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FORESTS AND LOCAL CULTURES – CULTURAL SUSTAINABILITY OF FORESTRY: Basic analysis on the approach and disciplines

SUMMARY

The topic has been receiving increasing importance internationally since the Resolution of the European Ministers of Forestry in Vienna 2003. The main content of the resolution was that cultural sustainability has to be developed as a topic and to be included into the dimensions of sustainability, into the sustainability of forestry. However, only limited action has been taken since the resolution in Europe. Recently, the topic has received attention and basic research has started regarding cultural aspects related to forestry. On the other hand, there is a tradition to include cultural sustainability into the nature conservation programmes and projects, particularly in the Russian Federation.

Thus it would be most natural to transfer basic methodologies and approaches and other lessons learnt from nature conservation to practical forestry. Nevertheless, there are still research and other development efforts within nature conservation and cultural aspects to be further developed as well. In both fields there are also some studies within social sustainability of forestry that have tackled the problem area in recent years. These issues have been focused in the identification report addressed in this abstract. The paper discusses the problem area in the Nordic countries: Finland, Norway and Sweden; the Baltic state Estonia, and the countries of the Russian Federation: Arkhangelsk Oblast, Nenets Okrug, and the Republics of Karelia and Komi.

The conclusions in the identification report include the facts that the problem area should require additional, mainly multi-disciplinary research and development work to be carried out, but also that one should pay serious attention to the following development activities within this topic: education, training and extension; the collaboration between museums of natural history and sciences; establishment of forestry museums; networking should be established as soon as possible between the main actors within the problem area; encouragement of local participation of various stakeholders in the development process. These activities should be supported by the private sector as soon as found feasible. The process described would act as an umbrella supporting these development activities.

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The museums identified for this development process are keenly interested in exchanging exhibitions on local cultures, including live performances, films, art, garments and other folkloristic objects, household goods, etc. They are interested in raising interest of the public in general, and particularly regarding forests in this field. The most efficient and appropriate method to carry out these types of activities is through networking.

A typical problem, that the minor and rural societies and cultures are facing, is the undemocratic situation including gender issues. It reflects also the general fact that rural and local people typically lack the right to participate in planning and decision-making regarding the renewable natural resources their lives and livelihood are depending on, particularly in Russia.

Improvement of the situation is one of the development goals of this process. Very often the most efficient and fastest way to improve this type of situation is to involve non-governmental organisations, NGOs, into the process. In this context NGOs are core actors in this process and their activities will be coordinated with and supported by the research and training organisations.

The process described has passed to the pre-feasibility phase in which all the activities will be planned according to the identified needs. It would be most welcome that the process receives research and development partners from the Western Balkan. It would also open the doors to cooperation between the EU member states and future members of the EU. Cultural dimension of sustainability could be in-loaded into the forest sector development programmes and National Forest Programmes of the Western Balkan countries, most likely in a rather flexible manner, as forests play such a varying role in the context of conservation and utilisation of forests in these societies.

Keywords: cultural sustainability, social sustainability, research, education and development, Nordic countries, Northwest Russia, Western Balkan

OBJECTIVES OF THE IDENTIFICATION PHASE AND THE PROCESS

Objectives of the development process can be determined from the Vienna Resolution 3 (2003) on Preserving and Enhancing the Social and Cultural Dimensions of Sustainable Forest Management in Europe. It has direct linkages and is presenting logical follow-up of the resolutions and decisions of the UNFF and the CBD related to social and cultural dimensions of sustainable forest management and the work done by UNESCO on cultural heritage and sustainable development. Cultural dimension is a logical continuation in the development regarding sustainable development and its social dimension. In many cases it has so far been included into the social dimension, yet it has clearly elements and factors why it should be also described and analyzed in a separate and individual context.

The objectives of the identification phase of the development process on cultural sustainability of forestry and other activities related to forests can be defined as follows:

- To clarify the basic concepts, theories and approaches
- To assess the state-of-art of each development item/activity
- To plan the process
- To design the main framework for the process

The objectives of the whole process can be considered to increase knowledge and understanding of as well as willingness to take increasingly into account local cultures when forest related activities, aiming at conservation or utilization of forests, are planned and implemented. Final aim is to create a similar status for cultural topics and issues within sustainable development as a dimension, than there exist for economic, ecological and social ones already, in order to gain increasingly comprehensive and balanced development.

