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National park as a source of social capital

— case Koli networks

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Abstract

Development of networks for a national park introduces an option to develop the social capital for the local community. This includes the know-how, skills for connections, horizontal and vertical partnerships and special investments on increasing of knowledge and enhancing one's responsible relationship with nature by means of research, education and customer guidance. There has been an active attempt of developing networks in the fields of research, planning, , environmental education, information services, nature tourism and resource management in the Koli National Park. An innovative network for environmental education and interpretation has been developed as an experimental partnership project connecting the park management and local community. A specific monitoring programme on customer feedback is controlling the outputs of the customer services produced through a novel model for partnership-based network.

Key words: Social capital, national park, partnership, local community, network.

1 Social capital

The concept of social capital became known during the 1990s especially due to the research conducted by Robert Putnam (1993). Social capital is generally defined as benefits gained by networking; also the social infrastructure can be understood as manifestation of social capital. At the same time it is an integral factor in the process of growth and development. Hjerppe & Taipale 2001 assess that the concept of social capital may rise to be a key factor in the evolving of the theory of social sustainable development.

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The concept of social capital has been mostly developed through studies on local communities and regions (Coleman 1988, Putnam 1993). The World Bank has developed the concept originally as part of the concept for sustainable development along with ecological and economical sustainable development, which well describes the multiplicity of the concept (Serageldin 1996, World Bank 1998). Finnish Future Committee (Toimikunnanmietintö 1998) in its report accentuates education as a tool for developing of social capital.

Local view on social capital has achieved a new meaning in EU, which is developing functional programmes for mobilising local social capital in order to battle unemployment and displacement. At the same time the programmes strengthen EU in its world wide economical competition (Kajanoja & Simpura 2001). Economical aid supports especially companies and the third sector communities to form local networks of partnerships and by so means to strengthen their social capital (Loranca-Garcia 2001). The key factors in this model are the actors in the third sector. By supporting their actions EU is supposed to create and support such small-scale initiatives that may activate better employment and in the end also to create new business ventures. In this model the partnership is created between enterprises and the third sector organisations.

Väärälä (2001) and Simpura (2001) have made references to Finnish local and national authorities in connection to the new partnership network. Väärälä states that in Finland and in the other Nordic countries the municipalities play a major role as the playgrounds of local autonomy and act thus also as activators of social capital. Simpura argues that Finnish “society for citizens” ensures that the common state also covers the major part in the building process of local social capital, as the state is here traditionally a part of the entity of the citizen’s society. In this respect Finnish society differs significantly from many other European societies, where state traditionally holds a more distant role above the society of citizens.

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Notion of social capital is also used in the micro level research of organisations, such as inter company networks or between enterprises (Woolcock 2001). According to Woolcock social capital means norms and social connections that have sprang roots to the social structures in the society. These norms and connections give people a chance to co-ordinate their behaviour in order to achieve wished objectives.

Central elements of social capital are the networks of the community, the inter-trust among the actors and the social code that is built on that trust (Putnam 1993, Väärälä 1998). According to Seligman (1997) reliance may be directed to people (trust) or institutions (confidence). Immonen (1999) argues that the fact that reliance includes a time perspective is crucial; it concerns the future and its predictability.

Connections and interactions between organisations and individuals have case by case taken a shape of networks in the scientific literature analysing society, also in the research of tourism (see Komppula 1997, 1998). There is a vast range of different types of networks and their interactive relationships are many in number. Networks settle typically between actors at similar level (horizontal) or different level (vertical) in the hierarchy of processes. Social networks may create additional value to society in forms of social capital. That capital appears as trust between the network actors, as deals and norms as well as attributes of the actors having a society wide relevance, such as knowledge and skills, and moreover as images and experiences, and finally as attitudes and values.

Project programme of the EU Commission (1998) attempting to develop local social capital defines also the intermediary organisation for social capital as part of social capital in question: “Local social capital means an intermediary organisation – either a district or local actor - that has an ability to offer support to people who join their resources in order to carry out micro level projects enhancing employment and social solidarity”. Functions of these intermediary organisations are for example;

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- preservation of social solidarity
- intensifying of local groups and networks aiming at inclusion of social solidarity
- activation of social businesses and co-operatives

Intermediary organisations function within a precisely defined geographical region where they have to interact and cooperate with people in need of support as well as the groups representing them. Local social capital intermediaries aim at being in close and supporting contact with the grass root level, so that new initiatives may flow as answers to local needs. Local intermediaries create additional value also if they can use available assets and carried out actions as bases for acquiring additional resources. Intermediaries of social capital need to act in co-operation with local public services (social services, educational services) as well as with other social and economical actors in order to support the development of social capital (Loranca-Garcia 2000).

