

Social and cultural values of forests – benefit for today's society

NEWS OF FOREST HISTORY Nr. IV/(38)/2007



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**SOCIAL AND CULTURAL VALUES
OF FORESTS –
BENEFIT FOR TODAY'S SOCIETY
SOZIALE UND KULTURELLE WERTE VON
WÄLDERN – NUTZEN FÜR DIE
GESELLSCHAFT VON HEUTE**

12th IUFRO WORLD CONGRESS - PROCEEDINGS

NEWS OF FOREST HISTORY Nr. IV/(38)/2007

IMPRESSUM

Medieninhaber und Herausgeber:

Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft

Gesamtkoordination: Abteilung IV 4; Fö. Ing. Johann W. KIESSLING;

IUFRO Research Unit 6.07.00 Forest and Woodland History; Elisabeth JOHANN (Deputy),

Für den Inhalt verantwortlich: die jeweiligen Autoren;

Bildnachweis: Bilder von den Autoren, Quellen beim Bild;

31.03.07



Picture: SCHIMA

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PREFACE

Forests and other wooded land have always been a major component of our life. They are part of the landscape used by people for social ecological and economic purposes. They create multiple benefits for economic welfare, biological diversity, environmental, social and recreational services to the rural as well as to the urbanised society. The sustainable development of cultural landscapes is based on the development of the entire society including nature- and social agreements. Social fairness also includes cultural, social and spiritual dimensions such as myths, ideologies and identities.

There is growing awareness from the part of international forest science and policy as regards the significance and relevance of local and indigenous knowledge about forests and traditional possibilities of utilisation, as well as the need to take account of this knowledge in the development of political strategies which aim at sustainable forest management. The protection, documentation, and utilisation of forest-related, tradition-based knowledge are in the focus of numerous political discussions held within national, regional and international organisations and forums. Concerning international and global forest policy developments cultural and social aspects of sustainable forest management are increasingly addressed and innovations are introduced.

Also the multi-disciplinary research into the

role of the social and cultural aspects of sustainable forest management in the overall goal of sustainable development including the role of traditional forest-related knowledge gain increasingly importance worldwide. It is critically important in developing countries for forest dwelling, tribal people and remote areas. It also has been expressed by the Vienna Declaration 2003 and Vienna Resolutions adopted at the Fourth Ministerial Conference on the Protection of Forests in Europe and signed by 40 European Countries and the European Community. There is a need to provide society with the lacking information about historical land use, social perceptions of woodlands and forests, changing attitude to trees and woodland, wood culture, traditional woodland management, origin of modern forestry in the context of social and economic pressure and the historical knowledge with regard to woodland conservation and restoration.

The XII World Congress, organized by IUFRO in Brisbane /Australia from 8-13 August 2005, with the general focus on "Forests in the Balance: Linking Tradition and Technology" provided an excellent forum for scientists from various disciplines and countries for a multi-disciplinary discussion about traditional forest related knowledge including the social and cultural values of forests and their benefits for today's society. The goal of two panel

sessions, organized and chaired by the IUFRO research unit 6.07.00 Forest and Woodland History was to increase the understanding of the inter-relationships between traditional and formal (scientific) forest-related knowledge and catalyze potential synergistic application(s) to sustainable forest management.

When looking at social and cultural values and cultural heritage in the context of sustainable and traditional forestry, it is necessary to define these terms. Karl Jaspers (1947) considers all things created by the human genius as culture. This includes language, community, society, crafts and techniques, economy, myths and religion, customs, ethos, institutions, state, policy, law, art, poetry, science and philosophy. These are based on values, and sustained through commitments and responsibility. Culture establishes how people deal with each other, with the environment, with the past and the future, with this and the next world. This definition is sufficiently broad to include sustainable management of forests and woodlands as culture.

Analysing historical developments, it is evident that forest management rarely occurs autonomously. Decisions regarding management are strongly influenced by goals established by the state, legislators, industry and society. The timber market in particular, but also “modern” trends in the field of scientific research, are influencing forest management systems. Moreover, social driving forces in

addition to economic considerations, such as increasing leisure time and recreation demands, are important determinants of forest management policies and practices. Forestry has to work towards an improved understanding and to improve or establish partnerships within civil society in order to enhance public awareness and understanding of the multiple benefits of forest for society and its significantly contribution to the overall well-being of society in rural as well as in urban areas. However, the promotion and rising of awareness of the social and cultural dimension of sustainable forest management as an important asset to the education, recreation, environment, rural development and economy of society can be considered as a chance to enhance new partnerships. It is of increasing importance to achieve a social consensus concerning financial subsidies for the offer of infrastructural benefits resulting from sustainable woodland management for the benefits of society (e.g. protection of water quality, nature protection agreements, maintenance of the cultural landscape including precious artefacts). By an increasing social appreciation of qualified benefit-based forest management forest enterprises might be able to achieve other sources of income beside timber.

At the two panel sessions “Social and cultural values of forests – benefit for today’s society” and “Social and cultural values of forests – benefits based management” 15 scientific studies from various disciplines, different geo-

graphical regions, and different cultures were presented to an audience of about 100 participants. They are the content of this Issue Nr. 4 (38) 2007 of the News of Forest History and illustrate the broad scope forest culture is emphasizing.

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DO CULTURAL LANDSCAPES HAVE A SUSTAINABLE FUTURE?

Abstract

Among landscaping traditions and landscape design principles, some are evidently naturalistic, others seemingly a product of artifice and cultural setting. However, the tradition of blended natural/cultural design is challenged by the ascendant ecological aesthetic. This holds that land use imitating nature is [more] sustainable; that preferences deviating from it are transient; that ecological understanding will eventually establish stable preference for an ecological aesthetic. Against this stand diverse arguments.

Economists might argue that the costs are immediate and benefits long-delayed, so represent a poor investment.

Ecologists may incorrectly perceive what patterns are natural or sustainable. Human landscape preferences may be both stable and evolutionarily relevant. Studies claiming to reveal preference for naturalistic silviculture overlook the aesthetic value of mosaics of contrasting land use. If scenic and ecological aesthetics are opposed, the ecological pole need not dominate - and adequate food production requires that it does not. If trade-off is allowed in agriculture, then in principle it should be admissible in forestry. Without that, neither the material benefits nor the rich aesthetic values of human-modified landscapes will be sustained for future generations.

Introduction

Human modification of the natural landscape has been a source of aesthetic delight from time immemorial. Whether this was by deliberately imposed design, as with the Hanging Gardens of Babylon, or an incidental result of human cultivation, as with the landscape of the English and Welsh enclosures, the impact of the human hand on landscape has attracted the human eye and satisfied the human mind. This is not to say that human intervention deliberately flouted nature, but rather that pleasure was derived from an interactive enterprise, in which nature was co-opted to human purposes.

At succeeding times, a different preferred balance has existed between natural and human elements in landscape. Most notably, Rationalism in seventeenth century Western Europe favoured a strong human domination, not just by displacing an inexact and recalcitrant nature, but by imposing human cleverness and precision on it, and organising it into conforming patterns. The Romantic reaction of the eighteenth century yielded [the illusion of] supremacy back to nature. “The sublime” in landscape and art was based on the awe-inspiring quality of nature. Where humans imposed themselves on nature, it was a transient triumph: nature eventually overwhelmed human artefacts, as in some famous paintings of Caspar David Friedrich

(e.g. “Abbey in an Oakwood”). But the sublime qualities of nature were more digestible when carefully organised: striking effects were to be artfully manipulated, nature-girt ruins to be carefully erected as such (and in the twentieth century, protected assiduously from further ruination). Picturesque landscapes where nature was constrained cunningly and beautifully to imitate art became the fashion (Price, 1810). Even the transition from human-dominated to naturalistic landscape was to be carefully contrived, with formal gardens and balustrades merging into a controlled version of wilderness. This was nature, not subjugated by humans, but interpreted by them. This tradition has been loosely termed “the scenic aesthetic”. (Figure 1)

Underlying these shifts of fashion, it may be argued, are more stable aesthetic principles for designing land uses. These are generalisations about the scenic preferences of the beholders, that are enunciated, more or less explicitly, by both landscape designers and environmental psychologists (Crowe, 1979; Kaplan and Kaplan, 1989; Lucas, 1991; Bell, 1998).

Figure 1: Informal, naturalistic, but contrived landscape, in which groups of trees are placed for aesthetic delight, drawing eye to high-lying human-made feature: Bradgate Park, England.



The set given below evolved and was named in the context of the rapid conifer afforestation of the UK in twentieth century, and the examples given reflect this. They are, however, conceived as generally applicable. Comparisons are given in table 1 (page 15) between the principles discussed, and some other sets of principles within the western tradition of scenic aesthetics.

First, consider principles which evidently embody “working with nature”:

1. The principle of naturalness.

Land uses should conform with ecological “expectations” and avoid imposing artificial geometry, more so in perceived “wild” environments, less so in “human” domains. For example, some woodland plantings in the UK show clearly unnatural outlines. By contrast, there have been deliberate recent attempts to create a more scattered forest edge.

2. The principle of integrity.

Land uses should reflect the character of the land on which they are imposed. Harmony requires land cover to match land form, as when vegetation boundaries correspond to a break of slope. Unity requires the visual qualities of land use to blend with those of the surrounding land. Dialogue requires that elements of land use interact coherently. Other principles appear less connected with nature, and to be more artful.

3. The principle of variety & contrast.

Differences of visual quality should be introduced, to give visual stimulation. Variety implies merely a range of visual impressions: contrast, a deliberate juxtaposition of strongly different visual qualities. For example, Humphrey Repton’s rule was that the flat outlines of neo-classical buildings should be highlighted by planting of tall, pointed tree species such as *Sequoiadendron giganteum*; pointed, gothic architecture is similarly contrasted with rounded broadleaved outlines.

4. The principle of pattern.

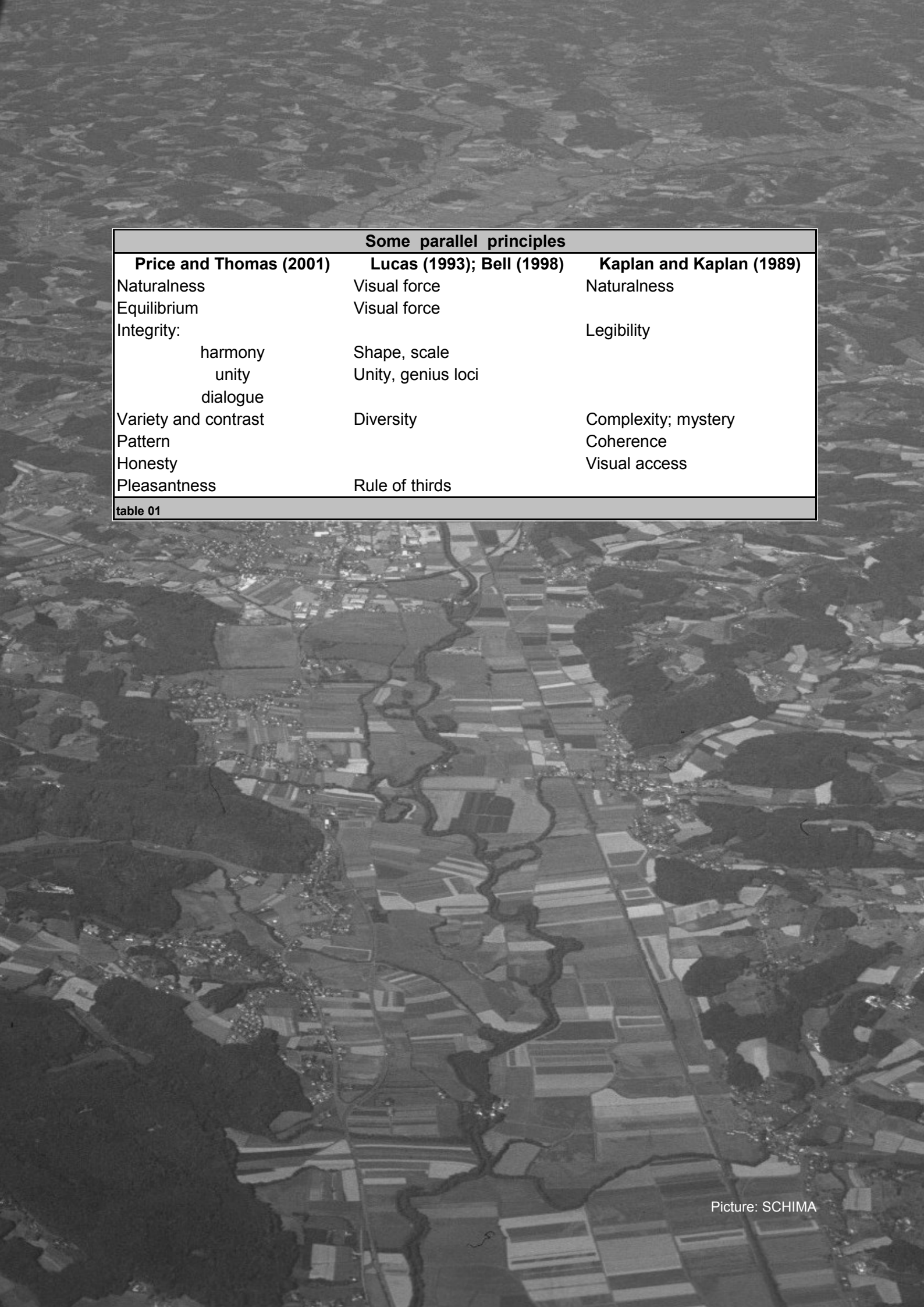
Varied land use elements should not be scattered randomly across a landscape, but be arranged to make an intelligible pattern, comprising repetition, development, and climax at the focal point of the topography.

5. The principle of equilibrium.

Land uses that constitute dark, or otherwise optically “heavy”, objects should appear to be in a state of rest. This applies particularly to conifer forests, which may seem unbalanced if they are distributed unevenly between the two sides of a valley, or are perched high on a slope with “no visible means of support”.

6. The principle of honesty.

Efficient function has its aesthetic merit very conspicuously evinced by suspension bridges. It should not need to be hidden or disguised; and, when it is, that creates an impression of deceit.



Some parallel principles		
Price and Thomas (2001)	Lucas (1993); Bell (1998)	Kaplan and Kaplan (1989)
Naturalness	Visual force	Naturalness
Equilibrium	Visual force	
Integrity:		Legibility
harmony	Shape, scale	
unity	Unity, genius loci	
dialogue		
Variety and contrast	Diversity	Complexity; mystery
Pattern		Coherence
Honesty		Visual access
Pleasantness	Rule of thirds	

table 01

7. The principle of pleasantness.

Land uses should embody sensory qualities that evoke, even if for unknown reasons, a generally positive response. For whatever reason, certain proportions, as well as textures, colour combinations and other characters, are simply more pleasing than others.

The rise of the ecological aesthetic

The ecological aesthetic, like previous dominant aesthetics, mixes several strands and is interpreted in different ways (Gobster, 1999; Sheppard and Harshaw, 2001). Professional ecologists are not necessarily the most single-minded and vocal proponents (Botkin, 2001).

Often, it refers back to Aldo Leopold's (1949) land ethic

- A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise.

- Which is customarily treated as though a proven scientific fact, rather than an ethical proposition for discussion. Among the strands it may or may not contain are the following.

- Only natural patterns of vegetation and wildlife are sustainable.
- Nature is usually untidy and often richly diverse at the small scale, unlike prevalent human land use patterns.
- Other aesthetics (and particularly the scenic aesthetic) are arbitrary cultural con-

structs (as proved by cultural differences and changing fashions).

- The land use patterns which they promote threaten the sustainability of the Earth (with or without its human inhabitants).
- If people understand ecology, their aesthetic preferences realign with the ecological aesthetic.
- Anyway, people should be given landscapes conforming with the ecological aesthetic, and in time their tastes will adapt to preferring such landscapes.

Only slightly caricaturing the implications for forestry: "... nature should be allowed to interpret itself, and human intervention is constrained to follow nature's way, the sustainable way: we should not modify forests with any scenic principles or preferences in mind, but rather should expect ecological principles to mould our scenic preferences" (Price 2002).

In consequence of this aesthetic - and also, it should be said, of ecological reasoning which has no aesthetic pretensions - a number of changes in land use practice have arisen.

1. Defence of primeval forest against encroachment by loggers and by local people has become more vigorous.
2. Low impact silvicultural systems, particularly with small regeneration areas, have been more widely advocated (Mason, 2003).

3. Areas previously planted with conifers are being restored to broadleaved cover (Spiecker et al., 2004) - and particularly cover of native tree species.

4. Both commercial forest and semi-natural woodland are being restored to heathland habitat, which in specific locations is considered more valuable: although if by “unnatural” it is meant “what has come about by human agency”, then the act of restoration may itself be unnatural. In Charnwood Forest in Leicestershire, England, South American alpacas have been introduced to ward off the dogs that attack the sheep that browse the trees that encroach the heathland. All very soundly thought-out, no doubt: but hardly natural.

5. Cultural landscape is being displaced by nature-orientated management. Jægersborg Dyrehave, a Danish Royal Deer Park, is an unarguably cultural, quintessentially “tidy” landscape; it is full of contrived vistas and created zones. Yet the ecological aesthetic has taken control to the extent that dead wood has to lie where it falls. This is a physical hazard to the public, and a perpetual contradiction of all that the park design embodies. If the deer are removed (because they were previously introduced) in due course the central building may become a “Sleeping Beauty castle” surrounded by a forest of briars. No primeval ecosystem is threatened by continuing the management that created this landscape. If actions are

needed to encourage diversity of species which depend on rotting wood, they would probably be more efficacious if undertaken in real forest conditions.