This task is very challenging as there prevail many sciences and disciplines that assess the relationship between man and nature, and how this relationship could and should be developed. This paper aims at describing them in brief and giving an overview of the problem framework.

BACKGROUND OF THE CULTURAL SUSTAINABILITY

CULTURAL THEORIES AND OBJECTS OF STUDIES

Common concepts

Common concepts in cultural theories should be discussed and agreed first within the theory discussed. The same applies to concepts regarding forests, and forestry. This process should be followed by a discussion between the sciences and disciplines aiming at designing common concepts so that various sciences can understand and agree with when dealing with such a multidisciplinary theme as cultural sustainability related to forests.

This process started in the beginning of the identification phase of the project in 2004. The discussions have revealed that gaining common understanding between concepts claims for long-term and collaborative work between experts representing different disciplines, and will last most likely during the whole development process. Clarification of basic concepts requires for setting up international working group(s) clarifying the concepts and finding basic funding for the work. The most appropriate umbrella under which this type of work should be carried out is the Nordic Council of Ministers that has (co)-funded such basic collaborative work within certain, more focused conceptual development work between Nordic countries and their research institutes. This work is under planning phase.

Linguistics and philology

The linguistic analysis in this context is mainly based on Jaakko Anhava's book in Finnish on World languages and family of languages, published in 2002. It represents a synthesis on languages and their relationships. According to Anhava (2002) we may distinguish the following languages in the countries and regions discussed in this context:

1. Uralian languages:

Same, spoken in North and East parts of Norway, West and North parts of Sweden (mainly the western same language with different dialects and northern

same) and eastern and northern same with several dialects in northern Finland as well as in Murmansk oblast in Russia.

Finnish-Ugrian languages, particularly the BalticSea-Finnish ones, spoken in Estonia and Finland as well as in Karelian Republic.

Permilanguages, mainly Komisyrjan and Komipermjak, spoken in Komi Republic

Samojedian languages, particularly Nenets spoken in Nenets Okrug in Russia.

From the linguistic theories viewpoint all these languages have common roots and thus one can identify common features and structures among these languages, as well as also factors that differentiate these languages and their dialects from each other. Evidently the linguistic roots influence the concepts and terminologies still used among native people and local cultures.

Thus animals and vegetation including trees in forests which have always been among the most determinative resources and base of livelihood for local inhabitants, carry similar or same as well as different words and meanings in different languages and dialects. Accordingly it is of utmost importance to understand these concepts and terms in a common way if plans and decisions regarding conservation and utilization of forests and the ecosystems are designed over and between boarder lines, measured not only geographically but also culturally.

Russian belongs to the Slavic languages which belong to Indo-European ones. It is also of great importance that the concepts used in Russian are discussed in the context of the Uralian languages in such a way that common and different meanings of concepts and terminologies can be distinguished and used as mentioned in previous chapter. This has not been the case neither in Soviet Union, nor in the Russian Federation, but more or less on the contrary.

These viewpoints and factors will be discussed further in the pre-feasibility phase of the development process and will be reflected in the conclusions and recommendations of this phase.

Folkloristics and ethnology

The folkloristic and ethnologic factors describe and explain the physical and mental cultural traditions people have and apply in their localities. These disciplines comprise several usable methodologies that can be applied also in the context of assessing the relationship of local people and their relationships with forests and trees. Very often relationships are based or closely connected with spiritual or religious values and habits. These disciplines are described in the next chapter. One may distinguish several different religions and spirits such as Lutheran and Orthodox religions, different types of native spirits and beliefs which represent paganism etc. These regions and beliefs are reflected as habits, rites, living modes, clothes, decorations, art etc. So the cultures typically are also assessed from the symptom point of view, as a reflection of applying habits of certain type of religion or spirit.

Particularly the habits and rites are objects which are increasingly demonstrated to other people and cultures music and theatre being the most commonly

used means in it. For instance, there are annual theatre festivals among ethnic groups of Finno-Ugrian cultures in which also diminishing minorities in the Russian Federation take part in. These events are also used in expressing worries and raise alarms for endangerment of some of these minorities regarding their basic rights and livelihood, and indigenous cultures.

