states (Line 1 and 2 in the table)
- 2. Forest owned by public bodies (mostly local authorities like towns or villages)
- 3. Privately owned forests are those, which are not underlying the two other categories.

The forests in the eastern part of Germany which could not be returned to the former owners or their descendants have been privatized. If certain parcels show unique or unusual environmental qualities they may be given to non-profit conservation foundations free of charge (see also Jäkel 2013).

Table 2: Forest ownership distribution in Germany (2002)

Area in 1000 Hectares	Area covered by trees	Area temp. without trees	Area for tree growth	Area without tree growth but serving forestry	Total forest area	%
Federal forest land	383,30	6,10	389,40	19,90	409,30	3,7
State owned forest land	3132,30	15,90	3148,20	128,40	3276,60	29,6
Forest owned by public bodies (e.g. Town forest)	2073,10	13,80	2086,90	73,30	2160,20	19,5
Privately owned forest land	4676,00	29,30	4705,30	118,40	4823,70	43,6
Forest land provided for restitution	389,50	1,40	390,90	15,00	405,90	3,7
Aggregate	10654,2	66,5	10720,7	355	11075,7	100,0

Source: BMELV (2014) http://berichte.bmelv-statistik.de/SJT-7010200-2002.pdf latest check :25.03.2014

4.1.2. Critical comparison with national data in FRA reporting

Table 3: Forest area according to FRA categories in 2005 and 2014

FRA 2010 Categories	Forest area (Forest area (1000 hectares)		
TRA 2010 Gategories	2005	2014		
Public ownership	5846	5933		
Private ownership	4824	5166		
of which owned by individuals	n.a.	n.a.		
of which owned by private business entities and institutions	n.a.	n.a.		
of which owned by local communities	0			
of which owned by indigenous / tribal communities	0			
Other types of ownership	406	320		
TOTAL	11076	11419		

Between the figures for 2005 (delivered by the Bundeswaldinventur 2002) and 2014 there has been a follow-up of the nationwide forest inventory (Bundeswaldinventur 2012) which sums up the forest area from the random samples. This method contains statistical deviations. That means that the figures cannot be compared without correction. More detailed analyzes will follow. The term "other types of ownership" includes those forests which will be privatised due to restitution of state owned forests in the former GDR. Currently there are still approximately 320,000 hectares in this category which means that in the meantime 85.000 ha have been privatized.

4.2. Unclear or disputed forest ownership

Areas with unclear ownership are mostly limited to land still reserved for restitution (see table 3: 320.000 Hectares). As long the restitution process is ongoing these forests are held in trust. The process of restitution is still going on and it will take approximately another 10 to 20 years till it is finished. It can be assumed that these forests will eventually be privately owned forestland.

4.3. Legal provisions on buying or inheriting forests

4.3.1. Legal restrictions for buying or selling forests

The buying or selling of forest property is regulated by a federal act called "Grundstuecksverkehrsgesetz" which translates roughly to like "Rules for selling or

buying a piece of land". Based on a law initially passed in 1918, the current version was passed in 1961 and last amended in 2008. Its main goals are: 1) to secure the continued existence of agricultural and forestry holdings businesses by protection against sell-offs of their land; 2) the protection of nature and the environment by preserving and strengthening agricultural and forestry structures; 3) to guarantee food security for the population.

For these reasons, the sale of agricultural and forestry holdings or parts of it, is legal only with an administrative permit following a special approval process. Obtaining such a permit is required for any sale of parcels bigger than one hectare.

But a lot of parcels are not part of an agricultural or forestry holding any more. So those parcels can be sold to other private persons or institutions without such a permit.

4.3.2. Specific inheritance (or marriage) rules applied to forests

There are no inheritance rules that apply specifically to forest ownership. However, the above described paragraph may apply, if more than one descendant wants to take over ownership of a farm or forest holding, and no agreement can be found, a court will make the decision for them. It may decide that the enterprise has to remain whole and who will be the owner, in which case he or she has to pay money to compensate the other/s.

In addition, there are several regional schemes, which should be mentioned as a special feature in this context, such as the "Closed Farms". Most of these farms have been established in the late Middle Ages. And due to the federal structure of Germany, there are still valid regulations at the country or regional level 13.

Namely these "Closed Farms" which only can be inherited by one successor, can be found in the southern black forest (Baden-Württemberg), in parts of Westfalia (Northrhine-Westfalia), in the Rhön (Hessen) and some other regions 14. These regulations cover farmland as well as forestland. The proportion of the forest is higher in mountain regions (southern and western parts of Germany) than in lowland areas (northern and north-eastern parts).