Arguments against universal application of the ecological aesthetic

The ecological aesthetic in its most fervent expression is based partly on scientific study, and partly on passionate conviction. But a number of arguments may be raised against it.

The economist’s argument

An argument that an economist (such as myself) might use, is that the benefits of implementing an ecological aesthetic are long term and uncertain, both in the sustained material products of stable ecosystems that are to be assured, and in the ultimately superior aesthetic satisfaction supposed (by ecologists) to be derived. By contrast, short-term benefits from present intensive exploitation are lost. There are, too, the psychic costs of adapting to an aesthetic which is less familiar and less immediately liked than the one embedded in cultural history. Because of the long delay before benefits arise, the ecological project offers a poor rate of return on the investment represented by incurring the short-term costs. It should be said that not all economists subscribe to this argument, based as it is on discounting the real effects of long-term gain at a rate derived from financial markets (Price,

1993). But the argument is one that will be encountered in the real world.

The agnostic ecologist’s argument

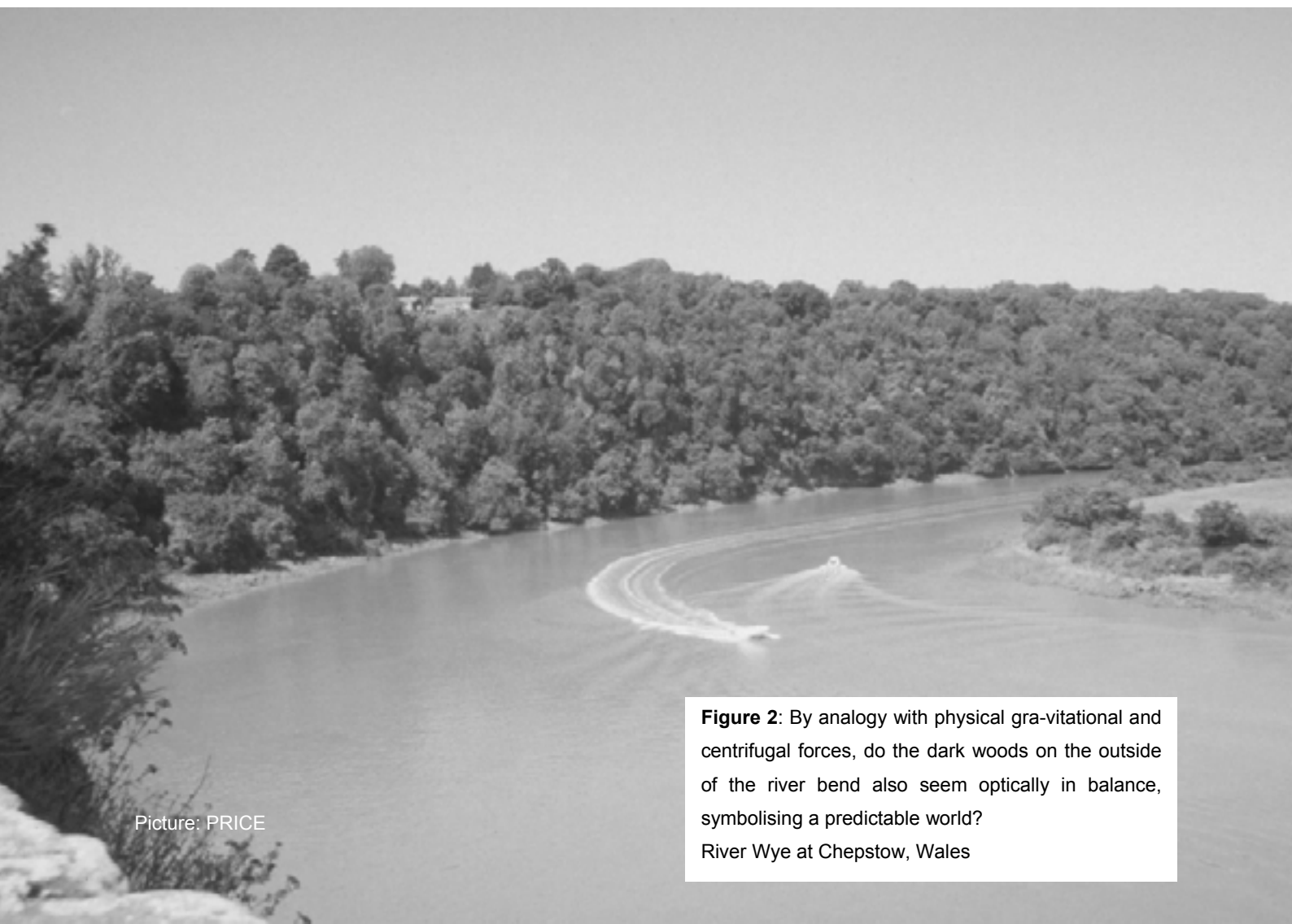
Ecological aesthetes may themselves be wrong - or at least not be confirmed as right - about what is truly natural and what is truly sustainable. There have been notable shifts in the conventional wisdom about this in recent years (Reaka-Kudla et al., 1997). Moreover, the relationship between diversity, stability (and sustainability) is complex (Huston, 1994), and the direction of causality is not necessarily clear.

Natural processes such as fire and storm result in large-scale forest gaps, which are as far from the currently favoured continuous

cover silviculture as from the tidy landscapes of the scenic aesthetic. Trees are adapted to these processes, and the ensuing forests need not be unsustainable. Moreover, rare and interesting species may flourish in the environment of large-scale clear-felling (Botkin, 2001).

The psychologist’s argument

According to Parsons and Daniel (2002), there is plenty of evidence that preferences seen as cultural or scenic, in fact have an adaptive significance. Perchance they embody subtleties of durable survival value which presently elude ecological studies. Thus “... contrast and variety in the landscape are emblematic of provision for the diverse needs of life.



Picture: PRICE

Figure 2: By analogy with physical gra-vitational and centrifugal forces, do the dark woods on the outside of the river bend also seem optically in balance, symbolising a predictable world?
River Wye at Chepstow, Wales

Pattern and integrity suggest a certain underlying predictability in the landscape which enables sources of subsistence needs to be located efficiently. Honesty represents a world not intolerably inhabited by nasty surprises. The ratios comprised within pleasantness appear to have natural precedents (the golden section ratio is the asymptote of ratios between successive numbers in the Fibonacci sequence, which underlies certain floristic arrangements). Equilibrium is the hardest principle to interpret in this way: perhaps its desiderata arise by analogy with the consistent laws of physics - gravitational attraction, centrifugal force and so again symbolise the comfort of living in a predictable world” (adapted from Price (2004).

As for the argument that changing fashions prove the scenic aesthetic to have no permanent grounding, fashion can be understood simply as shifting emphasis on principles and shifting power of cultural groups. The Rationalists emphasised the principles of artifice: the Romantics the naturalistic principles. But they worked to the *same stable set* of principles. Similarly, observers from low-income countries often express preference for an ordered landscape with regular pattern and imposed contrasts, where a threatening “nature” has been brought under human control. By contrast, in high-income countries it is industrialisation and urbanisation that are perceived as threatening, and dominance of naturalness and integrity is preferred.

Obversely, it is not clear that full-blown “naturalness”, as interpreted in the ecological aesthetic, will ever represent human preferences. Will humans ever come to accept that their aesthetic requirements are best met by a cover perpetually too dense to offer an outward prospect? In terms of Appleton’s (1975) prospect-refuge theory, such forests are plainly dysfunctional: by contrast, large cleared areas offer a prospect of food sources ahead, while dense mature forest offers a refuge from predators behind.

It does seem that having some ecological knowledge moves people’s expressed aesthetic preferences in favour of such un-scenic actions as leaving dead trees standing. This kind of cognitive factor in preference imparts a “warm glow” in acting or speaking in favour of what is currently believed to be in society’s or the world’s interest. Sustainability has been talked up in political circles, so may at present attract a particular premium.

But the warm glow can attach itself to anything which is convincingly portrayed as “the common good”. Thus, if it is argued that a scenic aesthetic is deeply beneficial to the human psyche, then a warm glow might be derived from supporting that. “Visible stewardship” and “evident care” (Sheppard, 2001) could also be sources of deep value derived from an understanding of cultural landscapes, even when they are in opposition to the instrumental and intrinsic benefits derived from greater naturalness. It is more appropriate that the sustainability benefits of particular

forms of land management (including non-intervention) should be evaluated for such benefits directly (Price, 1999, 2001). Relying on their indirect effect via reformulated aesthetic preference is risky: such support for genuine sustainability values might be lost if fashions change again. And, in the meantime, it may promote tokenism in the amount of concessions that the public is prepared to support.

The ethical argument

Even if scenic preferences were, without doubt, arbitrary and transient, it is controversial whether preferences should be reconstructed, so that we enjoy what we are allowed to have. In the 1960s and 1970s, UK forest managers argued that “we must educate the public” (to like the appearance of timber production forestry) - because it was deemed expedient for the public to learn to like the landscape that pursuit of production objectives promoted. Such commercialism has lost its dominant position in UK forestry policy, but there are, potentially, disturbing dictatorial parallels to be traced in the ambition of some ecological aesthetes to manipulate public preferences. There is, at the least, an option to be explored, that we should reserve the right to maintain our preferences unsullied by expediency; and, where indulging our preferences demonstrably leads to unsustainability, accept that preferences will be flouted, into the indefinite future (Price, 2004).

The statistician’s argument

At this very moment, data are being collected, that will be used to “prove” that people prefer - and are willing to pay more for - a “natural forest structure” than for any alternative. The investigative technique involves showing respondents pictures of alternative forest structures and requiring a choice to be made between them (with or without sums of money included in the options). The falsity of the argument lies in confining choice to only one treatment of landscape from a pair (or other combination), and arguing from the results that people would prefer that treatment everywhere. Thus constrained, it is not surprising that respondents choose the option offering maximum diversity within one scene. Because the option is not offered, they cannot express a greater preference for a portfolio of landscapes, in which different, less mixed vegetation types reflect the qualities of underlying topography; in which even tracts in similar terrain are treated differently, for the sake of variety on a large scale; in which rich and random mixtures are interspersed with contrasting tracts of more uniform vegetation, with variety in more orderly arrangements, and with areas of low vegetation that allow a distant prospect across the terrain.

Even if only a minority of respondents prefer a different treatment of landscape from the majority that is an argument for *some* areas being treated according to minority preferences.

The humanitarian's argument

Allowing natural processes alone to determine land cover is probably the most reliable - though perhaps not the only - way of assuring the long-term sustainability of the biosphere. In fact, the best prospect for the Earth's survival for a few more million years would probably be for *Homo sapiens* to vacate the planet immediately.

However, the argument then arises: what is the Earth being sustained *for*? A defensible answer is, for the benefit of the broader range of creatures that could inhabit it without human presence. But if *their* benefit is valued, benefit to humans also should be valued, even if only as one species among many.

There are proper, though ethically challenging, debates to be had about the right balance between the human population at one time, the sustainability of that population, and the amount of pleasure enjoyed by individuals (including from aesthetic delight) (Price, 1977; Parfit, 1984). If cultural and ecological aesthetics *are* opposed (see Parsons, 1995 for further discussion), the ecological pole need not dominate the trade-off - applied to agriculture that would mean death for most of the world's population. In fact, some agricultural systems which evolved to support dense human populations have proved both durable (because they respect nature), and scenically appealing (also because they respect nature). Even in such harsh environments as young mountains, cultivation terra-

ces have lasted many hundreds of years, although being very far from what nature would generate in the circumstances. They exemplify both naturalistic (integrity) and artistic (contrast and variety) design principles.

If agriculture is exempted from the requirement of complete naturalness, there cannot be an argument of principle that forests must be completely natural, rather than be used in pursuit of a diversity of objectives. It might be that a greater extent of ecologically-orientated forest than at present is appropriate: or it might be less.

Conclusion

So, do cultural landscapes have a sustainable future?

Firstly, since the debate on the constitution of naturalness and its necessity to sustainability is unresolved among ecologists, it would be premature to conclude that landscapes which embody a scenic aesthetic are an unaffordable luxury. It does seem improbable that *any* further human intervention would fatally injure sustainability. If *some* intervention is admissible, that which creates cultural landscape and aesthetic delight (particularly *local* landscape) is unlikely to be the most damaging. And delightful *local* landscapes, by reducing travel to elite national or world landscapes might increase sustainability in a wider context.

Secondly, sustention of cultural landscape might depend on people being prepared and



Figure 3. Agricultural terracing meets criteria of productivity, sustainability and aesthetic quality: Annapurna, Nepal. Courtesy Morag McDonald

capable to defend its claims, against a philosophy asserting either that only what nature creates can be beautiful, or that human-influenced beauty counts for nothing in the balance with the beauty of nature. Moreover, even though aesthetic tastes have changed and will change, it is becoming clear that people are showing increasing interest in how taste has been.

Cultural evolution, as well as biological, has left us humans a heritage of preferences, capabilities for satisfying those preferences, and a sense of self-worth which causes us to resent being told what we should prefer. The present generation should reflect on whether it has a responsibility to show evident care for this wide inheritance, as well as the custodianship of processes maintaining the biosphere: a responsibility to enhance it, rather than dogmatically passing, to future generations, landscapes and states of mind which are diminished in their wellsprings of aesthetic value.

Acknowledgement

I am grateful to Bronwen Price for comments on a draft of this paper.

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SOCIAL AND CULTURAL ACTIVITIES IN FORESTS, KOREA

ACTIVITY STATUS AND PERSPECTIVE OF SOCIETY FOR FORESTS AND CULTURE – BACKGROUND

Founded in January 1992 as a study group to promote cultural aspects of forestry in Korea and to increase awareness of forestry issues, Korea Forests and Culture Society has initiated various projects for the last 13 years. One of the motivations was to reach out to general public rather than professionals and bureaucrats for various forestry issues through more audience friendly approaches.

Missions of Forests and Culture Society

The society's goals and missions are well expressed in our mission statement as follows:

“Forests are the origin of life and the birth place of civilization. We are all from forests. Forests give us food, water for life, and shelter. Without forests we can not imagine our life and the progress of civilization. Forests and Culture is to seek an improvement of our standard of living through the maintenance of the integrity, visual quality and health of forests around us. Forests and Culture is to provide opportunities where we can share and exchange new ideas and perception on our relations with trees, forests, and the biotic community. Forests and Culture is to examine and organize the new ideas to disseminate the value of forests. Forests and Culture is to explore and cultivate new values

of forests to accomplish an ecological harmony between forests and human beings. Forests and Culture is a process to elevate our human life quality and to keep records of our efforts for future generations.”

This mission statement is carried on each issue of the society's journal.

Organization

Korea Forests and Culture Society is a non profit organization. Anyone who is interested in forestry issues can join the membership. Currently the society has about 900 members, inclusive individual and institutions. The society has four committees for journal, planning and public relations, academic and education, and one research institute.

The society is run by a board of 13 directors, which consists of people from various professional backgrounds including foresters, forestry professors, a physicist, an artist, a businessman, and an environmental educator. The board of directors has monthly regular meetings to deal with routines. The society has its own office and a secretary who looks after administrative works.

Major Activities

The society has made efforts to promote cultural perspectives of forestry through not only discovering them from history, myths, legends, and stories but also demonstrating such activities in the forests.

1. Publishing Journal

The society publishes a bi-monthly journal called “Forests and Culture” in Korean. The journal covers various topics on forests and culture both of Korea and other countries. Regular topics on the journal are trees and forests in Korean history and literature, trees and plants in Korean traditional arts, trees and forests in philosophy, forest essays, pilgrimage to outstanding trees, etc. Copies are circulated among paid members and a large number of copies are donated to public libraries and forestry schools. The journal publishing is open to all members for comments and suggestions for improvement. Members can not only contribute to articles and columns but also they can participate in the editing and planning.

2. Forest Tours

The society organizes a forest tour once every two months for members and the general public so that members can get educational and cultural experience of the forest ecosystem. The tour visits forests around villages, temples, and mountain fortresses, and forests with special purposes and uses. Sometimes the tour takes overnight trip. The main

purpose of the tour is to educate the members on cultural aspects of forestry as well as general forestry in Korea.

3. Annual Symposium

The society has held annual symposium for the general public on a topic decided a year early at the board of directors meeting since 1992. The symposium covers a wide range of topics. Examples of topics are Pine Trees and Korean Culture (1993), Forests and Outdoor Recreation (1994), Oaks and Korean Culture (1995), Forests and Music (1997), Forests and Nature Education (1998), Forests and Religion (1999), Forests and Fine Arts (2001), Forests and Mountains (2002) and Forests and Philosophy (2005). Various participants from professional foresters to government officials, poets, writers, artists, farmers and teachers have presented the year’s topic from their perspectives. Proceedings are usually available before the symposium.

4. Overseas Forest Tour

To meet the demand and desire to get experience of other country’s forests, the society runs an annual forest tour to another country. The first tour was in Japan in 2003, second in the western United States in 2004, and the third one was held in Western Canada in 2005.

5. Awards for Books and Research Papers

The society has selected the best forestry book and research paper of the year and presented awards to authors since 2003.

6. Research Projects

The society has conducted a number of research projects on forests and culture as well as forestry. It also has led several projects to develop various educational programs including school yard greening project and experiential learning in forests program.

7. Others

The society has been consulting in developing education programs for various organizations including a regional forestry service office, a commercial bank and business corporations which run their own nature program in forests.

Major Accomplishments

For the last 13 years the society has made efforts to change people's perception of forestry as narrowly defined technical discipline to a discipline with diverse topics and interests which are intimately related to our living and quality of life. The followings are a few examples of the accomplishments the society made over the decade.