These issues are currently studied also within the scientific project financed by the academies of sciences of Finland and the Russian Federation. In Arkhangelsk oblast and Nenets okrug the focal university carrying out such research is the Pomor University based in the city of Arkhangelsk. The main Finnish universities in these projects are the Helsinki and Joensuu ones. University of Turku and Åbo Academy which is the Swedish speaking university in Turku, have both conducted valuable research in these fields. These two last mentioned universities carried out interesting research in cultural sciences in the Finnish Biodiversity Research Programme FIBRE in 1997-2002. Close cooperation is highly recommended in these topics with these universities and research projects.

An interesting individual topic that describes often the relationship between the man and nature is the role of the king of boreal forests, the bear, in the scene. It seems to be the individual object in boreal forests through which many negative and positive topics and issues can be and are described. Thus it is no wonder why bear in many languages, such as in Finnish, has several words for the same animal, and the words have somewhat different meanings stressing some important characters and characteristics of this animal. In Siberia and Far East Russia tigers and snow leopards have the same position and various functions of them are described broadly in local languages and dialects. This is also one of the main reasons why the skins of bears, tigers and leopards are so extremely highly valued among hunters, and that people want to show their ruling positions within the nature. Biodiversity research brings about interesting and deepening results and findings about the relationship between flora and fauna, and the man preserving or destroying these relationships. In recent months in 2005 there has been an exhibition touring in Finland that describes these relationships primarily from the ethnologic and religious viewpoints and disciplines among Russian and Finnish rural cultures.

Owing to folkloristic and ethnologic disciplines both the conservation and sustainable utilization of local habits and traditions and presenting them in a format of cultural tourism including both products and services, could provide increasingly opportunities for local people and inhabitants for improving their livelihood. There are recent examples, for instance, in certain villages next to Finnish borderline in the Republic of Karelia, where active preservation of local traditions and habits in various forms have improved greatly living conditions in the villages. (Karhu 2002; Kupari 2005; Saastamoinen and Lipitsäinen 1998).

Religious and spiritual disciplines

One may distinguish several different religions and spirits such as Lutheran and Orthodox religions, different types of native spirits and beliefs which represent paganism etc. in our project areas These religions and beliefs are reflected as

practices, habits, rites, living modes, clothes, decorations, art etc. So the cultures typically are also assessed from the symptom point of view, as a reflection of applying habits of certain type of religion or spirit (Lehtinen 2002).

In many areas in northern hemisphere the content of religions and paganism have followed each other and changed during the centuries. For instance in Kenozero National Park area in Arkhangelsk oblast one can distinguish various periods of beliefs and religions from buildings, trees and forests, practices and folklore. In recent years there has been an increasing support from the park management to transfer spiritual and religious values from paganism to orthodox ones. It seems not to have created there such conflicts like in some other Russian rural areas where traditional Russian paganism is currently actively and even aggressively overcome by orthodox, for instance in many Finno-Ugrian villages and areas. This phenomenom can even be considered to have become systematically supported by the state authorities as a means to fight against islam and traditional paganism.

Archaeology and cultural anthropology

There is in all the Nordic countries as well as in Russia and the Baltic States rather systematic approach that has been applied regarding archaeological sites and monuments in nature, and cultural and nature monuments. In Soviet Union nature monuments were inventoried by the State Forestry Service or the Environmental authorities and nowadays by the Ministry of Natural Resources (MNR). The most valuable nature monuments have been protected either by federal or by regional orders (Kleinn 1998; Davydov 2005). These monuments are typically results of the phenomena of the Nature and its historic processes and not as a result of human beings. They are managed by regional authorities of the MNR. In the Baltic States the responsible administrative is typically the Ministry of Environment, and the process has been the same as in Russia (Davydov 2005).

Archaeological monuments are causes of human beings and they typically are results of inventories of museum authorities, which are usually in the administrative structure of the Ministry of Education. The inventories have varied per method and intensity and coverage in countries and regions discussed. The most systematic and recent inventories have taken place in Finland and Sweden by their national museum authorities. Also the private forestry central and regional authorities have been involved. At this moment these findings have not only been recognised but also attempts for taking them into consideration when designing forest management planning tools have been underway (Mattila 2004) These experiences provide a feasible platform to design and apply new management tools for other cultural factors as well.