4.4. Changes of the forest ownership structure in last three decades

4.4.1. Changes between public and private ownership

There are still about 320.000 Hectares¹⁵ of public land to be privatized in the restitution process after Germany's reunification.

Other changes between public and private ownership are marginal. Where it occurs, it comes from:

 open market selling e. g. when towns and villages are buying parcels from owners with no interest in forest land anymore or died persons with no (interested) successors. These authorities are likely to buy when the parcels which are offered appropriate to round the forests already owned or no private persons like to purchase the parcels. Some municipalities internet are running based platforms where forest land can be offered. Local buyers (especially with neighbouring parcels) will be

provided if they are willing to buy so that holdings can get bigger.

- In regions where municipalities are under financial pressure it might happen, that forests (or parts of it) are sold. In those cases usually private buyers purchase these parcels. Normally town forests are serving more issues than timber production especially water supply, noise reduction or local recreation. In these cases selling the forests is usually no option.
- State owned forests usually are not to be sold and the other way round there is no policy that state forest enterprises or entrusted administrations are scanning the forest land market (which is not very transparent) to buy additional hectares. There are only few cases und these are very individual.

4.4.2. Changes within public ownership categories

In different federal states of Germany (e.g. Lower Saxony, Saxony and Bavaria) state forest enterprises have been founded. Only in the case of lower Saxony these enterprise "owns" the forests legally. If the company no longer exists, the forests are automatically owned again by the state of Lower Saxony.

Otherwise there are only cases with no measurable effect, for example caused by exchanges of forest parcels due to infrastructural projects.

4.4.3. Changes within private forest ownership

Currently there is no trend that can be observed.

4.4.4. Main trends of forest ownership change

Across Europe, the following drivers for ownership changes had been identified in the COST Action:

- Privatization, or restitution, of forest land (giving or selling state forest land to private people or bodies)
- Privatization of public forest management (introduction of private

E. G. Badisches Gesetz, die geschlossenen Hofgüter betreffend (BadHofGG). http://www.ruby-erbrecht.de/erbrecht-abc/b/BadHofGGGesetzestext.php?dir_no=669 (latest check: 22.Sept. 2014)

¹⁴ Source: http://de.wikipedia.org/wiki/Anerbenrecht (latest check: 22. Sept. 2014)

¹⁵ Source: www.bund.de/DE/Behoerden/B/BVVG/BVVG-Bodenverwertungs-und-verwaltungs-GmbH.html (latest check: 22. Sept. 2014)

- forms of management, e.g. state owned company)
- New private forest owners who have bought forests
- New forest ownership through
- afforestation of formerly agricultural or waste lands
- Changing life style, motivations and attitudes of forest owners (e.g. when farms are given up or heirs are not farmers any more).

Trends in forest ownership: New forest ownership through	Significance*	
Privatization, or restitution, of forest land (giving or selling state forest land to private people or bodies)	2 in former East Germany, 0 in western States	
Privatization of public forest management (introduction of private forms of management, e.g. state owned company)	2	
New private forest owners who have bought forests	1	
New forest ownership through afforestation of formerly agricultural or waste lands	1	
Changing life style, motivations and attitudes of forest owners (e.g. when farms are given up or heirs are not farmers any more)	3	
Other trend, namely:		

^{* 0 (}not relevant); 1 (to some extent); 2 (rather important); 3 (highly important)

4.5. Gender issues in relation to forest ownership

The German land surface is divided into parcels. All owners of land parcels are recorded in the Land Register. Forest ownership in Germany can be analyzed by those organizations that have access to these data. A preferable way to handle the collected information would be to have the state forest administrations (Bundesländer) analyze the data and report the results to the federal government.

With few uncertainties, it is possible to determine the type of ownership (single, female and male ownership, co-ownership with of both genders, cooperation of heirs, etc.). For Bavaria 16 (south-east in Germany) the state forest institute evaluated the land register data from 2009. Out of 456,000 identified property relations 23% were "single female ownership", about 47% were in "single male ownership". 28% of the ownerships were "joint ownership of both genders". The rest is owned by institutions. The share of forest owned by women in "single female ownership" is about 8% of the total forest area in the state of Bavaria. Compared to the forest owned by private persons the share of "single female ownership" is about 16% or