The directors are frequently invited by various media (TV, radio, newspaper and magazine) to present the society's activities and introduce new cultural aspects of forests. A few members published reader friendly forestry books on forests and trees for general public. One director published a dozen books on forests and culture since the beginning of the society and several of them were on the list of best sellers in many Korean bookstores. One

director's popular book titled Forests and Korean Culture is translated in Japanese. Someday we hope to publish an English version.

For the last 13 years since Korea Forests and Culture society was founded, the society has played an instrumental role in initiating many changes in both academia and forest administration in the government.

The society has become an influential organization in the forestry community in Korea now and played leading roles in developing forest policies and in changing forestry education in Korea. Since Korea forests and culture society started its activities, there have been major changes both in academia and forestry administrations in Korea. Several forestry schools in Korea introduced a new course, Forests and Culture (course name can be different from school to school), open to non-forestry students. A new department of Forest Culture was created within Korea Forest Service Office, dealing with various cultural, recreational, and educational activities related to forests or in forests.

Future Plan for an IUFRO Working Group

- facilitating international collaboration on researching cultural forestry research to promote forestry as a means to increase the understanding of other culture
- comparing each country's culture and forestry practices to find some patterns and correlations between the two

- holding an international conference on Forests and Culture
- cultivating cultural forestry internationally
- exchanging ideas, researches and information for developing sustainable forestry practices based upon cultural forestry
- organizing visits and tours to international cultural forestry sites
- publishing books and papers internationally

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International cultural forestry sites in Europe.
Picture: left: SCHIMA, right: SINGER;

MOBILIZATION AND MANAGEMENT STRATEGY OF LOCAL RESOURCES IN THE CONTEXT OF COMMUNITY FORESTRY IN CAMEROON.

CASE STUDY OF VILLAGE COMMUNITIES OF MBOUMA, MEKOTTO AND ZOEBEFAM AROUND THE DJA BIOSPHERE RESERVE, SOUTH CAMEROON

Abstract

Community forestry, which is considered as a stop-gap measure to the problems of deforestation and marginalization of premises, is a fundamental tool in local development.

In Cameroon, the 1994 new law on forestry and its implementing order provide Cameroonian communities with a legal framework for the implementation of community forestry activities, through community forests. However, one of the problems that communities encounter during the creation of community forests is the insufficiency of financial and institutional means, and the distribution of incomes.

This study aims at determining obstacles and opportunities related to the mobilization and the management of local resources by the communities of Mintom, within the framework of community forestry.

90 households chosen at random in 3 villages make up our respondents, complementary information was gathered during group discussions and other interviews by resource persons, and thanks to appropriate docu-

mentation. The information that was gathered aimed at:

- Making a participative diagnosis of local resources involved or likely to be involved in community forestry,
- Determining the current and potential possibilities for the promotion of community forestry activities within these communities,
- Determining rural representations with regard to community forestry,
- Identifying and describing the various actors,
- Making proposals based on results achieved and that are likely to have a positive impact on the socio economic and ecological environment of these communities.

The ownership of the concept and of its community forestry/forests activities requires the taking into consideration of the rights and duties of every actor and the specificities these communities are living in, and which are highly marked by poverty.

Introduction

Stating of the Problem

Despite a very important forest potential which is still intact in some places, the contribution of

the exploitation of forest resources to the betterment of general living conditions of the local populations is still far below expectations. The situation of village communities in the management of forest resources has not fundamentally changed since colonization. Their marginalization is significantly fed by the State, operators in the sector and other international donors, who want to preserve their power and interests in the commercial exploitation of forests.

Thanks to the new forestry law of January 1994 which lay down rules and regulations governing the exploitation of forests, fauna and fishery, and Decree No. 95/531 of 23 August 1995, which specifies the conditions of this exploitation, provide that some forest areas should be managed by village communities. However, given the important resources that are needed for the acquisition of a community forest, the poor local populations are still unable to benefit from this privilege provided for them by the law. Community forest initiatives that exist in some places are exclusively the initiative of international NGOs and other external elites whose aim is to take advantage of forest communities and exploit the timber in a bid to justify the assistance they grant to poor countries. This situation raises the problem of resource mobilization by rural populations, in the context of community forestry.

Could there be, behind this ownership process, a move for the putting in place of the

participation of rural populations? How is it being put in place? What are the real issues at stake and the challenges?

Objectives of the Study

As a whole, this study aims at making an inventory of available local resources, within the village communities living in the south of the Dja biosphere reserve, in the acquisition of community forests, and at identifying obstacles and opportunities with regard to the mobilization of resources by these communities.

- Describing the MBOUMA, MEKOTTO, ZOEBEFAM populations based on some pre-defined socio economic characteristics.
- Identifying the various actors that intervene in community forestry, as well as the possible interactions between them.
- Determining representations of MBOUMA and ZOEBEFAM communities with reference to community forestry.
- Determining the current and potential possibilities for the promotion of community forestry activities within these communities.
- Making proposals based on achieved results that are likely to improve the socio economic, cultural and ecological environment of ZOEBEFAM and MBOUMA inhabitants, through community forestry.

Definition of key terms and literature review

Definition of Terms

Community forestry is being translated by the significant resort to solutions chosen by the community. It gives to rural populations a role in the management and protection of the milieu. In short, it deals with introducing the forest related problems in rural activities, the role of the forest service being limited to consultancy, animation and monitoring. From the foregoing, this study falls within the framework of participative approaches to the management of natural forest resources.

Literature Review

Community Forest

According to the “Procedures Manual”, which quotes Section 3 (11) of the Decree, it refers to a forest belonging to the non permanent forest estate, subject to a management convention between the concerned village community, with the collaboration or technical assistance of the administration in charge of forestry.

Acquisition Process of Forest Communities

The acquisition process of a community forest in Cameroon comprises three main steps (MINEF, 2001):

1. The reservation of the forest for the community,
2. The drawing up of a simple management plan,
3. The signing of the management plan.

- The reservation of the forest for the community

In terms of this process, the state is aware about the will of the local communities to obtain a community forest. This gives to the local communities the right to state the drawing of a simple management plan.

- The drawing up of a simple management plan (Forest Inventory)

It is generally defined as a set of operations leading to the quantitative and qualitative measurement of a forest as well as other important factors with reference to the goals to be achieved.

- Management Convention

Section 3 (16) of the Decree provides that a management convention of a community forest refers to “a contract in which the administration in charge of forestry grants to a community a portion of the national forest estate, with regard to its management, its conservation and exploitation for the interest of that community”.

Methodology

Choice and Size of the Sample

- Presentation of the Area of Study

The populations concerned by this study are the inhabitants of MBOUMA, ZOEBEFAM and MEKOTO which inhabit the southern part of the Dja reserve in Cameroon. These villages are part the domain of great villages survey with 200 to 400 inhabitants, that is 25 to 50

households. The population is relatively young with about 40% below 17.

Four ethnical groups inhabit the neighboring area in the south of the Dja reserve, with a population density not exceeding 2.8 hbt/km². We have two sedentary groups (Fang and Bulu) and two semi-nomadic groups (Baka and Kaka). Most of the population has a primary level of education.

An important group of the population (21 to 37%) is generally referred to as "occasional residents". This category includes "external elites", 5 to 11% of the population that lives abroad for professional and academic reasons. The coverage of social needs, school, health facilities and road infrastructures is particularly low and even poses problems with regard to the density of the population.

Despite the permanent presence of human beings all around the Dja reserve, it still has the natural potential that perfectly justifies its position as a biosphere reserve and as a world property site.

- Choice of respondents

The unit for analysis is the household: It refers to a family unit made up of a family head, his spouse(s) and their respective children. Respondents are household heads.

Data Collection

To conduct this study, two types of data were necessary:

Primary data

These data were exclusively collected using the MARP (a research and participative planning active method) tools:

- Half-structured interviews

In this particular case, the people that were interviewed were chosen in advance, "key informant" with regard to their status, activities or position in the village. Oral conversation was oriented thanks to a control list incorporating the possibility of adding new elements based on interviewees' responses.

- Focus group discussions

Meetings with some social village categories were organized on themes specified in advance.

- Field observations were used in determining a transect and a map for village resources.

Secondary data

Secondary information was collected through the consultation of various documents, notably in libraries, research institutes, universities and through the internet.

Presentation of results

Identification and description of actors

Identification

Two types of actors intervene in community forestry in Cameroon: external and internal stakeholders. External stakeholders include:

- the administration in charge of fauna and flora, donors, NGOs, and business operators;
- the local populations constitute the internal stakeholders.

Description

The ministry in charge of fauna and flora
It is the body in charge of implementing the state policy with regard to forest management, through the division of forests. A unit in charge of community forestry were created within this unit.

Donors

They are the main initiators of ideologies and actions for the defense of the environment, the conservation of biodiversity and the use of forest resources. Developed countries that provide technical and financial assistance make up the majority of this group.

Non Governmental Organizations (NGOs)

In Cameroon, NGOs are private non profit making organizations that are working both to mobilize funds and sensitize the public for the participation in the social and economic development. They are most of the time monitored by intellectuals in search of a job.

Business operators

They impact on the management of Cameroonian forests as private sector economic operators. Their activity consists in the industrial exploitation of forest species. Their interest is to make the most possible profit for a given period of time, which usually corresponds to the amortization period of initial investors.

Local Populations

They live of and thanks to the forest and are the main users of it. They are the beneficiaries and the first target groups of the action for the sustainable management of natural resources.

Respondents Characteristics

Age and Sex

The average age of the population is 40, that is, the population is relatively young. The most represented population group is below 17 (47%), followed by the group between 35 and 50 (38%). 17% of women as heads of families were identified during our research. However, these divorced women or widows considered their first born sons, during our research endeavor, as the potential head of the family, once they are grown up. This is explained by the fact that in these societies, the woman is considered as inferior to men.

The level of Education

44,41% of the people involved in the survey have a primary level of education, while 17,46% never went to school. That is why a large proportion of the population (72%) can read and/or write French.

Socio-professional Activity

Agriculture is the main activity of the population, and concerns about 78% of people. We then have hunting which is practiced exclusively by youths. The minor activities include gathering, fishing, handicraft and small trade. Only women and old people are involved in these activities.

Real Assets

Collective Mobilization Capacity

Tontine groups are the most common associations (39%). According to respondents, these associations have a positive impact on their living standard. They mostly mention the money they receive in cash through these tontines. After tontine groups come groups of mutual help. Traditional associations and legal institutions do exist, but are very few.

Awareness on Community forestry Information

95% of respondents have already attended a meeting on community forestry. We can therefore assume that the notion of community forestry is well known in the region. A very important number of NGOs are found throughout the region.

Legal Provisions Awareness

58% of respondents said they are aware of the procedure for the acquisition of a community forest. This level of knowledge can be attributed to the commitment of these populations who are trained in this area by the local NGO “EN VIE LCP” (the French acronym for Environment, Life and Fight against Poverty) in the acquisition process of 08 community forests.

Local Population level of Knowledge on the Environment

In assessing the local populations level of knowledge on the environment, some indicators were retained namely: The relationship

between man and the forest, the value of the tree as viewed by the respondent, the respondent knowledge of marketable species and non timber products, the use of non timber forest products by respondents, the degradation of the environment and access to land.

For respondents, the tree has a double value: a useful item and a source for the provision of various products. The populations view the tree as a long term investment, a sign of land acquisition, which will provide products such as: fruits, barks, firewood, lumber, medicinal plants...

The population know the marketable species; they give a local name to each species. Non timber forest products (African mangoes, Moabi fruits, the *Gnetum africanum*, ratan lianes...) are well known, not quite exploited due to the enclavement of the region and to their less known economic value. The degradation of the forest and fauna environment is noticeable by respondents, through the disappearance of some animal and plant species that used to be common in their forest, and the scarcity of the existing ones.

Experiences in the Domain of Participative Management of Forest Natural Resources

It appears that these villages have the necessary skills in terms of forest management, namely, cutters (40), sawyers (05), prospectors (20), direction finders (01), cartographers (01), and scalers (05). However, the majority of these technicians require a financial payment, and the rest (12%) say they can put

their expertise at the disposal of the community.

Potential Assets

Management of the Village Land

Fallow lands belong to families, and virgin forests are conquered through the creation of plantations in an area that pertains to the family. Collective estates do not exist in the area, but access to the forest for the purpose of collecting forest products or hunting is free.

Gender and community Forestry

95% of respondents consider women as the main actors in this domain and recognize their role in the gathering and collection of non timber forest products, firewood, and food crops. It appeared during group discussions that women are still facing ownership problems both for land and for trees.

Time Availability

The people that were interviewed believe it is important to participate in a collective work for the purpose of giving a hand in the implementation of a community action. For many, it is way to be fully involved in the evolution of society. 62% of respondents said they can have time for community works.

Learnt Passivity

The purpose of this part is to assess the ability of respondents to express an idea or to support an opinion during a meeting. 68% are active, while 31.8% believe they are passive. From this result, it can be said that these

populations are able to actively take part in the implementation of a plan of action for their development.

Financial Contribution

The survey shows that 55% of respondents are ready to invest on the condition that it generates incomes. This group of respondents includes rich internal elites (retired workers, former civil servants, administrative officers), who are working with external elites and sector business operators who want to generate incomes from timber exploitation, to the detriment of the major part of the population which is poor and unable to mobilize funds.

Training Bodies

Several training bodies were identified in the area. ECOFAC, an international NGO which acts for the preservation of the Dja reserve, and promotes activities for the protection of the environment in the locality; CED, a local NGO charged with carrying out environmental studies in the region; FERURDJAL, a body acting for the training of women in modern agriculture; EN VIE LCP, a local body specialized in the protection of the environment. It provided assistance to communities in the acquisition process of 08 community forests.

Rural Representations in Awarding Procedures of Forest Communities

Some identified criteria guided us in the evaluation of rural representations in awarding procedures of community forests.

Identification of forests in a buffer zone, maximum area to be allocated, compulsory cruising, community forest and sustainable development, the system of managing funds, costs related to the awarding of a community forest.

85% of the region's population is ready to give a portion of their land for the acquisition of a community forest, but think the portion provided for by the regulations in force is useless. The reason is that buffer zones are made up in majority of old fallow lands that belong to individuals and represent ideal zones for agriculture. Moreover, these zones are generally secondary forests that can not harbour highly marketable species. The major part of the population have no idea about the exact area of a community forest that is awarded to a community, and believe that this area, instead of being fixed, should rather depend on the capacity of a community to manage a community forest or not. Despite their strong desire to have a community forest, 45% of respondents think that the costs incurred by cruising and follow-up of files are too high, beyond their means. The system of managing community forest is thought to be satisfactory by the majority of respondents, who, however, do not very well appreciate the way it is practiced.

Finally, respondents say a forest community is helpful and likely to benefit to the whole community in the sense that it can generate considerable incomes that will help in the execution of social projects.

Difficulties/ Expectations

Priority Needs of Villages

The absence of communication means (roads, rural electrification ...), and social facilities (hospitals, potable water...) constitute the major needs of these populations. Development bodies and plans should take that into consideration.

Difficulties

By order of importance, respondents raised the problems at the root of the poor functioning and dissolution of local organizations in the region:

1. Different economic interests
2. Past disputes between families
3. Leadership conflicts
4. Different political opinions
5. Witchcraft
6. Selfishness

Conclusion and recommendations

Forest community by the population and for the population is a new approach in the decentralization and management of natural resources in the rural milieu. According to Pelink et al (1986), it is the result of an awareness of the advantages that the nearness to the forest can bring to the communities in charge of its management.

For it to be successful, it has to meet some requirements:

How can conflict relationships that usually exist between rural communities and the administration be reduced? How to put an

end to demobilisation and to individual and collective absence of accountability on the part of rural populations and the administration? How can the management of forest communities by the population and with their own funds be integrated in village communities, and how can the effective mobilization of these funds be ensured? Giving an answer to the last question was the main concern of our study.

As a matter of fact, village communities are endowed with important and available resources, though some are still insufficient. The notion of forest community is relatively well understood, but the rural populations are still unaware of the issue at stake and its importance. They are in a way driven by external actors who are well aware of the issue and the advantages related to a community forest. The rural populations have been ill prepared and do not have the necessary skills that can enable them to face the challenges related to community forestry.

Thus, the promotion of community forestry activities by communities and for communities entails the putting in place of some fundamental safeguards: complete and implemented legal protection, enough resources to achieve and maintain their own organization and planning process, adequate capacity building for the acquisition of organizational, administrative and technical skills.

The ownership of community forestry activities entails the taking into consideration of the rights of all stakeholders, their responsibilities and the specificities of rural communities.

Abbreviations

ECOFAC : Ecosystème Forestière d'Afrique Centrale. International NGO

FERURDJAL: (Fédération Rurale du Dja et lobo), local NGO

EN'VIE LCP (Environnement Vie et lutte Contre la pauvreté), a local NGO

MINEF: Ministry of the Environment and Forestry

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Picture: SCHIMA

THE SOCIAL AND CULTURAL VALUE OF THE BOAB TREE *ADANSONIA GREGORII* (MUELL.): BENEFITS AND CHALLENGES OF A UNIQUE RESOURCE

Abstract

The Boab tree, *Adansonia gregorii* (Muell.), North-west Australia's endemic baobab, provides important social and cultural benefits for that region, resulting in special challenges for management. Boabs are an important resource for cultural expression, and craft uses include engraved seed pods or 'boab nuts' (a popular aboriginal art form, frequently sold in arts centres and displayed in museums). Small-scale food utilisation has also occurred recently, contributing to Australia's 'native foods renaissance'. Utilisation adds value to the species, but requires sustainable access to healthy tree populations. As an endemic, the species is also a unique component of landscape character, and is frequently used as an amenity tree in the region's towns; specimens have been cultivated (and original trees retained) within landscaping schemes, sometimes requiring sensitive planning of new developments. Many individual trees have heritage value due to their specific historic associations. Possessing memorial, education and tourist values, such trees can pose additional management challenges where they are present, due to public access pressures and legal requirements. Meanwhile,

traditional uses, stories and beliefs contribute to the species' role in the region's folk heritage. *Adansonia gregorii* is thus presented as an important species within the region, worthy of management attention.