The issues covered by the archaeological inventories include e.g.: 1. Former living and working sites; 2. Sites of Sacrifice and rites, often with decorations; 3. Graveyards, made of e.g. rocks or stones as well as signs made during the last trip of the deceased; 4. Fortresses; 5. Routes representing and originating from Stone Age, Bronze Age and Iron Age (Lounema 2003).

Additionally the following issues among natural sites and monuments are considered to be valuable for preserving: Eternal Trees; anthropomorphic decorations, typically on rocks; Bassiskaidis in Same cultures; Large, wilderness type of forest lands; High mountains or hills or precipices; ancient landscape; Field of the Devil (stony field) and other special stony areas (e.g. frost effects); holes in rocks or hills; and springs of water (Lounema 2003 and Mattila 2004).

One can also use the IUCN definitions concerning protected area management categories in this context (Kleinn 1998). They are:

Scientific/strict nature reserve	IUCN category I
National Park	IUCN category II
Natural Monument	IUCN category III
National Wildlife Refuge	IUCN category IV

These factors are most likely the ones among cultural ones, that can be included into practical forest management planning systems, such as land-scape ecological or multi-targeted planning, most easily from the technical point of view. There are attempts in this respect also in Russia. For instance, the Arkhangelsk State Technical University has carried out some preliminary projects within this theme. It is evident that these topics can be most rationally included in forest related planning systems.

Environmental aesthetics and cultural landscapes

Environmental aesthetics is a discipline that has gained increasingly importance in cultural sciences during the last two decades. It applies aesthetics into nature and other environments and discusses preservation and utilization of nature, in the world of human being. Due to increased interest into these topics also old, traditional landscapes have gained interest, and as a result various types of cultural landscapes have been converted back to their "original" state, for instance, describing certain agricultural methods and their relationship with nature, such as traditional lamb fields. These areas are primarily preserved in nature protection areas administrated with state authorities. However, also private farmers and other actors have returned some parts of their land into cultural landscapes, demonstrating certain traditional modes of life for future generations.

There are also international projects and pre-studies carried out in the excursion areas of this project, for instance in Kenozero National Park (KNP), that illustrate this problem area. There has been a major emphasis in KNP for these issues during the last decade in general as well. In KNP these landscapes have close links with religious and spiritual life of the ancient life in the park, as well with traditional rural modes of life including methods of agriculture, forestry and fisheries. These topics were demonstrated also in the excursion of the Inception Workshop in Kenozero National park in Arkhangelsk oblast in September 2005.

History and social sciences

Anthropology is the science that studies of history of ancient cultures and populations. The latest studies of northern populations are carried out by sociologists mainly in Russia as they are very concerned about the worsening conditions

of the northern population and their immigration to southern and more urban regions. Unemployment and collapse of social welfare and system in the 1990's has led to a situation that most of the northern villages and other communities lack future (Heleniuk 1999; Kuoppala 1998). This is also one reason for the endangered situation of certain, languages and dialects, and thus linguistic specialists usually share these worries and risks.

The researchers in history typically focus their attention on certain periods of history of man, which typically in the North are divided mainly to Ice, Stone, Bronze and Iron Ages. The department of history at the Pomor University from Arkhangelsk oblast has expressed its keen interest to participate in the development process in this field and this relates also to some local NGOs.

Culture and local development theories

The Organisation for Economic Co-operation and Development (OECD) is among those international organisations that have increasingly paid attention in recent years on the importance of cultural issues in local development. The report with character of being synthesis of various studies in western industrialised countries (OECD 2005) discusses primarily of such processes that are or could be market driven. It defines the processes into three:

The *attraction paradigm*, in which the importance of the contribution of cultural activities to local development depends on the territory's population, its integration and its extent; on the length of the season for cultural activities, on their synergies and on their local employment content.

The *dissemination paradigm*, in which the importance of the contribution of cultural activities to development depends on how concentrated cultural activities are locally; on their capacity to transmit and adapt their specific knowledge and know-how; on their capacity to balance production and marketing dimensions; on their potential to win recognition, or even protection, of their originality.

The *territorial cultural paradigm*, in which the importance of the contribution of cultural activities to development depends on their capacity to reveal and disseminate values and reference points that will encourage various players, individually or collectively, to think to the future, to device new plans and projects, and to pool their defences against unforeseen.