4.6. Charitable, NGO or not-forprofit ownership of the forests

This section is concerned with forests owned by organisations such as conservation and heritage NGOs, self-organised communitybased institutions and other philanthropic ("Characterized or motivated by philanthropy; benevolent; humane" OED) organisations. The management objective for these forests is usually to deliver social or environmental aims with maximisation of financial or timber returns as a secondary concern. Most owners are corporate and may invoke at least an element of group or participatory decisionmaking on management objectives and high ethical standards. It is possible for such ownership to be entirely private. However, the provision of public benefits (services (e.g. biodiversity, amenity, recreation etc.) which are free for everyone to enjoy or provide benefits to local communities (employment for disadvantaged people etc.) are sometimes recognised in the form of charitable registration. This in turn puts restrictions on the rights of the owners to use profits and to

nicht nur Männersache. LWF aktuell 62, S. 20-21.

^{200.000} hectares. For other states in Germany (Thuringia, Baden-Wuerttemberg and North-Rhine-Westfalia) the proportion of women in forest ownership is estimated to be around 20 % (2008). Forecasts predict that the proportion of women will continue to rise.

Figures are not published, but available at the Bavarian state forest institute: Marc.Koch@lwf.bayern.de Enzenbach, B.; Krause, E.; Kirchner, S. (2008): Wald ist

dispose of assets in exchange for tax exemptions and access to charitable funding.

Forests owned by	Yes	No	Uncertain
Foundations or trusts	X		
NGO with environmental or social objectives	X		
Self-organised local community groups		Х	
Co-operatives/forest owner associations	X		
Social enterprises	X		
Recognized charitable status for land-owners	X		
Other forms of charitable ownerships, namely:			X

4.6.1. Forests owned by foundations or trusts

The German Environmental Foundation (Deutsche Bundesstiftung Umwelt - DBU), is one of the largest conservation foundations whose board is made up of governmentappointed members. It owns about 60.000 hectares of land that have been transferred from public ownership to this foundation to care for the special environmental qualities in these areas. Much of its property is located in East Germany and was given to the Foundation in the privatization process of land following previously state owned reunification. Another source of are pieces of land previously used by the military. Similarly other forest-owning foundations that are associated with the conservation organization also acquire and manage forest land for conservation purposes. One of the largest is the NABU foundation which is associated with NABU (nature conservation organization) owns about 200.000 hectares of land, however not all of it is necessarily forested. (http://naturerbe.nabu.de/stiftung/wirueberuns). See also 4.6.2 of this report.

4.6.2. Forests owned by NGO with environmental or social objectives

The most recent state of this issue is comprehensively shown in the following paper: "German forest ownership in change: environmental foundation as the new "big players"" by Kristin Jäkel (2013). She provides a good overview of the situation: "Research conducted by DBU (German Environmental Foundation) shows that there 400 institutions (not are over environmental foundations) who own about 391.000 ha of land in general (DBU 2012). In addition to this, there is also a large amount

of land in the property of 'pure' environmental organizations. Research by the author shows over 40 environmental foundations that own and/or possess forest land.

4.6.3. Forest co-operatives/forest owner associations

The most recent state of this issue is comprehensively shown in Schraml and Selter (2011).

The authors describe two cases where common forest management was established among private small forest owners in the Southern Black Forest in the very south west of Germany and at the transition from low mountain range to the Northwest German Plain. In both case studies a new commons was founded. Individual management rights transferred to а forest association, but the right of selling the property remained with the individual forest owners. No changes were made to the land tend their register. The associations make members' forest properties and concerning decisions all management activities. Both new commons

grant their members the option to extract fuel wood, and any profit made from the forest is transferred to the proprietors. The forest owners, as members of the cooperative, keep the ownership of their individual properties and take part - to a greater or lesser degree - in governing the cooperative. The legal and the executive heads of the associations are elected democratically. A legal framework regulates the relationship between cooperative and its members. The authors find this new cooperative helped solve a number of problems the private forest owners faces before the cooperative was founded, such as lacking equipment and expertise to effectively manage their forest. Crucial to the success of the cooperatives was also the opportunities for participation of a range of stakeholders, including of course forest community stakeholders, owners. associations and more in initial meetings. Furthermore, a neutral facilitation of these meetings was listed as an important factor in creating trust in the newly created rules. Another important factors was that the funding was provided by the 'Nature Park Southern Black Forest', an organisation dedicated to regional development and on the other hand by the federal state of North Rhine-Westphalia. As a consequence, the participants were clearly removed from the sway of particular interests that usually comes together with financial support provided by representatives of either industry or nature conservation. It also became clear that separating the general decision-making section from the operational management decision-making section was important for building trust. The former in the form of the association's general membership meeting, resided in the hands of the forest owners and the latter was with state contractors. Those forest owners with no forestry expertise in particular, advocated this separation. They saw the role of the forester as a guarantee for knowledge-based management decisions and, consequently, as a safeguard against the possibility of more proficient association members seeking to use their knowledge to dominate the organisation.