Introduction

Though devoid of timber value, the Boab tree *Adansonia gregorii* (Muell.), North-west Australia's endemic baobab, supports several social and cultural values within that region. This support derives from the species' historic provision of regionally-distinct foods, medicines, and art/craft materials; from the role of many individual trees within folk history and traditional religious practices; and from the prominent role of the species as a defining feature of the region's landscape character. This study aimed to identify the benefits and challenges arising from the values connected with this endemic natural resource.

Adansonia gregorii is the only baobab native to a region outside of Madagascar or the African mainland. It is naturally found in parts of the Kimberley districts of Western Australia (W.A.); and in the Victoria River district of the Northern Territory (N.T.), and has also been deliberately introduced to other parts of North-

west Australia, principally to the town of Broome, Western Australia.

Methods:

The following methods were used within the study:

Site visits:

Visits were made to townsites in North-west Australia in which the species is used for amenity purposes (Broome, W.A.; Derby, W.A.; Kununurra, W.A.); to individual trees of heritage value; and to museums, galleries and arts centres in which boab-derived specimens are displayed and/or sold, within the region, elsewhere in Australia, and in Edinburgh, U.K.

Literature review:

Ethnobotanic literature was reviewed in order to examine the species' role in traditional diets, medical practices, arts and crafts. Heritage values (particularly in relation to individual trees) were documented in the heritage registers and databases of statutory agencies. Locally-published popular literature, archive material and media sources provided invaluable "local knowledge" on the role of *A. gregorii* in folk culture and in amenity usage, etc.; on popular attitudes to the species and to individual trees; and on various other matters relating to popular usages of the species.

Interviews:

Interviews were conducted with contemporary users of boab trees for food and artistic purposes in order to explore the current relevance of the species.

Results:

The results of the study are presented here in broad utilisation categories.

Arts and crafts:

A. gregorii has been an important resource for cultural expression, through the use of boab-derived materials for artistic and craft purposes and remains so today.

The literature records numerous historic uses (see Table 1), with one art form remaining particularly important today: Engraved boab nuts. The hardened shell of the boab seed pod provides a medium for engraving that is both attractive (scratches appearing white against an otherwise dark colouration) and durable (historic specimens can be found on display in museums in Australia and elsewhere in the world). This traditional aboriginal art form (which is regionally unique, due to the geographic limitation of *A. gregorii*) remains popular today, with contemporary specimens being frequently displayed and sold in regional

Historic art/craft uses of Boab tree materials		
Tree part	Use	References
Stem	Carved to depict traditional imagery	BASEDOW, 1918; CRAWFORD, 1968
Bark	Twine production Coolamons	SMITH, et al., 1993
Nuts	Painted or engraved with imagery	numerous.

table 01

galleries and arts centres. The medium has also been used educationally within the region; specimens carved by students at Derby District High School (Derby, W.A.) have been featured in national exhibitions (NORVAL, 1999).

Benefits:

- Utilisation ‘adds value’ to wild tree populations
- Supports cultural expression
- Allows artists to maintain connectivity to the natural environment

Challenges:

- Requires sustainable access to healthy tree populations
- Requires retention and appropriate use of traditional knowledge

Food heritage:

A. gregorii is an important part of North-west Australia’s food heritage, with numerous historic food uses recorded in the literature (see Table 2).

It is important to note that such food uses were not limited to aboriginal populations; early white settlers noted that boab fruit pith could either be made into “an agreeable jam” (LOWE, 1998) or used as a baking powder substitute in breadmaking (BASEDOW, 1918), and that the flowers could be used to make an alcoholic spirit with a “fine sting”.

Recent developments suggest that aspects of this food heritage may have some commercial

Historic food uses			
Tree part	Use	Notes	References
Nut	Fruit pith (eaten raw)	Sherbet-style children’s sweet	MURRFURRA et al. 1995;
			LOWE 1998; numerous others
	Sweet drink	Fruit pith mixed with water and wild (native) honey	PURDIE et al. 1999;
			LOWE 1998
	“Roast potato”	Unripe fruit pith, roasted.	MURRFURRA, et al. 1995; PURDIE et al. 1999
	Jam	Fruit pith boiled up with sugar	LOWE, 1998
	Baking powder	Pith used as a rising agent in breads, etc.	BASEDOW, 1918
Flower	Alcoholic spirit	Fermented flowers	COATE, 1995

table 02

potential. Australia’s ‘native foods renaissance’ has reawakened interest in re-searching the food potential of those Australian native species with a known history of use. A major challenge to such research, however, can be the retention of traditional ethnobotanical knowledge, and the loss of such knowledge in an increasingly westernised society has been noted as a problem in the region (SMITH, et. al., 1993). Cultivation trials by the W.A. Department of Agriculture (with funding from the Rural Industries Research and Development Council, RIRDC) aimed at exploring the potential of *A. gregorii* as a root vegetable, have begun to arouse interest amongst some local farmers and restaurateurs in the roots and leaves of cultivated

boab saplings. Though an agricultural enterprise, boab cultivation continues to require wild trees as a seed source, thus adding economic value to existing populations whilst also potentially supporting the development of a crop that is highly adapted to the environmental conditions of the region (JOHNSON, ROBINSON & GREEN, 2002).

The use of local native ingredients can add a distinctive regional flavour to food products, and “boab chocolate”, which uses boab fruit pith to add flavour and textures to the chocolate has been a surprise success for one Kununurra business, with orders continuing to grow (Boot, pers. comm.).

Benefits:

- Utilisation ‘adds value’ to wild tree populations
- Supports a crop with possible economic and environmental benefits for the region
- Supports the expression of regional culinary heritage

Challenges:

- No defined ‘optimal yield’
- Requires sustainable access to healthy tree populations
- Requires retention and appropriate use of traditional knowledge

Amenity:

A. gregorii is widely used as a street tree and as a landscape feature for public and private properties in North-west Australian towns. As a distinctive component of the North-western

‘landscape character’ (due to the species’ endemism and the prominent sizes and appearances of many individual trees), *A. gregorii* thus delivers many of the benefits associated with urban trees in a manner that maintains the unique regional appearance of the towns.

Notable uses of *A. gregorii* as an amenity tree include deliberate and large-scale introductions to Broome (which lies just outside the species’ natural range); avenue plantings and the retention of original trees in Derby (where the species is native); use as a major landscaping feature in the Derby golf course (known as “The Boabs”); and occasional use for commemorative plantings in Kununurra and Broome. Individual boab trees in towns can attract considerable public support, which has sometimes required sensitive planning of new developments (NEWS OF THE NORTH, 1977; THE WEST AUSTRALIAN, 1964).

Benefits:

- Amenity trees can receive ‘iconic status’ and popular affection
- Veteran specimens have high visual impact
- Longevity of many specimens, and suitability to the regional environment.

Challenges:

- Maintenance of health and safety (always an issue for amenity tree management)
- Implications for town planning arising from existing trees
- The management of tree health and death, and replacement of dead trees.

Social history:

A. gregorii is an important resource for the social history of North-west Australia, for a variety of reasons associated either with the species in general, or, in some cases, to individual trees.

Ethnobotanic literature indicates that the species was a valuable resource for traditional aboriginal healthcare practices, both in terms of the provision of medicines and as a resource for health-related rituals (JULI, 1999; MARTIN, 1999; THOMAS, 1999). It is also understood that the white fruit pith, which has a high concentration of Vitamin C, was used by early white settlers as a treatment for Scurvy (LOWE, 1998), a serious health threat that arises from Vitamin C deficiency.

Traditional religious beliefs within North-west Australia attribute considerable spiritual significance to many individual boab trees. Therefore, numerous specimens are subject to protection within traditional aboriginal law and, since the adoption of parliamentary legislation for the protection of aboriginal heritage sites, are also protected by State law. An example of the potential management impacts arising from such status is provided by the “Prison tree” in Derby, W.A., which has recently been enclosed by a fence in order to prevent tourists from damaging the religious values of the site, which is protected under Western Australia’s Aboriginal Heritage Act 1972.

The ability of many individual boab trees to function as landmarks has resulted in some individual trees becoming known as sites for social gatherings; such use is typified by the Cattle drovers’ “Dinner Tree” in Derby, and similar sites elsewhere, which served as resting points at known distances along cattle droving routes. This landmarking potential, combined with the ability of boab bark to be carved with durable inscriptions led to many prominent trees to be used by early explorers as way-markers; a tree near Timber Creek, N.T., still bears inscriptions left by A.C. Gregory’s 1855 expedition to the region, and boab inscriptions created by other expeditions elsewhere are often now the only surviving archaeological remains of those imperial missions. Such trees, where present, require management appropriate to their significance within the region’s heritage. Such trees can also have considerable potential for education and tourism; Derby’s “Dinner Tree” is now part of a local heritage trail relating to the pastoral industry and an explorer’s inscription tree at Careening Bay, W.A., is an increasingly popular attraction for pleasure cruises.

Finally, some individual trees have played important roles within rites of passage for local people, including ritual usage within aboriginal traditions, use as memorials of birth, and use as grave sites both by aborigines (BASEDOW, 1918; ACKERMANN, 2004) and early white settlers (D.E.H., 2005).

Benefits:

- Education, remembrance and heritage value of “heritage trees”
- The species is important for the integrity of regional heritage

Challenges:

- Recognition and protection of value (not all sites may yet be recognised or fully understood)
- Requirements for sensitive management of significant sites, and for careful management of public access (where appropriate).

Discussion:

Adansonia gregorii delivers a variety of non-timber benefits to the communities of North-west Australia. The species has been incorporated into the social histories of aboriginal and non-aboriginal populations alike (due to a heritage of use by both); continues to provide resources for cultural and other purposes; and is a popular amenity tree throughout the region.

The geographical restriction of *A. gregorii* means that the species is a distinguishing feature of the region’s landscape character, but also means that the products and services delivered by Boab trees are necessarily unique to the North-west, helping to define a distinct cultural identity for the region.

Recent developments (such as Australia’s native foods renaissance; the commercial success of the aboriginal art industry; and the successful use of individual “heritage trees”

for education, memorial and tourism purposes) demonstrate the potential of cultural heritage, and the Boab’s cultural associations may present a considerable “option value” for future exploration.

The continued delivery of these benefits (and the retention of options to develop these benefits further) will require the sustenance (and continued accessibility) of healthy tree populations. Though the species is not considered to be threatened at any level very little is known about the species’ ecology, population size or trends. Furthermore, it is unclear how the species has been affected by past land management interventions (such as the introduction of non-native livestock farming) or could be affected by proposed future interventions (such as the expansion of irrigation agriculture and the possible extraction of monsoonal river flows to provide water for other Australian regions).

Much knowledge of the ecology and biology of Australian tree species focuses on those trees with the capability of producing marketable timber or fibre, reflecting the historic focus of Australian forestry since colonisation by the UK. However, forestry in Australia, as elsewhere, now seeks to deliver a broad spectrum of benefits to society, including social and cultural benefits. Within the context of this broad forestry agenda, *Adansonia gregorii* is thus presented as an important species for North-west Australia, worthy of appropriate attention by land managers in the region.

Acknowledgements

The author acknowledges the following people for their generous donation of time, advice and encouragement: Peter Johnson and Elizabeth Green of the W.A. Department of Agriculture (Frank Wise Institute), Kununurra; Melissa Boot of Kimberley Boab Kreations, Kununurra; and the artists and staff of Waringarri Aboriginal Arts, Kununurra.

Any aspect of traditional knowledge mentioned within this report has already been published within the public domain, with references provided wherever possible. The author wishes to acknowledge the traditional custodians of the knowledge contained within literature cited within this paper, and has endeavoured to avoid mention of any culturally sensitive information.

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Baobab tree; Western Australia



TRADITIONAL AND NEW OCCUPATION IN RURAL AREAS BASED ON FORESTRY AND FORESTS – GENDER ASPECTS

Gender aspects¹ come into sight when we look, who worked and works in German forestry. Traditionally, women were excluded from foresters' positions in the state and municipal forest services. Also in the execution of forestry work, there was a clear division of labour: men used to do the heavy work around timber logging and extraction, whereas women used to be involved in the planting and caring part of activities, considered lighter work (Hoffmann/Lewark 1999).

Over the last decades there has been a complete shift of the organization of forest work on all levels. Simultaneously with the rapid social change in Germany, the importance of the classical forest worker decreased. New societal demands emerged. The increasing recognition of leisure and tourism, pedagogic events, ecological and environmental aspects of forests and national parks promise new opportunities for jobs in rural areas. At the same time much of the forest based work has been outsourced, from employment by forest owners, including state and municipal forest services, to contracting

work. The traditional contracting services in forestry primarily consisted in work of extraction and transport of felled wood, only recently more and more in the felling operations themselves, and in forest road construction. But today we find that contracting enterprises are doing this traditional work as well as rendering new services.

As part of two interdisciplinary research projects² at the University of Freiburg development of forest based occupation and work organisation in the state forests and by forestry service enterprises were studied with a special focus on gender arrangements, using mostly qualitative methods of the social sciences. In the research project "WALD" (Wald/Arbeit/Land/Dienstleistung = forest/work/land/service) work in general in forestry-related jobs in rural areas were studied. The research project "wa'gen" (Wald – gender = forest and gender) focuses on the role that

¹ This paper is based mainly on two posters connected to the IUFRO World Congress in Brisbane 2005: Lewark et al. (2005), Wonneberger/Lewark (2005) – and three publications: Westermayer (2006), Wonneberger (2004a,b). For more details and more references cf. these longer texts.

² 1) Research project 'WALD', funded by the German Ministry for Education and Research as part of the programme „Zukunftsfähige Arbeitsforschung“ under No. 01 HN 0120 – 2) Research project "wa'gen" "Forestry Knowledge and Nature Perception under Consideration: Gender Analysis of Forestry related Environmental Education, Information and Public Relations – evolving new Approaches" funded by the German Federal Ministry for Education and Research as part of the programme „Sustainable Forestry“ under No. 0330607; for more information see: <http://www.wa-gen.de>

gender relations and perceptions of nature have on forestry and environmental education. To understand current gender relations, patterns of corporate culture in state forest services will be identified and analysed, using an historical approach to reconstruct underlying mechanisms.

Traditional forest work and recent changes

Historically, in Germany paid work in forestry was done by day-labourers, especially by farmers who wanted to earn additional income in winter (Gröger/Lewark 2002). This is true from the 16th century to the beginning of the 20th century. Cutting timber in the form of an occupation (“Holzhauer”) can only be found between 1600 and 1800, when charcoal was the primary source of energy for the early industries. With the exhaustion of the woods used for charcoal production and the move to mineral coal as primary source of energy, forestry work once again became the work of day-laborers and farmers.

At the end of the 19th century wood owners and foresters complained about the lack of skilled workers. Subsequently “forestry worker” became an occupation, including a solidified occupational image, adequate pay, and the end of the day-laborer principle. Occupational training for the forestry workers was implemented only in the 1950s (GDR) respectively the 1970s (FRG).

The “standard model” of the wood worker in the 1970s and 1980s is the unionised male wage-earner, working in a permanent full-time

position all around the year, employed by the state forest services (or, to a certain degree, in bigger municipal or private forest properties). The establishment of this standard model also had an effect on the number of forestry workers. Since the 1960s, temporary workers and women planting trees were in effect laid off, the number of workers in forestry decreasing from 135.000 workers in 1965 to around 75.000 workers in 1975. In 1985, the peak of the industrial organization of forestry work was already over. At that time, only about 50.000 to 60.000 forestry workers were employed in the FRG, a number continuously reduced in the following years. Even the German unification brought this move downwards only for a short time to a stop.

Traditional forest contractors

As a consequence of a combination of globalisation, “neo-liberal turn” and mechanization forestry work was out-sourced to contractors by big forest owners, including the state forest services (Westermayer 2006). While the numbers of employed workers was reduced further, a market for “mechanized” contractors was established. A turning point was heavy storms in the beginning of the 1990s, leading to the necessity of processing large amounts of timber in short time. Instead of buying forest machines themselves, the German state forest services set incentives for contractors to buy harvesters and forwarders. Although small contracting enterprises (“forstliche Lohnunternehmer”) and farmers

earning additional money in the winter season existed in parallel to the industrialized forestry work of the 1970s and 1980s, only from 1990 onwards the professional contracting enterprise (“forstliches Dienstleistungsunternehmen”) became a possibility and soon a reality for forestry in Germany.

At least a quarter of the forestry workforce in Germany is formed by contractors and their employees, in total roughly 23,000 persons, working in 7,300 enterprises (Westermayer/Brogt 2006). Even the new contracting enterprises are micro-enterprises: the average contractor employs only 2.5 workers, 90 % of the enterprises employ less than ten persons. The reduction in the number of workers employed in the “fordistic” regime of the big state-owned and private forest operations will probably continue, whereas the importance of contractors will continue to increase.

Most of the smaller forestry contracting enterprises are organized as family enterprises. Only very few contractors are structured along the standards of business studies textbooks. Family enterprises are characterized by very flat hierarchies, by informalities and familiarity. Separation between the contractor’s family and the business is low or not existent at all. We call this a low degree of “Betrieblichkeit”³. Family members, especially the wife of the contractor, are of special relevance for the functioning of the enterprise.

³ German „Betrieb“ meaning the operation or the firm.