In all paradigms there is an identified need to balance cultural heritage and to protect its core issues, to develop the production, marketing and distribution sustainably and to develop local human resources comprehensively in the full chains of cultural production and services. This can only partly be developed by public efforts, including policies and politics supported by national and regional policies and politics.

Most of the activities needed with clients, audience, etc. claim for involvement of the *private sector*. However, there are enough experiences all over the world where private sector involvement has destroyed even core functions and activities of local cultures, unless they are planned in close collaboration with local and other public policies. Yet OECD stresses the importance of involving the pri-

vate sector into local development processes, it promotes the urgent need to develop *relevant public policies* in this respect. OECD also points out international experiences and development results in which the role of cultural activities in increasing GDP, nationally, regionally or locally, have been assessed. Thus the role and impacts of cultural activities can be defined and described in economic terms, which nowadays is increasingly important.

This approach is urgently required to be applied also from the socio-economic development viewpoint in rural areas in Russia, see for instance Heleniak (1999), Kuoppala (1998), Lausala and Valkonen (1999) and Local self-goverrnance (2003).

CULTURAL ASPECTS IN THE CONTEXT OF THE SOCIAL SUSTAINABILITY

One could identify as the starting point of the worldwide discussion and implementation of the concept of sustainable development the statement of the World Commission on Environment and Development (WCED) in 1987. According to this Commission: "Sustainable development is development that meets the needs of the present without compromising the ability of future generation to meet their own needs" (Our Common Future 1987).

There are numerous definitions discussing sustainability, and typically they are rather value-contained. A rather value-neutral application of the WCED definition can be found in Journal of Forestry, March/1998 and according to the authors Gregersen et al.:"Sustainable development is a process of meeting the continuing, evolving needs of people while protecting and enhancing the resource base on which production of goods and services depends".

Hytönen (1998) has discussed these definitions in her publication on social sustainability of forestry in the Baltic Sea Region very thoroughly. When discussing the cultural sustainability in this context, she refers to an overall definition within forest related issues to the work carried out by the USDA Forest Service in 1994 when they produced a scheme as a part of their strategic approach on sustainable forestry. They concluded that the ecosystems to be developed comprised three dimensions, namely biological, physical and human and the human dimensions of culture, community, political and economy. The human factors relevant in management, one can identify demands, values, perceptions and interactions of human beings.

Rannikko (1998) has an interpretation of cultural sustainability in which he makes a difference between social and cultural sustainability. According to him in social sustainability development enforces the individuals control over their own lives and the key measurement of it is the distribution of the results of development equitably among beneficiaries. Cultural sustainability according to him is development which is in harmony with the cultural concepts of the individuals involved. This can be interpreted that activities carried out for instance in forests should be in balance with the values and behaviour including their livelihood related to forests.

Saastamoinen has dealt with social and cultural sustainability issues in many of his publications. Usually he discusses them as an integrated concept where social factors (may) change more rapidly whereas cultural ones are more permanent and long-term. He considers that as forestry is characterised by contradictions, conflicts and controversies rather than harmonious compromises based on shared views, it is necessary to analyze the basic values and principles and the consequent procedures to cope with the differing opinions and demands (Saastamoinen 1997). These basic values and principles are originating from the cultures dealt with and can be recognised in different instruments based on various approaches, which are based on various theories.

The largest and most comprehensive prevailing study in Finland concerning this problem framework is the research programme on social sustainability of forestry in Finland. Owing to its team leader Vehkamäki (2005) the closest links with cultural sustainability their project has, is within the analysis from the religious viewpoints and context. Thus our development process must have linkages with this social sustainability focusing one, and synergies can be evidently created.

CONCEPTS REGARDING FORESTS AND FORESTRY

The main difference between concepts and definitions dealing with forests concern if we define forest on a ecosystem basis or purely as an object containing trees. The ecosystem approach yet introduced more commonly into forestry since 1980's, has rather similar content as forests have had for centuries among local, rural people. Forest comprise wood and non-wood goods and benefits which then based on decision making are either conserved or utilized. These decisions are made either by the local people, based on their ownership and rights, or by external organisations and people, based on their ownership or rights. All these decisions are made based on various values, most of which can be measured, and thus compared with each other.