4.6.4. Social enterprises

Yes, there are social enterprises owning forests, such as insurance companies, however these are few and far between and thus do not have great relevance in the bigger picture.

4.6.5. Recognized charitable status for land-owners?

See 4.6.1 and 4.6.2 of this report.

4.7. Common pool resources regimes

Commons - forest common property regimes (CPR) are resource regimes where property is shared among users and management rules are derived and operated on self-

management, collective actions and selforganization (of rules and decisions). Examples of traditional CPR regime are pastures, forest land communities in Sweden, Slovakia, Romania Italy and other European countries or irrigation systems in Africa or Asia. The number of new common property regimes is growing and it is challenge of this Action to transfer knowledge and skills of traditional CPRs to new CPRs and vice versa. Example of new CPR regime is community woodlands in UK, established in last 20 years mainly in Scotland, Wales. Our interest in" traditional" and "new" common pool resources regimes (CPRs) in European forest, is based on the understanding that robust resource regimes are critical for sustainable forest management regardless of the property rights. Ongoing practice shows that local land users (without ownership share) leased use agreement may also be CPR regime if they have the rights to determine management commons typical for (e.g. organisation and shared rights and responsibilities). Thus proper rules on management (harvesting, decision making conflict resolution mechanism, and cost/benefit sharing, sanctioning etc.) are crucial for sustainable use of common pool resources.

Common land use has a long tradition in Germany and is practiced on about 2.4% of the forestland. "Due to the agrarian and societal change and as a result of dividing time and again a parcel of land in each case of succession, about two million people in Germany own small pieces of forest land decoupled from agriculture" (Schraml & Selter, 2011, p. 17). Resource use associated with small-parcel forest ownership is not characterized bv over-use. but underutilization in Germany as well as other countries. For example, in many parts of Europe, North America and Japan, there have been unanimous reports of the new, non-material motivations guiding the actions of forest owners, and of their failure to avail of the timber increment. Schraml and Selter (2011) accompanied two initiatives with the aim to establish common forest management over several years, one located in the Southern Black forest and one in the Northwest Plains. Both initiatives succeeded. See also (Prömse, Amann, Selter, & Schraml, 2008; Schlueter & Schraml, 2006).

EXAMPLES OF BACHELOR THESES

Several bachelor theses have been written analysing CPR's in Bavaria, North-Rhine-Westfalia and Baden-Wuerttemberg using the "Principles" by E. Ostrom.

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5. Forest management approaches for new forest owner types

The Action is interested if there are any new management approaches specifically address new forest owner types, or that could be particularly relevant for new forest owner types. We are aware that there is not much awareness for this and that there is not much literature available, however, we are convinced that this is an issue: if owners have different goals for their forests there must be new kinds of management, if they have not the skills any more to do it themselves then there must be new service offers, etc. There are assumingly implications in silviculture, technology, work organisation, business models, etc. Such new approaches may be discussed under the key word of new ownership types but often not.

5.1. Forest management in Germany

Forest owners typically manage their land independently and on their own. However, there is a clear trend in recent decades toward increasing use of contracting service providers for forest implementing forest treatments. This is true for both larger and smaller scale forest property. Small scale private forest owners either work directly with contractors themselves, or work with forest owners associations or the state forest administration to organize and hire third party contractors.

Licenses tend to be short term what means usually only for a special measure like thinning a special stand or a bunch of similar but scattered stands in one year, in some cases longer term when the contract partner is a forest owner association (e. g. 5 year management contracts).

The number of third party contracts has

generally increased over the past 3 decades, however these developments can differ between states and regional ownership conditions (see also footnote 13).

New forest ownership types typically organize forest management activities through forest owner associations, only seldom are 'new commons' initiated and established (see also section 4.6.3 in this report).

5.2. New or innovative forest management approaches relevant for new forest owner types

There are not new techniques to report that relate to the new forest owner types. There are changes in terms of the organization of forest management – see section about Forest owner associations in this report.

We are planning to provide more detail on new initiatives in Bavaria that may be relevant in the context of new forest owner types even though they are not targeting this group specifically.

5.3. Main opportunities for innovative forest management

Schraml and Selter (2011) have suggested the expansion of new forest ownership patterns may provide the foundation for the establishment of "new commons" (see section about new commons in this report).