The engagement of family members in the contracting enterprises can assume different forms, e.g.: – the wife is formally employed for office work in the contracting enterprise – handling of the office work by the wife without payment – sons, brothers or brother-in-laws of the owner working as employees – informal and unpaid participation of family members, e.g. discussing to buy a new machine with the father-in-law first.

A flipside of family enterprises, familiarity and low formality is the special form of *gendered division of labor*. Women who become forestry contractors are clearly an exception. The occupational image is that of a male occupation. The male contractor is seen as doing the “real work” or the “hard work”, supported by female work, e.g. in the office. This corresponds with the division of labor in family farms. The division is hierarchically, establishing traditional gender roles also with regard to family work and reproductive work, further strengthened by long working hours and demands of flexibility and mobility. From a perspective of gender equality and “sociability” of work this gendered – and hierarchical – division of labor is problematic.

Sometimes we also find neo-traditional gender roles: both work for pay, the man as a contractor, the woman (part-time) in another job, so there is a double income, but household work, children and help in the enterprise are still seen as female responsibilities, creating in effect a double workload for women in small rural enterprises.

New service contractors

In addition to the traditional contracting services in forestry doing primarily proper forestry work, new services came up more and more, like value estimations of forest properties, forest planning and certification. These were activities connected to forestry production, which had been done by the forest services before and then been outsourced. Now they are done by self-employed experts, who are also active for instance in forest inventories or private lawsuits, estimations of forest damages through storms, or for insurance cases. Rather new as well there are occupations of experts for tree tending and care, or experts, who draw up tree registers in cities or assess the state of tree diseases. There are also specialists for difficult felling operations connected to road construction or railway location lines, or when cities are sued for damages through accidents.

But on the other hand new occupations are based on new developments or demands and changing interests of society in forest utilization. Our interviews included self employed work in fields like forestry equipment business, IT jobs for forestry, timber trade, mobile sawing, forest education, tree climbing and adventure parks.

The spectrum of occupations is met by a variety of access roads: It is true that predominantly women and men with academic forestry degrees go for those occupations, but we also find completely different backgrounds

and also traditional educations supplemented by additional education leading to innovative occupational paths. Access to many of the described occupations is informal and not regulated. Also payment for the self-employed is little formalized, but depending on the permanent struggle between competences, prices, power and market segments, even with public customers.

Informal regional networks are of great importance for all new service contractors and work through personal acquaintances, common language (including dialects) and mouth propaganda. Integration into such networks guarantees market access and professional success and that they are known to the target groups. These new service contractors are characterized by their attitudes towards nature as starting points, which in many cases go back to childhood and youth – this became evident in the majority of the interviews.

While employment in traditional forestry and agriculture is falling off, new niches and occupations are found and opened up by inventive men and women, moving from public tasks to private initiatives. However for the time being these new occupations are very often precarious jobs, not providing ensured and continuous positions nor making provisions for illness or unemployment.

We find an increasing number of women working in new fields of forest based activities, in state forests as well as in private enterprises or self-employed. This is a signal

for more working opportunities for both sexes but they still follow the tradition of gender division in this rural employment sector. Sometimes highly qualified women find new tasks and possibilities. Of course this was only possible after an increase of numbers of female graduates at universities and universities of applied sciences (“Fachhochschulen”) (Lewark 2003, Hehn et al. 2006).

But it has to be mentioned also, that these jobs are not yet sustainable, are not fully integrated into health security, and that they are not easily compatible with family tasks. Numbers of jobs with lower qualification decrease whereas – during a similar decrease of jobs with higher qualification demands – at least there seems to be an increasing number of new occupations. This applies to wood production as well as to jobs connected to recreation. But gender segregation is still observed under old and new institutional and organizational conditions. Women choose more often pedagogic jobs. They work more often in the office part of management and are found in the natural resources conservation jobs. Activities and necessary qualifications changed, but women are still more involved in ecological and educational tasks, whereas the better paid jobs in wood production and forest services are still mainly men’s work. Thus we see chances for a future gender justice and new jobs for women in forestry mainly because of the increasing relevance of nature appreciation and eco-education.

Forest based work and rural development and gender aspects – outlook

In the bigger picture, forestry work is embedded into rural development within society. Even if one still can find typical differences in life-style and social structure between rural and urban areas, rural areas do not stay the same. They become increasingly post-industrial, too. Concerning the organization of work, one may even speculate about the resonance between a post-fordistic work organization brought to rural areas, emphasizing autonomy, flexibility and a lacking borderline between work and private life, and pre-industrial traditions of autonomous rural work with similar characteristics.

Another facet we should look at is the role of rural traditions and regionality (Brüggemann/Riehle 2005). In the biographical backgrounds of forestry contractors links to farming and forestry work were found for almost all contractors though not as often with their employees. Such links range from training in agricultural occupations to parents who were farmers. If a farm was inherited by the contractor, farming stopped in almost all cases, often following a pattern: first working as contractor and at the farm, then part-time farming, leasing the fields to others and finally using the farm buildings for the contracting enterprise only. In some cases, farming continues as a hobby, e.g. by keeping some horses or sheep. In other cases, the contractors continue a minimal amount of

farming for tax reasons (agricultural taxes are often lower than enterprise taxes).

Also, in most cases we found biographical links to forestry: training as forestry worker, or parents, relatives or neighbours working in forestry, sometimes a history of working first as a forestry worker and then establishing the own enterprise. In Saxonia-Anhalt, older interview partners mostly had done some work for the technical operations in the GDR state forests, whereas here the biographical link to forestry is in decline with younger interview partners.

These connections with agriculture and forestry emphasize the role of traditions of rural work in the new contracting enterprises, e.g. a high esteem for the quality of work, an instrumental view on nature, or in the case of forestry, an orientation towards long-term processes. Another orientation stemming from rural traditions is that of omnipresent and autonomous work, resonating with the new post-industrial demands on work organization. These “rural” attitudes are combined with a high degree of interest or sometimes even fascination for technology. Regarding regionality, most of the contractors say that they estimate it very highly.

We find contractors who are very interested in the well-being of their region and say that they are proud of it, but who work away rather often and rather far away. Other contractors prefer to work at one place, but say they are not interested in the politics and culture of their region at all, and that they will move if the

economical situation is better somewhere else. Here one can notice an important difference between family farms and forestry contractors. Whereas family farms are “rooted” in a region via their ownership of fields, meaning that the farmers are not able to move to another region if they do not want to sell their fields, this is not true for forestry contractors.

If one asks for an ecologically, economically and socially sustainable development of rural regions, our research findings on out-sourcing of forestry work in a framework of sustainable regional development presented above are seen critical. We find hybrids between post-industrial work and rural traditions. Many elements – like the low level of “Betrieblichkeit” (cf. footnote 3) and the omnipresence of work, to mention only two – are typical of rural craftsmanship and small-scale agricultural work. These traditional elements of work in rural areas are now being recombined. Even if the working conditions look familiar on first view, the context in which small enterprises and omnipresent work takes place, has dramatically changed and is something new for rural work: the global market. In this new context, traditional elements of work lose their innocence, if they ever were innocent. This is especially true for the redistribution of the risks and the burdens of failure linked to the out-sourcing of work.

Looking at the consequences of the developments described at the macro level of sustainable development, the out-sourcing of

forestry work is not desirable, neither from an ecological nor from an economical or social point of view. A lower degree of familiarity with the working area as well as the increased pressures of global market competition together with the existence of the intractable problem of control in subcontracting chains lead to ecologically questionable practices and to the loss of views on forests as more than goods and assets. Economically, the increasing relevance of centralized structures like large wood processing industries means that only little added value remains in the regions (Fink-Keßler/Hahne 2004, Gothe/Hahne 2005). Understanding sustainability socially, the decrease of secure employment opportunities in rural regions as well as the negative consequences for gender equality are remarkable.

Turning back to the tasks forest based contracting firms are doing, we see traditional forest done as well as new services. The development of new services is considered positive and important for rural development, even if their numbers are lower than occupations in traditional forestry and working conditions as well as sustainability of those occupations leave many open questions. The new enterprises will react to the local social environments and networks, contributing to secure occupations in rural areas and enriching the regional spectrum of occupations and competences. Gender relations in particular are studied in the research project *“wa’gen”*, where patterns of corporate culture in state forest services are being identified and

analyzed, using an historical approach to reconstruct underlying mechanisms and a sociological approach to look at current consequences (Hehn et al. 2006). We assume that these patterns not only led and still lead to the exclusion of women, but also to an utilitarian view of nature, both restricting the potential for change. We assume further that gender ratio and gender relations within a public organization like the state forest services can be considered as indicators for the compatibility between an organization and the society as its social environment. Seen from this view and considering the political goal of equal-opportunity employment and consideration of gender aspects a low representation of women indicates a need for reorganisation and improvement – for example with the help of gender mainstreaming.

Gender relations as an indicator for a certain corporate culture can be used as a key to understand similarities and differences in the comparison of corporate cultures of forest services in different European countries. Gender relations are deeply rooted in the different corporate cultures and national traditions. With the increasing significance of a common European forestry policy (e.g. FFH guidelines, Natura 2000 Initiative, certification of wood and wood products, Kyoto Protocol and Process), the differences between the tasks, cultures and structures of the national forest services become increasingly relevant. Therefore, the integration of the national forest services in a wider European network is inevitable. This integration process will be

greatly facilitated by a thorough understanding of the different corporate cultures.

Considering forestry as a source of employment in rural areas some conclusions can be drawn:

We find jobs for both sexes, particularly with the new services recently emerging, contributing to gender equality. In addition to jobs in the productive sector jobs in conservation and recreation such as nature conservation, forest-pedagogics, leisure activities and communication tasks are needed.

In a densely populated country like Germany, different kinds of forestry are possible in the future. Because men and women seem to prefer different ways of using forests and working in forest, handling of gender issues has impacts on the type of forestry conducted. If women also find forest based working opportunities this is a contribution to rural development. No region can exist without men and women living and working there and this calls for gender equality in employment. New jobs should be sustainable in a social, ecological and economical sense which includes sociability.

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Forestry-related jobs in Rohrer areas: women planting trees; (Source: ForstKultur-Archiv; Auger, Rohr im Gebirge)

⁴ All issues of „Arbeitswissenschaftliche Forschungsberichte“ and the earlier series „WALD-Arbeitspapiere“ are available under <http://www.fobawi.uni-freiburg.de/awi/awiberichte.htm>

ANALYSIS OF ORGANIZATIONAL CULTURES IN THE RUSSIAN ROUNDWOOD MARKET

In market dealings, pure trade is not only part of the whole business process. On the background, there are many other significant elements, such as cultural questions, among others. Geert Hofstede¹ (2001), famous Dutch scientist, noticed the main indicator of differences in national corporative governance is the understanding of financial goals. “It is naïve to assume” that financial goals “are culture – free”.² For example Germans translated financial goals into independence from banks, the Dutch translated them into book value, and the Americans related them to stakeholder value. “This reflects the institutional differences among the countries (the strong role of the banks in Germany) but also the prevailing ideologies of the shareholder as a symbol in the United States”.³ Culture plays a very important role in communication.

Culture is information to avoid conflict situations in the new environment. Market is one of the ways of modern communication. So in this case, intercultural communications skills⁴, cross-cultural know-how⁵, and cross-cultural management⁶ are very important knowledge for the global economic system and for the roundwood market, too. There are many books devoted to the role of culture in business and in market. In this paper we will use some of the most popular theories, and one of them is a theory about organizational culture. These papers seeks to describe and explain how culture could influence roundwood market, what are the main characteristics of Russian organizational culture in roundwood market, how distance of power could influence the way of thinking and time management, how folklore roots of culture could have an influence on national mentality.

¹ Hofstede, G.H.(2001) Culture’s consequences: Comparing values, behaviors, institutions, and organizations across nations. Thousand Oaks, London, New Delhi: Sage publications. International Educational and Professional Publisher. p. 385.

² Hofstede, G.H.(2001) Culture’s consequences: Comparing values, behaviors, institutions, and organizations across nations. Thousand Oaks, London, New Delhi: Sage publications. International Educational and Professional Publisher. p. 385.

³ Hofstede, G.H.(2001) Culture’s consequences: Comparing values, behaviors, institutions, and organizations across nations. Thousand Oaks, London, New Delhi: Sage publications. International Educational and Professional Publisher. p. 385.

⁴ Intercultural communication is communication with people from a different cultural, linguistic or ethnic background. Barnett, C., Davidsson A. Improve Your Global Competence. Helsinki: Multiprint OY. p.176.

⁵ Cross-cultural know-how is a core competence that facilitates interaction between different cultures. Barnett, C., Davidsson A. Improve Your Global Competence. Helsinki: Multiprint OY. p.173.

⁶ Cross-cultural management is a branch of international management whose task is to facilitate and direct synergistic interaction and learning at interfaces where knowledge, values and experience are transferred into multi-cultural domains of implementation. Barnett, C., Davidsson A. Improve Your Global Competence. Helsinki: Multiprint OY. p. 173

Russia is one of the major roundwood exporters on global scale. Currently, Russia is negotiating for participating in the World Trade Organization. Although the time schedule and the possible transition period are under discussion, this participation will implicate more harmonized trade legislation, customs tariffs, and open competition in the world market. Practices, which were created during the Soviet history, can be hardly applied to the current conditions. Russian firms do not have much experience in making direct contracts with their international business partners, as the earlier process was highly centralized and authority oriented. Due to the same facts, Western business culture and all its features were unknown to majority of Russian enterprises until the Soviet Union collapsed at the beginning of the 1990s. Transition to a new system was very fast but it takes time to get familiar with new habits, requirements, working and operational environment. On the other hand, cultural question is not one-sided. European partners also need to take into account Russian business culture before participating in the Russian roundwood market. Sufficient knowledge of a partner's way of thinking and operating is one of the major conditions of a successful business relationship.

Organizational culture has been defined in many ways⁷. We will use the definitions that were proposed by two scientists and success-

⁷ All necessary literature about organizational culture definitions is presented in references

fully supplement each other. G. Hofstede noticed that Organizational culture is “the collective programming of the mind that distinguishes the members of one organization from another”⁸. A. Tropenaars explained the process of formation of organizational culture (1998) “Organizational culture is shaped not only by technologies and markets, but by the cultural preferences of leaders and employees”⁹. “Software of the mind”¹⁰ includes different parameters among them are distance of power and time management. Time management and distance of power are the main aspects in the Russian organizational culture in roundwood market. These two parameters are closely connected in Russian roundwood trade. Power distance in Russian organizational culture in roundwood market is the main aspect and subjugates other aspects such as time management. At the same time these two main characteristics of Russian mentality could be explained very well through the theory of organizational structure that was described by A. Tropenaars. Organizational structure includes:

⁸ Hofstede, G.H.(2001) Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations. Thousand Oaks, London, New Delhi: Sage publications. International Educational and Professional Publisher. p. 391.

⁹ Tropenaars A.(1998) Riding the waves of culture: understanding diversity in global business. 2nd. Ed. New York: McGraw-Hill. p. 161.

¹⁰ Hofstede, G.H.(2001) Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations. Thousand Oaks, London, New Delhi: Sage publications. International Educational and Professional Publisher. p. 2.

1. The general relationships between employees and their organization.
2. The vertical or hierarchical system of authority defining superiors and subordinates.
3. The general views of employees about the organization's destiny, purpose and goals and their places in this.¹¹

Organizational culture has the next features: holistic, historically influenced, related to anthropological concepts, socially constructed, soft, and relatively stable - that is difficult to change¹².

According to the A. Tropenaars ideas organizational culture is holistic, historically influenced, related to anthropological concepts, socially constructed, soft, and relatively stable system.

In this paper we will try to show the role of power distance index and time management in Russian organizational culture in the roundwood market and to describe the preliminary model of Russian organizational culture that could be checked soon through questionnaires and interview in a further project. At the same time these papers will present historical roots of Russian mind through the system of collective unconscious, which is reflected in Russian fairytales. Some roots of Russian mentality were analyzed in the works of

¹¹ Tropenaars A.(1998) Riding the waves of culture: understanding diversity in global business. 2nd. Ed. New York: McGraw-Hill. p. 162.

¹² Hofstede, G.H. (2001) Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations. Thousand Oaks, London, New Delhi: Sage publications. International Educational and Professional Publisher. p. 393.

Russian philosophers thus it is necessary to mention them for a better understanding of the Russian way of thinking.

The concept of power distance as instrument for measuring of the human inequality and its acceptance in the society is presented in different fields of social life. It is the concept that has been successfully applied in the analyses of intercultural communication. They are mainly due to the studies of Hofstede (1986) on work – related values in international corporations¹³. So there are national cultures based on high and low index of power distance. This index could show the difference in political systems, consequences for religious life, philosophical and ideological thinking and consequences for organizations. Russia and Finland have a different distance to power. Russia has an index number of 88.1, while that of Finland is 33 (Hofstede 1986, Elenkov 1998). Thus, there seems to be a distinct difference between the Finnish and Russian political and economic system. This difference is more visible in the example of the relations between partners in Finnish - Russian roundwood market.

Centralization of authority and authoritarian leadership has a long history in Russia. Over the centuries, Russian culture has been replete with ruling elites and authority figures that tightly controlled society and suppressed

¹³ Hofstede G. (1986): Culture's Consequences. International Differences in Work-Related Values. London. New Delhi.

personal freedom. Among these were leaders of the Russian Orthodox Church, tsars, land-owners, and the Communist Party's elite. Land and forest according to the Russian mentality belongs to the supreme power. The identification of power in Russia contains in itself the sacral meaning. Thus, the Monarch is the only person who has the responsibility for the lands, while other people, who are free from this duty, should fulfill all orders of the supreme power. Regardless of who was in control of the country, the population was subjugated to the values and behaviors of the authority figures in Russia. Among the clearest evidence of the unequal distribution of power in Russian society was the Table of Ranks instituted by Tsar Peter I in 1722. This system, which determined status and privileges in society according to 14 ranks, remained in effect until 1917.