FAO presents the most common valuation approaches in relation to type of forest goods and services (Kengen 1997). The measures can be divided as follows: a/ Direct market prices, b/ Indirect market prices, c/ Residual values, d/ Value of production increases as minimum measure of an input, e/ Surrogate prices and replacement or avoided costs, f/ Opportunity costs, g/ Differences in travel costs as the measure of value of an area, facility or activity, h/ Non-market value estimates. The four last mentioned ones are typically used in measuring services and recreational values in forests whereas the various products are typically measured by the four first mentioned ones. UNU has also assessed the values related to forests (2001) and cultural factors can be identified also among them.

One can find more appropriate measurement instruments among the environmental economists than the FAO ones, described above. For instance, Mäler (1997) discusses these measures, but yet not directly as typically the cultural factors are descriptive by character, and not directly measurable. The potential and actual conflict very often raises from this dilemma: most of the factors are measurable and even comparable, but not all of them, as many factors related to cul-

tures are such. Usually the measurable ones dominate in planning and decision-making.

METHODOLOGICAL DEVELOPMENT

It would be useful to clarify the research and development methodologies that could and should be used in assessing the relationship between the man and nature in general, and related to forests in particular. One practically oriented approach could be to apply the following logical path in it.

1. Assessment of the problem framework
2. Assessment of the potential research disciplines
3. Selection of the most relevant disciplines
4. Collection and analysis of data
   - Selected research sites (empirical data)
   - Desk research
   - Comparative data and analyses
5. Analysis of all data materials
7. Conclusions and recommendations
8. Testing the methodology and approach in selected experimental sites

The most appropriate way to carry out this type of methodological development would be to use international expert groups and model or pilot type of forest research areas in which cultural data could assessed, compared and integrated with relevant biological, ecological, economic, technical and social data describing and explaining the man and nature/forests relationship. In Finland the most suitable areas could be the biosphare areas founded in the Baltic Sea (Saaristomeri biosphare area) and in the border line area next to Russian Karelia (North-Karelian biosphare area). This methodological development process is currently in planning phase.

SOME MEANS TO DEVELOP AND WAYS TO APPLY THE SOCIO-CULTURAL RELATIONSHIP IN THE FIELD OF NATURE UTILIZATION

The identification phase of the development process has pointed out that the most efficient means and ways to promote the socio-cultural issues include:

1. Increase of knowledge and understanding about indigenous people and local cultures
2. Promotion of participatory approach and democratic processes in these areas
3. Use of market - based support mechanisms for these processes
4. Development and use of publicly financed development programmes and projects demonstrating these topics and issues

This development process concentrates its emphasis and focus at its first phases on Northern Scandinavia and selected subjects of the Russian Federation, namely Arkhangelsk and Murmansk oblasts, Nenets Okrug, as well as Karelian and Komi Republics (Lausala and Valkonen 1999). After the concepts and approaches and other major issues have been designed, agreed and tested through these phases, then one should consider if the process could be broadened to other subjects in Russia (such as the Finno-Ugrian regions, Sakha Republic, Khabarovsk and Krasnoyarsk Krays etc.) (Lehtinen 2002), the Baltic States as well as to northern provinces of Canada.

In addition it would be most interesting to create comparative analyses and processes into other countries, such as Croatia and other western Balkan countries, and within other renewable natural resources with the same methodology. International research network should be established within this theme, and be introduces also to the 7th Research Framework Program of the European Union.

The Inception Workshop held in Arkhangelsk oblast in September 2005 identified in its meetings the following research needs and applications for further development:

1. Basic research
   a/ Planning of relevant research needed to fill the gaps regarding the comprehensive problem framework. (Typically work conducted and financed by academies of sciences).
   b/ Planning of research based on individual and interdisciplinary research and other type of problems. (Typically based on scales of activity of individual researchers and institutes).
2. Forest and other applied research and development
   a/ Selection of tentative criteria and indicators for cultural sustainability of forestry, and testing them in the framework of current FSC and PEFC forest certification schemes.
   b/ Further development of the criteria and indicators, and practical experimental appliance of them.
   c/ Planning of relevant research supporting the appliance of cultural sustainability in relevance with: A. Forest certification schemes; B. Practical forest management planning systems, such as integration of cultural dimensions and factors such as anthropological ones into land-scape ecological planning in national parks or biosphare areas s to be followed by forest areas with comprehensive development targets

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