Bittner and Härdter (2003) have suggested forest administrations should view the needs of new forest owners for management service providers as a potentially profitable service gap.

Both of these options provide private forest owners with access to expertise and equipment they do not have, but that is necessary in order to manage their property.

6. Policies influencing ownership development / Policy instruments for new forest owners

Policy and ownership are related in various ways: Policies directly or indirectly influence ownership development or even encourage or create new forms of ownership; and policy instruments are emerging that answer to ownership changes, including instruments addressed to support new types of owners e.g. through advisory services, cooperative or joint forest management, etc.

6.1. Influences of policies on the development of forest ownership

Private forest ownership change in Germany has been shaped by large-scale, long-term socio-economic developments. Apart from intervention active policy following reunification in the form of restitution and efforts regarding previously privatization state-owned forest land in the country's eastern states (Schraml & Volz, 2003), private forest ownership change has not been the result of active policy intervention. Generally speaking, agricultural and rural development policies aim to slow down these ongoing socio-economic processes.

The restitution process following reunification drastically changed forest ownership structure in the states that used to make up the German Democratic Republic. Initiated in 1995, between 38% and 60% of previously state-owned forest had been privatized by 1999. To understand the motivations of those purchasing these lands, Spinner (2003) conducted a survey of those who had recently acquired forest land. The primary motivation was ideational, such as family tradition, symbolic value. The second most common motivation were conservation goals. These tended to view conservation objectives to be compatible with active forest management. Almost as common was the goal to become more self-sufficient regarding the owners' own use of fuel wood or timber, and to a lesser extent, to sell timber for profit. Only few listed tax benefits or financial investments as their motivation to purchase forest land.

The buying or selling of forest property is regulated by a federal act in Germany called "Grundstuecksverkehrsgesetz" which translates roughly to like "Rules for selling or buying a piece of land". Its main goals are: 1) to secure the continued existence of agricultural and forestry holdings businesses by protection against sell-offs of their land; 2) the protection of nature and the environment by preserving and strengthening agricultural and forestry structures; 3) to guarantee food security for the population.

For these reasons the sale of agricultural and forestry holdings or parts of it, is legal only with an administrative permit following a special approval process. Obtaining such a permit is required for any sale of parcels bigger than one hectare. A lot of parcels are not part of an agricultural or forestry holding any more. These parcels can be sold to private persons or institutions without a permit. Rules on whether or not, or to what extent property can be divided during a sale can differ depending on the region.

Afforestation policy comes from the European Union but is losing relevance. Since the year 2000 there is no significant increase (European Commission 2011). Spontaneous afforestation is actually more relevant than planned afforestation. Another reason why there is still a positive balance in the total forest area in Germany is that forest loss due to construction projects must be compensated for and in the past, the factor was more than 1.0

Apart from exemplary new legal forms of ownership which tend to be region-specific in scope there are no systematically introduced new forms of legal ownership.

6.2. Policy instruments specifically addressing different ownership categories

No new types of advisory systems have been developed. Rather an intensification of traditional approaches has taken place. Hereby it has to be mentioned, that all over Germany the Forest Services in the federal states have been restructured following the

special needs of every state. So due to this reforms the number of the employees has been reduced up to 30 % following budget constraints. Advisory-measures for "New owners": Actually there is a pilot-project in Bavaria: New forest owners were identified by comparing the data of the present land register (forest plots only) with the state two years before. So "new" (by the time owning the forest) forest owners can be identified. These owners are contacted by the local forest Service office with the offer to meet the forester in the forest and get advisory how to manage the forest and so on. This approach follows the idea, that there is a "window of awareness" people face in this initial phase of (now) being responsible for a forest. So far there are no results that can be shown here. Further information is available Marc.Koch@lwf.bayern.de

In Bavaria, the communication of the forest sector in general is changing. This might not necessarily be the result of an effort to reach "new" or "non-traditional" forest owners. There is still the will to reach as many forest owners as possible (with reduced manpower s.a.) and above that to show all people what managed forests provide for the whole society. One measure to meet this goal is to bring forestry into the cities. There are 2 to 4 information weekends in different regions of Bavaria every year. Beside the public announcements of these "Events" by posters or newspaper-articles, all forest owners in this region receive a letter which invites them personally to join this event. Scientific lectures are given as well as practical information about forest management, how to find the boarder of your property and so on. Evaluation of these events show, that a high proportion of visitors are small scale forest owners. More information is available at: Marc.Koch@lwf.bayern.de.

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