A power distance phenomenon in the Russian organizational culture is more vivid in the system of collective unconscious which is reflected in the Russian folklore legends and fairytales. Fairytales about: "Priest and the Blockhead", "According to a pike's will", "Vaselisa the Wisest", "Illya Muromets, Alesha Popovitch, and Dobrynia Nikititch", describe the general relationships between employees and their organization very specially. We could see how a vertical or hierarchical system of authority defining superiors and subordinates is developed in the Russian mind. Generally, we could analyze the relations between the state (organization) and

ordinary people peasants as a rule (employees) based on Russian the fairytales. At the same time these fairytales originally highlight the vertical or hierarchical system of authority defining superiors and subordinates.

According to the Russian fairy tales the Russians do not like: poverty, hard work, and grief, most of all because all these definitions are closely connected with the system of power and distribution of power in Russia. We see inconsolable suffering on the faces of the main heroes of famous Russian painters: Perov, Vasnetsov, and Fedotov.

All these people confronted with indifference of the power to their life tragedy to a greater or lesser extent. Official power could not help a person in proper way during the awful social circumstances, vice versa sometimes power provokes these "social circumstances" by imperfection legislation according to which the majority of people in Russia is always at a loss. It is easier to govern with society when people totally depend from the strong governor. Thus historically the Russians could not trust the official power, public institutes, and legislation. So Russian fairytales describe how a man from the village so called "Blockhead" could teach a local Priest. This fairytale about "Priest and the Blockhead" shows that the lower level of society is more clever, honest and kinder than the higher level. This comparison is a special form of popular protest against injustice and imperfection of social vertical. Russian professor Vyshislavcev called this phenome-

non as a luck of Divine Harmony and Divine beauty in the life¹⁴.

The fairytale “According to a pike’s will” demonstrates fatigue from every day labour which is beyond peoples strength and never helps peasants to rise in hierarchical system or to come into a fortune. Mystic pike could chop firewood; prepare foods and so on. All this was done for Emelia, a poor peasant, the main hero of this fairytale. At the same time, Emelia could relax on the Russian stove and to be a lucky person and could despise and even lay down his demands to the Tsar’s court. This is possible because social guarantee of tsar’s court is nothing to compare with pike’s help. It is amazing but the reverse may be true Emelia could survive without the Tsar but the Tsar could not survive without Emelia. Thus Russian folklore shows us the Russians as the people who not believe in justice of social contraction, hierarchical system of authority, law, special principals and rules of the society because material well-being and social, professional advancement do not depend on your labor, mind skills and ethical behavior. The Tsar could give you a hard work but not social guarantee. You could survive not because of the “good governance” but despite the “good governance”. Power in Russia which consists of the army of officials and hierarchical system takes away products of your labor and does not pay for it. According to Emelia’s behavior he is a wise

person. It is more profitable to do nothing than to do something for the Tsar. Official power produce nothing, at the same time functionaries control population, some sector of the market industry, distribution of social and material well-being and so on. So it is more profitable to be at the service of the state in Russia than to be businessmen, the higher position in social officials’ hierarchy - the better. Russia is a country of officials. Emelia is an official for the pike, because he takes away the products of pike’s labor and does not pay for it, so the pike is a peasant. Emelia does not want to change this unjust world he wants to occupy a more “interesting” place in it. He wanted to be official and to control others, even Tsar’s court. He does not want to fight for his rights he wants to change his position in the society and nothing else.

Relationships between superiors and subordinates in Russia are not based on the concrete rules or legislation but on the personal wishes or superiors. From this point of view, it is understandable why the relationship between “employees” and their “organization”, vertical or hierarchical systems of authority with its defining superiors and subordinates looks sometimes as total anarchy and nihilism. Russian hieratical system has one main problem – it is luck of trust between people and official power. Thus on the one hand, officials are out of people’s control; on the other hand, officials sometimes could not control people. The luck of political individual mind, the wish to be independent from such kind of hierarchy and injustice

¹⁴ Vyshislavcev, B. (2003) Russian National Character. The Russian World. Moscow: EKSMO. Pp. 621-641.

power means that all social system could be deleted in one moment without any explanations.

One of the examples of possible social catastrophe is described in the legend about the “Three heroes”. There are three heroes in Russia, Dobrynia Nikititch (he was from the nobility), Illya Muromets (he was a peasant), and Alesha Popovitch (he was from the family of a priest). According to the modern definition Dobrynia Nikititch was a government official, Illya Muromets was a representative of folk power (the strongest hero), Alesha Popovitch was a representative of intelligentsia. The legend narrates us that Illya Muromets was not invited to Kiev Prince’s feast, after his true long-term military service for the Prince of Kiev. It was taken by Illya Muromets as an insult...Illya Muromets decided to avenge the insult ...so he destroyed Churches, threatened to murder the Prince. He assembled down-and-outs and drunkards to help him avenge the insult. Thus, we see the first example of the Russian revolution. Only Dobrynia Nikititch, a government official, could solve the conflict between the prince and the peasant. Illya Muromets struggled not for concrete rights, but because of the lack of justice, lack of Divine Harmony and Divine beauty in hieratical system. He could not explain what Divine Harmony and Divine beauty in hieratical system means, but it is clear not on the mind level but on the level of heart the God. This is a special feature of understanding of Russian hieratical system. Distance of power and social hieratical system

existed not for justice but for suffering and sometimes it brings up your soul. In this case Russian “Software of the mind” or organizational culture was formed many centuries ago and has a conservative character. The system of ruling existed not for life needs but for the God’s justice. So wishes, the expectations of a concrete person in concrete time are nothing to compare with the Universe and the God. Consequently we could suppose there was no special understanding of organizational culture in Russian mind in secular sense of the word but it was the understanding of Divine hierarchy that person should accept as reality. So it is a charismatical understanding of organizational culture.

Thus based on Russian fairytales we could describe some aspects of National organizational culture. National aspects of organizational structure such as relationships between employees and their organization, the vertical or hierarchical system of authority defining superiors and subordinates, general views of employees on the organization’s destiny, purpose and goals and their places in it¹⁵ in Russian version look like:

1. In the relationships between employees and their organization lack of trust on the general level, because of lack of effective methods of social control as well as superiors and subordinates.

¹⁵ Tropenaars A.(1998) Riding the waves of culture: understanding diversity in global business. 2nd. ed. New York: McGraw-Hill. p. 162.

2. Existing vertical or hierarchical system that could not promote social and material welfare of people and some people consider that officials exist only for hard taxes and they could only take away products of your labor and never pay for it. Legislation of those officials is far from the interest of labor and business and never is implemented in practice.

3. The main financial goal in the existing system of the Russian organizational culture is to collect and safe money for your own surviving from the officials and state arbitrariness.

Officials are closely connected with business and sometimes one person could combine two appointments and two kinds of responsibility such as social (deputy or governor) and business (director of forest enterprise). Power distance index in organizational culture should indicate on the system of forest governance. In other words, distance of power index clarifies who is responsible for final decision making in the roundwood market (in the segment of a stem, harvesting, transporting, processing of selling wood in contravention of national and sub-national laws and norms that regulate such operations) and demonstrates the way of transfer of power from the central government to the lower levels in political-administrative and territorial hierarchy. Distribution of power in Russia is a really difficult field for study. All power is concentrated on the Federal level because a local

official at the same time could have appointments on the Federal level and vice versa. This is one of the main specific of Russian organizational culture in timber trade. Another specific is that Russia has two ways of governance by the state - official and unofficial. This is a result of the side effect of lack of trust between citizens, private business institutions and systems of the state operating at national and local levels in the forest cluster of the Russian economy. High index of distance of power negatively influences on labour motivation and business motivation. Financial goals of Russian businessmen are very selfish in the roundwood market. It is well known that the international timber trade in Russia sometimes is out of the public control. As rule businessmen do not trust in the Governmental initiatives. All markets in Russia are shared between different levels of officials. It is explained why the Russian industrialists suffer from custom arbitrariness, from sanitarian control (another type of officials) and so on... The best example for the conflict between business and state is the existence of illegal logging in Russia. A considerable increase of illegal harvesting has occurred and was registered in a number of regional MNR departments¹⁶ :

- The Republic of North Osetia – Alania – 3 fold increase;

¹⁶ National report on temperate and boreal sustainable forest management criteria and indicators (Monreal process). Ministry of national resources of the Russian Federation State Forest Service.2003. p. 27.

- Khanty-Mansiisk autonomous district – 2.6. fold increase;
- The Republic of Adygeya – 2.5. fold increase;
- Kursk region – 2.3 fold increase;
- Cheljabinsk region- 2.1. fold increase.

These are regions with low level of the people's living, they could not find work and they have no money to pay all legal taxes for business. At the same time, there is a steady progress in combating illegal harvesting in some other regions. The forest guard officials have reported that the number of violations in certain regions such as Murmansk region, Kemerovo, Magadan, Komi, and Perm is still increasing. Illegal harvesting is not only a forestry related issue; it also involves transportation and trade of the illegal timber, illegal timber processing, illegal export, as well as customs violations and price infringements. In 2001 there were more than 10.2 jurisdictions. Almost 941.4 thousand m³ of timber were harvested illegally. The estimated damage was 2.8 bill. rubles in 2001. This is only the official information. Unofficial information is difficult to get and we could only guess about the real damage.

The process of decision making in Russian organizational culture takes special time because of the high index of power distance and huge vertical of hierarchy which existed in Russian roundwood market. Decision should be co-ordinated and discussed in different levels and this process takes additional time because the final instructions could depend

not only on national legislation but sometimes on personal characteristics of officials and their personal preferences. Thus, in Russia the Power distance index subjugates time management and other parameters of organizational culture. Before the description of time management it is necessary to notice that Political uncertainty and changes on national, regional and local levels lend instability to the general climate in Russia. In this case it is really difficult to plan business activity in the market. Managers need to coordinate their business activities; they require some kind of shared expectations about time. All time management in Russian roundwood market totally depends on authority's decision making. From this point of view, nothing changed in Russia from the period of the Soviet Union.

The centralized planned wood procurement system had existed in the USSR. The procedure of the balancing of the roundwood customers' needs and roundwood suppliers' possibilities was acted, because the state was an owner of forests, logging companies (suppliers) and forest industry enterprises (customers). The state did not allow the stoppage of wood products production. The roundwood deliveries for an every supplier were planned from the outside for time horizon in 5 years, a year, a half year, 3 months, a month, a decade and a shift. The wood price was planned as well. Thus, the role of a logging company (lespromhoz) was a production unit in the totally centralized wood procurement organization. Consequently, all

time management was in the hand of authorities and the central power.

The centralized planned wood procurement system was liquidated in the beginning of the 1990th at the same time with the “privatization” of the forest industry, but the sense of the management remained valid, because of the conservative mentality and the lack of experience in western, market management. The so called “privatization” was based on the interests of the highest ranks of Russian authorities; this “elite” which could save enough money had no opportunity to spend it in the framework of the Soviet ideology. Thus, all reforms in Russia begin from the upper ten not from the low level of society, so it is always an artificial process, based not on the real economic needs. These reforms largely changed the wood flows. Through the forest lease or auction the logging companies took the rights to deliver the roundwood according to their own possibilities and interests. At first sight the state lost the planning and control functions for the roundwood distribution and the efficiency of roundwood usage. The idea was as following: the market will regulate the wood supply chain. In reality, all market belongs to the former central officials with special experience and methods of soviet ruling and old connections in the international market. Thousands of logging companies, with old connections in marketing, should found appropriate customers to make agreements. The role of time is under the factor of Distance of power again.

The market of roundwood in Russia can be characterized as perishable with a long cycle of production, selling and consumption. A rotation cycle of coniferous stand around 100 years, the preparation for wood harvesting needs several years (roads, cutting site allocation, etc., felling is going up to one year with stoppage including off-seasons). During a summer time, roundwood is a perishable good because the quality is decreasing after 2-3 weeks of storage (blue stain, insect damages, etc). At the same time, an average speed of a long distance wood transport (railway, vessels) is extremely low. It means that the delivery of some assortments is not possible during a summer. For example, fresh spruce pulpwood, according to the quality requirements (TU 13-2-15-99 "Fresh spruce pulpwood delivered to Finland"), should be felled and delivered to Finland within 2 weeks, what is practically impossible under the Russian conditions.

Due to the low quality of the Russian forest inventory and the heterogeneity of forest fund, the volume of roundwood, corresponded to contracted assortments, has a significant variation. The infrastructure of forest areas is poor and wood delivery depends on the season. Therefore, the well-timed performance of wood contracts is quite a hard management task.

The roundwood demands as well as wood prices are varying constantly by species, size and quality. For example, Russia has not enough utilization capacity of birch and aspen pulpwood, and competition and price are not

too high. The demands of pulp and paper industry and wood industry have a time displacement. Therefore, the customers prefer to make two types of wood contracts:

- “Basic” long term wood contract (one or more years)
- “Optional” short term wood contract (3-6 months).

A long term contract, on the one hand, secures the basic annual round wood needs of a customer. On the other hand, a big or medium size logging company is interested in a basic contract as well, because it has forest resources in lease for dozens years ahead and must fulfill an annual allowable cut by every species. Based on a long term contract, the companies have possibilities:

- To loan money from a bank for a moderate interest rate for machinery renovation, infrastructure improvement, etc.
- To optimize the consecution of forest operations and
- To improve a system of quality of roundwood.

But all these possibilities are open only in case if foreign partners have good relations with local or central authorities. Sometimes it is difficult to build it because authorities and officials are exchanged according to the instability in Russian political and economic systems. So the high index of power distance has influences on the duration of contracts. From this point of view short term contracts could be more prohibitable for foreign partners.

A short term contract plays a stabilization role in a wood procurement. A small and medium size logging company is a key player. Usually, this company buys the cutting sites for a short time usage (up to 1 year) on an auction. Also, the company’s target is cutting site with wood resources which are in need on the market at the moment. If a demand for birch pulpwood is high, the target will be a deciduous stand, and vice versa. Of course, a big size company has the possibility to participate in an auction as well, if it has enough capacity to manage not only their own cutting sites.

In Russia, time management depends also on communication system and infrastructure. This is a question of power authorities again. Because the decision making is strongly connected with authorities, time management is often conditional on the opinions of different levels of officials. Therefore, it is typical of the system that it uses the own Russian (Eurasian) system of time management, because local and central authorities may have different views or objectives on a question.

It is possible to analyze Russian (Eurasian) system through different scientific theories in intercultural communication studies. Different cultures have different assumptions about how people relate to one another, so they approach time differently. It is well known that business culture of Western countries is oriented on deadlines and programmers. Western partners really try to achieve project deadlines on time and within a budget. Such type of business culture is called as “mono-

chronic” culture¹⁷. The monochronic system has the next features: do one thing at a time, programmes and plans are important, programmes are followed tightly and punctuality is important, serious commitments concern time, dates, duration, money and so on. In other countries greater flexibility is appreciated. There is less worry about deadlines, as there will always be another tomorrow. Time is renewable. In business, the key thing is to make sure that the quality of relationships is good, and then everyone can work things out together. Such type of business culture is called as “polychronic” culture¹⁸. Polychronic system has the next features: do several things at the same time, individuals are more important than programmes, programmes change, punctuality is relative, serious commitments concern people¹⁹. This type is more typical for the Eastern countries. The first type of business culture is business oriented and the second type is relationships oriented.

More detailed description of these two types of cultures was proposed by A. Tropenaars. According to his theory there are past, present and future oriented cultures²⁰. The difference is very vivid for example in past oriented culture everything viewed in the context of

tradition or history, and in present oriented culture everything viewed in terms of its contemporary impact and style, and in future oriented cultures present and past used, even exploited, for future advantage. A. Tropenaars emphasizes the same two types of culture “sequential oriented” culture and “synchronic oriented” culture. “Synchronic oriented” culture includes past and present cultures and “Sequential oriented” culture includes future oriented cultures. Representatives of synchronic oriented cultures do more than one activity at time; representatives from sequential culture do only one activity at time. Geert Hofstede²¹ developed the theory about time management and planning process in the market and his contribution to science is more close to the understanding of Eurasian time management. He marks out two types of business culture “Long and Short-Term Orientation” in business planning. Eastern countries have Long term orientation culture and Western countries have Short term orientation culture. Eastern countries based on items reminiscent of the teachings of Confucius, on both of its poles. It opposes Long-term to Short-term aspects of Confucian thinking: persistence and thrift to personal stability and respect for tradition. Eastern countries or Long-term oriented countries pay special attention to the culture. “Culture in the form of certain dominant values among the population

¹⁷ Barnett, C., Davidsson A.(2003) Improve Your Global Competence. Helsinki: Multiprint OY. p.20 .

¹⁸ Barnett, C., Davidsson A. (2003) Improve Your Global Competence. Helsinki: Multiprint OY. p.20.

¹⁹ Barnett, C., Davidsson A. (2003) Improve Your Global Competence. Helsinki: Multiprint OY. p. 20-22.

²⁰ Tropenaars A.(1998) Riding the waves of culture: understanding diversity in global business. 2nd. Ed. New York: McGraw-Hill. p. 123

²¹ Hofstede, G.H.(2001) Culture’s consequences: Comparing values, behaviors, institutions, and organizations across nations. Thousand Oaks, London, New Delhi: Sage publications. International Educational and Professional Publisher. p. 368.

is necessary but not sufficient condition for economic growth. Two other conditions are the existence of market and existence of political context that allows development: the latter course is also strongly affected by culture²². The main difference between these two types of cultures is the difference between ways of thinking. It is interesting to determine the place of Eurasian culture among Eastern and Western time orientations (see table 1).

The table shows the place of the Russian (Eurasian) time management among Eastern and Western cultures, preliminary model of the Russian organizational culture in roundwood market, some special features of the Russian mentality. According to time management's index Russia is Eurasia. It means that some features in the Russian business look like Eastern Long-term oriented culture, but at the same time there is no horizontal coordination in Russian roundwood market and values of Russian businessmen is based on the ideals of Meritocracy: economic and social life to be ordered by abilities. Russian Economic system is government by men not by law, so the main skills in the timber trade are building the relationships in vertical coordination and after that creation of market position. In general, the Russian businessmen could combine two ways of thinking: analytical and synthetic. It depends on the situation of the market, the political and economic situation in

Russia and the relationships with some officials. Family and business are closely connected in Russia. Sometimes a huge sector of market or forest enterprise could be governed by and belong to one family.

Time management in Russia is closely connected with a power distance index. According to the A. Trowenaars theory about the general relationships between employees and their organization, the vertical or hierarchical system of authority defining superiors and subordinates, the general views of employees about organizational destiny, purpose and goals and their places in this, the Russian organizational culture in roundwood market close to the so called "Family" type of corporate culture. This is a culture in which "status is ascribed to parent figures who are close and powerful", all colleagues are family members, boss is a "Father" which could change course of company, and the main motivation and rewarding is to be involved in power game, and intrinsic satisfaction in being loved and respected, management by subjectives²³. Based on this statement we could conclude that relationships in power distance are the main feature of Russian organizational culture in timber trade. Russian organizational culture in timber trade is based on the main aspects power distance and time management. Russia has own specific mentality that occupies intermediate place between the Eastern and the Western ways of thinking.

²² Hofstede, G.H. (2001) Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations. Thousand Oaks, London, New Delhi: Sage publications. International Educational and Professional Publisher. P. 368.

²³ Trowenaars A.(1998) Riding the waves of culture: understanding diversity in global business. 2nd. Ed. New York: McGraw-Hill. P. 183.

Russian (Eurasian) time management among Eastern and Western cultures			
Ways of thinking	Short-Term (Western) orientation culture	Long term (Eastern) orientation culture	Eurasian mentality
	Probabilistic thinking.	Either full or no confidence	Either full or no confidence
	Belief in absolute guidelines about good and evil.	What is good and evil depends on the circumstances	What is good and evil depends on the circumstances
	Short-term virtues taught	Long - term virtues taught	Depends on circumstances
	Government by low	Government by men	Government by men
	Analytic thinking	Synthetic thinking	Analytic thinking and Synthetic thinking, depends on circumstances
In business culture it is looks like	In business short-term results: the bottom line	Building the relationships and market position	Building the relationships and market position
	Family and business sphere separated.	Vertical coordination, horizontal coordination, control and adaptiveness	Vertical coordination without horizontal coordination, control and adaptiveness. Family and business closely connected.
	Meritocracy: economic and social life to be ordered by abilities	People should live more equally	Meritocracy: economic and social life to be ordered by abilities

table 01

Evidently, the dramatic change in operational environment in Russia together with expeditious privatization and the participation in world business activity have generated an increased need for Russian managers to adapt new business strategies and to learn a more market orientated way of thinking. Also, while the inherited habits, working and business culture in Russia differ from those of the Western counterparts, not to mention language barrier and totally different operational environment, it is often difficult for foreign decision makers to understand how to implement business in Russia. Therefore, there seems to be a clear need for a research for cross-communication problems.

Issues related to the roundwood market in general and those of the roundwood trade between Russia and foreign partners in particular are current issues where the understanding of differences in national cultural background, values and ways of thinking shall produce concrete improvements for Russian and foreign partners both sides and to stimulate collaboration through the cross-cultural focus. Also, it may help to reduce the possibilities of potential conflicts and increase benefits between partners in timber trade market by providing guidance for how to structure the social interactions between the foreign buyers (recipients of roundwood), and Russian sellers, working partners and subordinates.

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QUANTIFICATION OF THE IMPACT OF FORESTRY PROJECTS ON ECOLOGICAL BALANCE AS DEFINED BY THE LAND:MAN ECOLOGICAL RATIO

Abstract

An analytical tool was developed to quantify the impact of forestry projects on ecological balance as defined by the Land:Man Ecological Ratio in a given period of time e.g. five years, ten years, etc. The Land:Man Ecological Ratio is so-called to indicate that the ratio involves the measurement of how much area of forestlands are sustaining the ecological needs of each person in a certain municipality./province./region. The analytical tool developed put together the factors of the total area of forestlands, the total area of forestry projects and population. Projections are done which showed the hypothetical situation had there been no forestry projects' interventions and the situation with forestry projects' intervention in a given period of time. The formula can be further enhanced and experimented on by foresters and forest scientists to analyze the impact of other forest phenomenon such as forest fires, intensive denudation of forest areas due to development activities, etc. on man/population. In the same way, social scientists can also use the formula to look at the impact of rising population on man's ecological needs. The possibilities opened up by the formula are only starting.

Introduction

Man is the main actor in the conservation or utilization, protection or denudation of forest resources, yet in the analysis of forest resources management, man/population is oftentimes forgotten. The ratio of forestlands to alienable and disposable lands has been used in the past as an analytical tool to evaluate ecological balance. To date, the ratio of forestlands to agricultural lands is still used in the examination of ecological considerations and is a good measure to use when analyzing the effect of land classification on agricultural activities but is very much limited when there is need to analyze the effect of land classification on population, a very active factor in the preservation of ecological balance and vice-versa.

In a study entitled "The General Land Classification of the Cordillera Administrative Region," an analytical tool and framework was developed to bring into the ecological balance analysis the factor of population. This analysis basically involves the use of the ratio of forestlands to population and the ratio of alienable and disposable lands to population. The ratio of lands to population used in the study was developed from the land:man ratio

being used in the analysis of land rationalization.

Two ratios were developed in the analytical framework (Odsey, M., 2002). One of the ratio developed is the Land:Man Ecological Ratio so-called to indicate that the ratio involves the measurement of how much area of forestlands are sustaining the ecological needs of each person in a certain municipality/province/region.

The formula is as follows:

$$\frac{\text{Total forestland area of a municipality/province/region}}{\text{Total population of the same municipality/province/region}}$$

Total population of the same municipality/province/region

= Land:Man Ecological Ratio

Quantification of the Impact of Forestry Projects

Conceptual Framework

Scope and Coverage

This paper intends to quantify the impact of forestry projects on ecological balance as defined by the Land:Man Ecological Ratio. It also aims to quantify the impact of forestry projects on individuals.

Ecological balance as defined by the Land:Man ecological ratio in this paper is limited only to two factors: forestlands and population. Although it could be expanded to be used in an analytical framework of Land Classification and the concomitant recommended actions which Local Government

Units should undertake, for purposes of quantification as well as simplicity in poster presentation, the paper would only deal with the change in the Land:Man Ecological Ratio.

The Land:Man Ecological ratio is a measurement on how much area of forestlands are sustaining the ecological needs of each person in a certain place.

The formula is as follows:

$$\frac{\text{Total forestland area of a municipality /province/region}}{\text{Total population of the same municipality /province/region}}$$

Total population of the same municipality /province/region

= Land:Man Ecological Ratio

Estimation Framework

The analytical tool defining the Land:Man Ecological Ratio and Land:Man Development Ratio in the former study on Land Classification was further developed to quantify the impact of forestry projects on ecological balance. To get the said quantification, first, on the assumption that no forestry projects will be implemented, the Land:Man Ecological Ratio should be computed. Next, the Land:Man Ecological Ratio when forestry projects are implemented should also be computed. The difference of the two is the quantification of the impact of forestry projects on ecological balance as defined by the Land:Man Ecological Ratio.

Land:Man Ecological Ratio without Forestry Projects

Total forestland area of a municipality/province/region

Total population of the same municipality/province/region

Where:

Total forestland area = Area of Actual Forestlands – Area of Forestlands

Affected by Major Physical Changes

Area of Actual Forestlands = Area of natural stands of forests/timber in the municipality /province/region

Land:Man Ecological Ratio With Forestry Projects

Area of Forestland + Area of Forestry Projects of a municipality/province/region

Total population of the same municipality/province/region

Where:

Area of Forestland =

Area of Natural Stands of forests/timber in the municipality/province/region – Area of Forestland affected by Major Physical Changes

Area of Forestry Projects = \sum (all forestry projects involving reforestation activities such as Communal Forests, Assisted Natural Regeneration, Community-Based Forest Management Projects, etc.)

Impact of Forestry Projects

Land:Man Ecological Ratio with Forestry Projects

Less:

Land:Man Ecological Ratio without Forestry Projects

Operational Concept

Selection of Site

The site was selected from the three (3) provinces of the Cordilleras where the Reforestation Subcomponent of the Cordillera Highland Agricultural Resource Management Project (CHARM Project), a poverty alleviation project funded by the Asian Development Bank which in turn funded the first study from which the land:man ecological ratio originated, was implemented.

Selection criteria include the number of forestry projects implemented in the area, survival percentage of the reforestation activities, the trend of population in the area and availability of secondary data. Of the three (3) CHARM-covered provinces, the province of Benguet was selected using the criteria cited.

Sources of Data

Actual forest stands which composed forestlands in this study were taken from the Philippine Economic Environment and Natural Resources Accounting (PEENRA) Bulletin on Land and Soils compiled by the PEENRA Regional Technical Working Group on Land and Soils in CY 1998. The data were collated from the submitted reports sent to the

Department of Interior and Local Government (DILG) by the Local Government Units. The area of the Mt. Data National Park covered by the Province of Benguet was provided by the Aggregates Section, Land Management Service, and DENR-CAR from estimates done using Autocad.

Data on Forestry Projects were provided by the Forest Management Service (FMS) of the Department of Environment and Natural Resources – Cordillera Administrative Region (DENR-CAR).

Estimation using the conceptual framework

Forestlands in the Province of Benguet

The Province of Benguet has 105,593.25 hectares of forestlands which include natural stands of forests, reservations and watersheds. One reservation, however, had been squatted and converted totally to agricultural lands. The Mt. Data National Park, once full of timber, flora and fauna, had been tilled in the past decade. The Benguet portion of the reservation, consisting of 3,477 hectares, is now a huge vegetable bowl.

Forestry Projects in the Province of Benguet

Various forestry projects have been implemented in the Province of Benguet. These includes Communal Forests, Community-based Forest Management Projects (many of which are foreign-assisted) and contract reforesta-

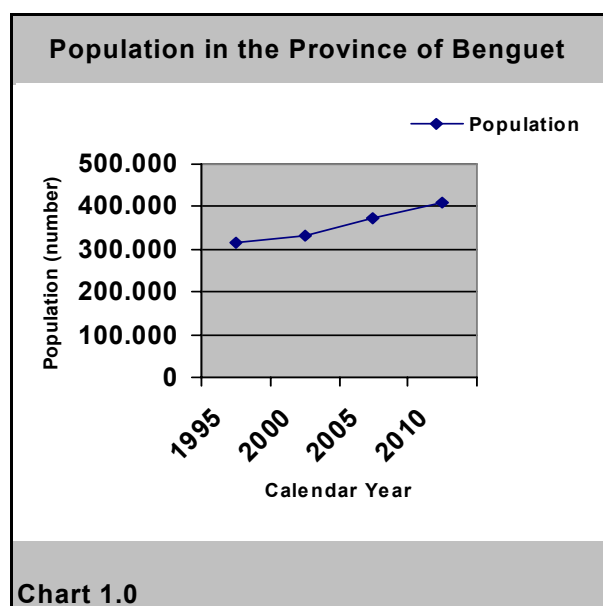
tion projects (stewardship, family-approach, etc.).

Communal forests are old community forests regenerated by the government by providing the communities with resources to regenerate, maintain and protect them. Community-Based Forest Management Projects are reforestation projects implemented through the Community-Based Forest Management Approach while contract reforestation projects are those projects contracted out to individuals and groups.

To date, communal forests established in the Province totals 3,992.66 hectares. Currently also, through contract reforestation and the Community-Based Forest Management Agreements, a total of 27,505.49 hectares have been reforested. The total area of all Forestry Projects implemented between 1970 - 2000 total 31,498.15.

Population Trend in the Province of Benguet

The population in the Province of Benguet



follows an increasing trend. The 1995 Census-based City/Municipal Population Projections showed that from a total of 313,833 in CY 1995, population increased to 330,129 in CY 2000 and is still projected to increase to 373,291 by CY 2005 and to 408,594 by CY 2010.

Computation of the Land:Man Ecological Ratio of the Province of Benguet without the Forestry Projects

Computation shows that the land:man ecological ratio decreases every year.

Computation of Land: Man Ecological Ratio				
PROVINCES BENGUET	Year	2000	2005	2010
Forestland (has)		105593,25	105593,3	105593
Population		330129*	373291**	408594
Land:Man Eco.Ratio		0,32	0,28	0,26

* Proclamation dated April 2001.
 ** 1995 Census-based City/Municipal Population Projections. NSO.
 Table 01

In CY 2000, Land:Man Ecological Ratio stands at 0,32. By CY 2010, projections showed that it will decrease to 0,26 or a 0,06 decrease every ten years. If this trend continues, then by CY 2060, Land:Man Ecological Ratio would have dropped to 0,02. This means that for every person in the Province of Benguet, only 200 square meters of forestlands will be sustaining his ecological needs by CY 2060.

Computation of the Land:Man Ecological Ratio of the Province of Benguet with Forestry Projects

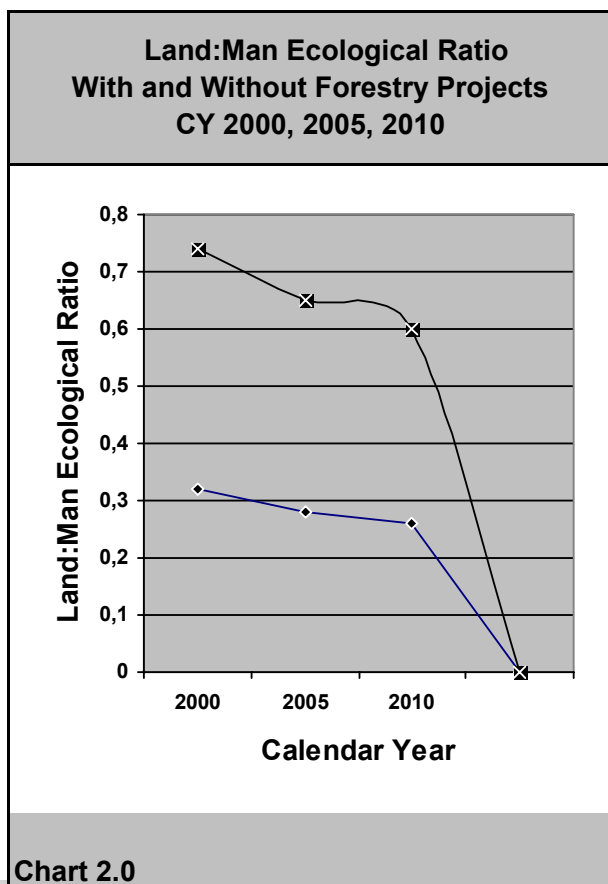
Computation of the Land:Man Ecological Ratio of the Province of Benguet with Forestry Projects shows that the Land:Man Ecological Ratio decreases yearly. In CY 2000, Land:Man ecological ratio stands at 0,40. By CY 2010, projections showed that it will decrease to 0,33 or a 0,07 decrease every ten years. If this trend continues, then by CY 2050, Land:Man Ecological Ratio would have dropped to 0,05 which says that by CY 2050, only 500 square meters of forestlands will be sustaining the ecological needs of every person in the Province of Benguet.

Computation of Land: Man Ecological Ratio				
PROVINCES BENGUET	Year	2000	2005	2010
Forestland (has)		133614,4	133614,4	133614
Population		330129*	373291**	408594
Land:Man Eco.Ratio		0,4	0,36	0,33

* Proclamation dated April 2001.
 ** 1995 Census-based City/Municipal Population Projections. NSO.
 Table 02

Quantification of the Impact of Forestry Projects on Ecological Balance

When computed, Forestry Projects increased Land:Man Ecological Ratio in CY 2000 from 0,32 to 0,40 which means that for each person in the Province of Benguet, the implementation of forestry projects increased the area of forestlands supporting his ecological needs from 3,200 sq.m. to 4,000 sq.m. Forestry projects, therefore, provided 800 sq. m. more of forestlands for each individual in Benguet to support his/her ecological needs in CY 2000.



Similarly, in CY 2010, projections show that forestry projects would have increased Land:Man Ecological Ratio by .07, that is from .26 to .33 which means that for each person in the Province of Benguet, the implementation of forestry projects increased the area supporting his ecological needs from 2,600 sq.m. to 3,300 sq.m. A additional 700 sq.m. of forestlands has been provided by the forestry projects implemented between CY 1979-1990 to each individual in the Province of Benguet to support his/her ecological needs. Impact of forestry projects in CY 2010 is an increase in the Land:Man Ratio by 0,07 which means to say that there is an additional 700 square meter of forestlands to sustain the ecological needs of each person in CY 2010an.



Picture: ODSEY

with forestry project
Projected Land:Man Ratio = .26
CY 2010

Conclusion

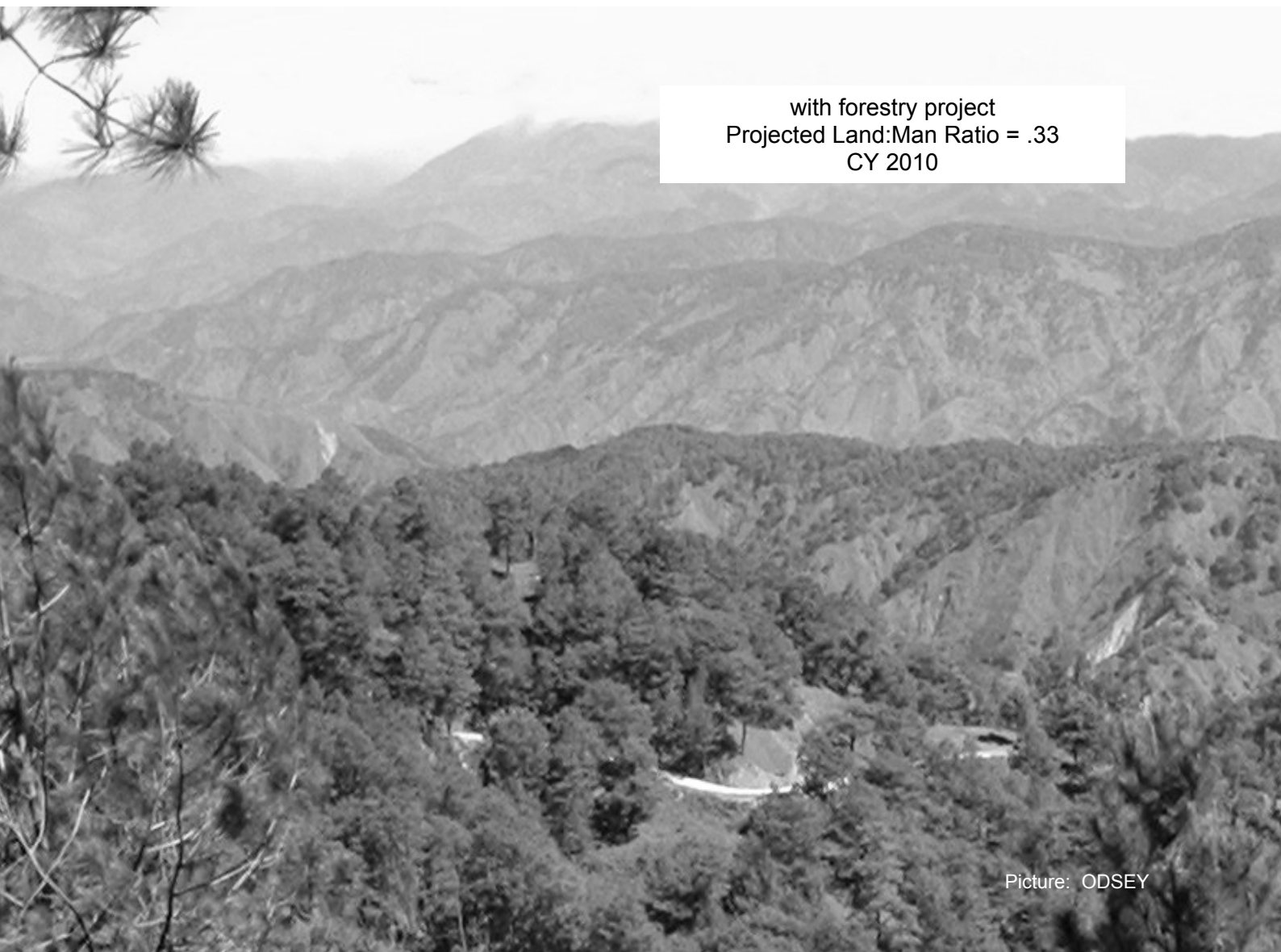
Forestry Projects implemented between CY 1970 – 1990 resulted in an increase in land:man ecological ratio by .06 in CY 2000 and an additional 800 sq.m. of forestlands for each individual in the Province of Benguet to support his/her ecological needs. Projections also showed that the said projects will result to an increase in land:man ecological ratio by .07 in CY 2010 and in an additional 700 sq.m. of forestlands for each individual in the Province of Benguet to support his/her ecological needs.

Recommendations

The formula can be further enhanced and experimented on by foresters and forest scientists to analyze the impact on population of other forest phenomenon such as forest fires, intensive denudation of forest areas due to development activities, etc.

For the Province of Benguet, the following are further recommended:

- a. That the implementation of forestry programs be continued and should be expanded to cover wider areas in order to enhance ecological balance in the future; and



with forestry project
Projected Land:Man Ratio = .33
CY 2010

b. That the Local Government of Benguet should facilitate the reduction of population growth rate.

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CULTURAL FACTORS AND EUROPEAN FORESTS: CHALLENGING SUSTAINABILITY PARADIGMS

The 1992 UN Conference in Rio defined the word “sustainability” for managers and policy makers. This led to the first set of indicators for Sustainable Forest Management - a “hierarchy” of values to represent national diversity and the experience of several experts and research bodies. However, cultural and historical values of forests are only one of the 11 sub-chapters appearing in criterion 6. We believe the role assigned to this issue requires reflection to address the way forests are studied and perceived.

Although decades of forest history research has demonstrated the deep and profound interrelationship between man and forests, there is little awareness that cultural values are one of the most important issues in forestry. In many countries the conservation of the structure of the forest landscape, might well be the main criteria in the planning and management of forests. The underestimation of cultural values has often led to policies pursuing an idea of sustainability based on paradigms, such as “pristine nature” as the



desirable goal, ignoring that man often created higher diversity in nature. Resolution 3 of the 2003 Ministerial conference in Vienna stated the importance of preserving cultural values, indicating that it is time to review not only the indicators, but the approaches guiding sustainable forest management.

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DISCOVERING COMMON GOALS IN SUSTAINABLE FOREST MANAGEMENT: THE DIVERGENCE AND RECONVERGENCE OF EUROPEAN AND AMERICAN FORESTRY.

From the beginning of Gifford Pinchot's education at the Ecole Nationale Forestière at Nancy in 1889, it was clear to him that European forestry would have to be significantly adapted to the American landscape and culture. Throughout most of the 20th century, American and European forestry continued to diverge from their common root, each responding to the particular needs of their respective societies, ecology, economy, and social settings. This divergence is reflected in some of the enduring forestry institutions that Pinchot helped establish, foremost among them the U.S. Forest Service (USFS). Today, as the USFS prepares to embark upon its second century, a reconvergence is taking place between American and European forestry, as forest managers, educators, and policymakers strive to comprehend the complexities of sustainable forest management. Not only must forestry professionals be concerned with sustainable wood production to meet renewable resource needs, but they must discover new ways to conserve an ever-increasing array of public values — from protecting watersheds to se-

questering carbon. This paper will explore the results of an academic and professional exchange held in early 2005 as two paired international symposia, the first in France and the second in the United States, on the common roots, the divergence starting in the late 19th century, and the recent re-convergence of European and American forestry.

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Ponderosa Pine near Ochoco Ranger Station, USA.
Photographer: Ernest Lindsay, Source of Scanned Image
U.S. Forest Service Serial Number 321441, Date 1936

USING ARCHAEOLOGICAL EVIDENCE AND ORAL HISTORY IN NEGOTIATING ABORIGINAL INTEREST IN AUSTRALIAN REGIONAL FOREST AGREEMENTS

Over the last decade, indigenous communities have become stakeholders in forest management in Australia, primarily through regional forest agreement processes. They have expressed a desire for their forest cultural heritage to be protected, to participate in decision making about forest management, and to derive economic and social benefits from forests. In most states, cultural mapping is being undertaken to ensure that indigenous values are factored into reserve designs. A cultural map can depict aspects of Aboriginal secular or sacred associations with forests by using a range of information sources including ethnography, the ethnohistoric literature, oral history, traditional ecological knowledge, and the archaeological record. Obtaining this information can be problematic, and results may be used in unforeseen ways. For example, the degree to which indigenous land management practices and in particular the use of fire have modified the forest environment continues to be a highly contested issue amongst land managers, academics, and policy makers. Early records of Aboriginal burning have been used selectively to support or refute arguments that advocate greater or lesser fuel

reduction in publicly owned forests. Similarly, evidence of Aboriginal presence in the archaeological record can be interpreted in different ways depending on the outcome sought, and oral history can be ignored if the informant is thought not to be credible.

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Aboriginal Art, Anbangbang Rock Shelter, Kakadu National Park, Australia
Source: Thomas Schoch
<http://www.retas.de/thomas/travel/australia2005/index.html> date 07. Aug. 2005 Creative Commons

CONSTRUCTION OF SOCIAL AND ECONOMICAL CRITERIA AND INDICATORS OF FOREST ECOSYSTEM MANAGEMENT IN TAIWAN

The purpose of this research was to develop the framework for social and economical criteria and indicators for Taiwan's forest ecosystem management which is based on the pressure-state-response model. Four economical and four social C&Is were developed that recognize circumstances in Taiwan.

The economical criteria are: production and consumption, investment in the forest sector, labour, and economic policy. The social criteria are: culture, science and education, public participation, and social policy. There are 12 economical indicators and 18 social indicators. The 30 indicators were selected through a questionnaire survey with the Fuzzy Delphi method and "brain storming" discussions. Relative weights for the criteria and indicators were assessed through the analytic hierarchy process (AHP). The weights of the first two economical criteria were: 32.54% for investment in the forest sector, and 31.80% for production and consumption. The weights of the first two economical indicators were: 16.12% for forest values of on-consumption, and 13.3% for forestry physical labour. The social criteria had equal weights. The weights of the first two social indicators were: 9.96% for performance evaluation of talent training

and education, and 9.55% for preservation and restoration of aboriginal traditions cultural relate to the forestry.

Shaw-Lin Lo

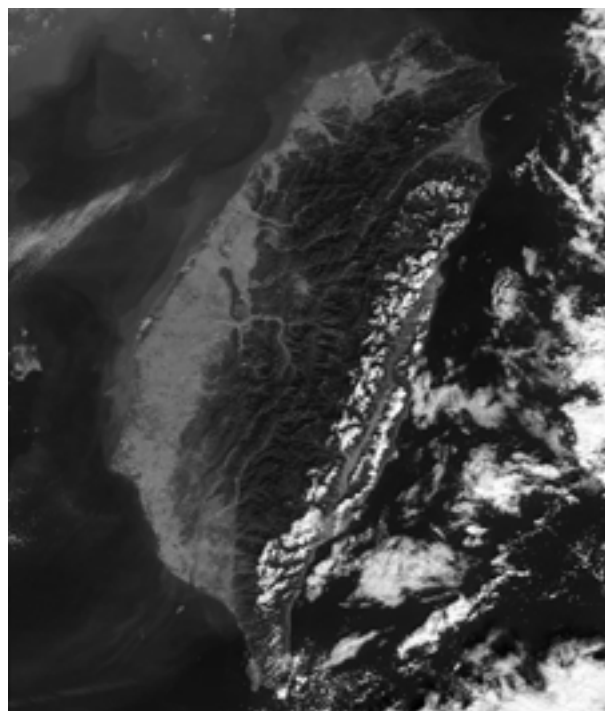
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Taiwan; NASA Terra MODIS
Source: Wikimedia Commons

BENEFITS-BASED MANAGEMENT AS A RESEARCH AND PLANNING FRAMEWORK FOR NATURE-BASED TOURISM AND RECREATION

Nature-based tourism and recreation managers struggle to plan and manage for the outputs of recreation. Unlike many natural resource industries that have tangible products (e.g., timber, livestock, and minerals), tourism and recreation professionals help provide a diversity of concrete and abstract outputs: environmental education, physical fitness, economic development, ecosystem protection, and many others. In the early 1990's, a benefits-based management (BBM) framework was developed to identify, plan, and manage for the diversity of leisure's economic and non-economic benefits. This paper discusses BBM's evolution and its role in nature-based tourism and recreation research and planning. In particular, it describes key studies that examined the link between recreationists' desired personal benefits (i.e., motivations for recreation) and specific recreation activities and setting characteristics. It also addresses recent research that goes beyond visitor benefits to include tourism and non-recreation benefits (e.g., community pride and improved quality of life) accruing to communities as a result of their proximity to and association with public recreation areas. Finally, expanding the BBM framework to include the concept of place

attachment is examined. Examples are provided to illustrate how inclusion of these concepts enhances the management of recreational lands.

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THE CASE OF THE KASKASKIA WATERSHED’S “SLEEPING ASSETS”: A BENEFITS-BASED MANAGEMENT APPLICATION FOR NATURE-BASED RECREATION

“Our river has sleeping assets,” explained a community member from the Kaskaskia Watershed, Illinois, United States, when referring to the intangible benefits his community gains from living near the Kaskaskia River. Benefits-based management is an emerging research and planning framework designed to encourage planners and managers to adopt a more holistic view of outdoor recreation areas. It helps managers identify, communicate, and manage benefits that are abstract and may go unnoticed otherwise. To date, little is known about the on- and off-site benefits that might accrue to community members living near nature-based recreation areas. These “sleeping assets” can include such benefits as increased community pride and improved quality of life. Using a mailed survey of 1,600 community residents, the study a) identified benefits desired and attained by community members, b) identified social features of the area, management, and local communities that influence benefit attainment, and c) gathered community member suggestions for increasing benefit opportunities in the future. In addition to expanding benefits-based management research into the arena of tourism and non-recreation benefits, this research also

applied concepts and measures of place dependency to understand community benefits associated with a nature-based recreation area.

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Kaskaskia Watershed Association hosts annual watershed forums to collaborate on goals and objectives
Source: Kaskaskia Watershed Association, Inc.:
Communities Come Together to Save a River

PROBLEMS AND PROSPECTS OF THE LAST REMAINING NATURAL FORESTS OF BANGLADESH: THE CASE OF THE SUNDARBANS MANGROVES

The Sundarbans, covering 571,500 ha, are the largest single tract of mangrove forest in the world. Located in the estuary of the river Ganges in southwest Bangladesh, it has been declared a World Heritage Site by UNESCO in 1997. Research was conducted between 1999 and 2003 to study a) the effects of introduced tree species in the raised areas, and b) the ecology of the disease of top-dying of the dominant tree species, Sundri (*Heritiera fomes*). Although the introduced tree species showed promising growth, profuse natural regeneration by *Albizia procera* and *Leucaena leucocephala* in places indicated that they were capable of replacing the mangrove species. Top-dying prevailed mostly in the higher diameter trees of Sundri, was profuse in affected areas, and was found to be associated with burial of pneumatophores, the breathing organs, through increased sedimentation. It is recommended that a) physical facilities for eco-tourism be built, instead of introducing inland tree species in places where mangrove species have disappeared, and b) Sundri trees affected by top-dying be removed through salvage felling. This would ensure regeneration of Sundri species, while maintaining sanitation for the remaining growing stock.

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Sunderbans National Park
Photographer: Peter Andersen
Source: Wikimedia Commons
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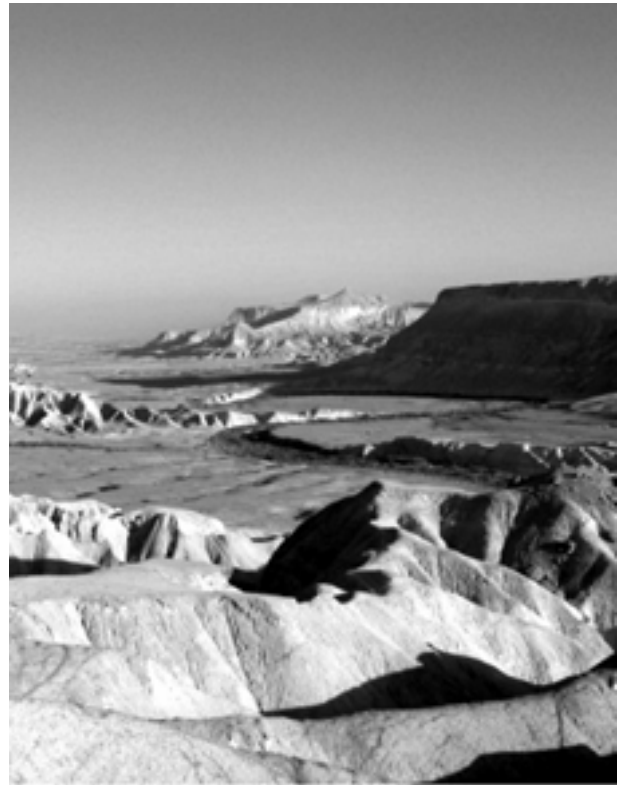
ARID AFFORESTATION TECHNIQUES AND THEIR CONCLUSIONS IN ISRAEL.

More than half of Israel's area is desert or semi-desert. Rainwater-based afforestation can be relied upon in only 20% of this arid region, known as the Negev. Since the 1940s, efforts were made to plant trees in the semi arid parts of the country. This challenge brought about the development of suitable silvicultural techniques and the introduction of prospective, draught-tolerant trees from various desert areas around the globe. Today, 'Savanization' techniques, namely, widely planted arid-type trees, are used in the Negev. Trees are planted in small patches or strips into which local runoff flows. In addition, Limans (mini catchments) are created in order to capture runoff from the upslope areas, where the average ratio between contributing areas and the Liman is 100:1. One result of appropriate arid land afforestation is the protection of the readily created gullies from further erosion, as well as regulation of seasonal grazing. As a result of years of experimentation in tree selection, introduction, and improvement, the success of seedling establishment and plantation survival increased tremendously. The most promising tree species proved in the Negev are from the Eucalyptus family, African and American Acacias, along with several native Mediterranean species. The main planted tree and Eucalyptus torquata species in the Negev

are: *Ziziphus spina-christi*, *Acacia gerrardii* subsp. *negevensis*.

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Negev 2005
Photographer: Roybb95
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Picture: KIESSLING

NOTICE