National parks (NP) have a multidimensional societal profile. Social capital is the third dimension of the benefits to be produced by a park as a promoter of sustainable development. The first operational function of a NP, linked with the values of nature, supports sustainable ecological development. The second operational function is most often linked with tourism and may support sustainable economical development. The third operational function linked with education and research, preserving cultural values, and developing networks supports sustainable social development. A more thorough examination of the networks of Koli NP as an example of a development process of social capital is presented next. Also, I will examine more closely how the national park may be developed to function like an intermediary organisation or actor for social capital and like an innovative centre for development in remote rural peripheral area under recession.

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2 Partnership as a key factor in network model

Partnership is a concept meaning that social services, previously provided with the line organisation of public authorities, are now provided with networks basing on the co-operation and contracts between different operational partners (Lorenca-Gracia 2000). Partnership may be defined as “a process including a number of diversified players from diversified sectors; the players come along with a common vision and act together towards the common goal”. The process lies on the principles of democracy, acts with clearly defined supporting systems and includes constant evaluation in order to create results that produce common added value (European Commission 1998). Alanen & Kajanoja (2000) associate the concept of partnership particularly with the development of social capital on local levels.

Common application of the partnership model is a syndicate co-operation between two public government organisations, where both partners participate in operation as active operators with their partial programs and cover the expenses by their own budgets. Both parties gain operational benefit through co-operation. Partners may also represent public sector societies and private sector enterprises. This is also a union, where both parties have their own separate goals that are to be met through the joint venture. Partners form a consortium in which partners participate with their own resources and share the results according to a predetermined agreement.

Externalising public services by purchasing services from private enterprises by means of bidding competitions differs from partnership. Purchased services replace services of the public administration and the relationship between the buyer and the provider of the service is a normal business relationship. A network that is based on the previous is a company and customer network. However, some externalised services may include features of partnership, especially in case where the agreement covers public goals and the operations are economically non-profitable.

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A new type of a partnership network is formed by public societies and so called third sector societies (Kaunismaa 2000). Third sector means different societies that operate for public good, like non governmental organisations, associations, citizen unions or other similar operational groups whose operations are not driven by profit maximisation but some special civic goal. The special civic goals are usually registered in the rules of these third sector societies and the society has a mandate to make agreements on behalf of its members in order to meet their goals.

Public administration and the third sector societies form a partnership based network mostly when the operation in question is not profitable enough for business enterprises or the resources of the public authorities are not sufficient in order to produce the service in full. However, a partnership approach is potential in case the operation is important enough for the public authorities, the third sector societies are capable to participate in practical operation and the final customers are willing to pay directly a part of the costs of services they consume.

3 National park as part of the public administration network

Operation of the national parks is connected to the operational strategies of their administrative organisations. Nature services of the Finnish Forest and Park Service (Metsähallitus) administer 34 parks (year 2003) and Finnish Forest Research Institute administers one, the Koli National Park, in the Finnish national park network. Centralised result oriented management system, applied by the Ministry of the Environment, covers most of the operations of the Finnish national parks. The ministerial management system controls strategic and tactic planing and budget allocation.

Strategic control by the Ministry cover the long term (10-20 years range) management plans (= master plan, Luonnonsuojelulaki 1996, 19§). The master plan is prepared by the organisation in charge of park management with its local and regional interest groups. Ministry of the

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Environment ratifies the plan, and rather frequently (for example Metsäntutkimuslaitos 1997) responds once more to some central issues of the plan as well as gives guidelines for the special operation plans to be done later.

The organisation in charge of park management prepares a special operation plan for the central themes of the master plan. The Ministry of the Environment either validates the operation plans or, more often, delegates the matter to the central governing body of the park management. Special operation plans are mostly tactic plans that normally cover the timeline of the master plan or less. Alternatively the tactical plans are applied to short-term special projects, such as projects dealing with developing the infrastructure of the national park. Development projects like Ukko-Koli service centre and park harbour serve as examples of the latter.

Ministry's annual management control is carried out through agreements on management outputs between ministry and the central governing body of the national park management. The central governing body in charge transfers its output objectives concerning Koli NP to be part of annual objectives of the Joensuu Research Centre, and Joensuu in turn transfers them as annual goals for the "research forest" -project in charge of operative management of the Koli NP. A part of the annual budget is allocated with setting of operative goals.

4 Network of national parks and interest groups

The national park network is carrying out the societal strategic responsibility over nature values. National parks provide also as nationally valuable scenic attractions a public service reserve for the benefit of citizens. Both views implicate that national parks form a significant public welfare resource over which many Finnish communities and individuals are interested in terms of utilities and development. This can well be seen in the activities when the organised groups and private cups try to influence on the management and development of the park.

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Interest upon national parks are transboundary since national parks form natural and cultural heritage networks, international natural and cultural travel networks and networks of international education, environmental education and research. These networks have agreement-based organisations and they have regular bi- or multilateral interactions at various levels.

Network for European national parks is built in connection with European Federation for national and nature parks (EUROPARC) and its regional co-operation groups such as Nordic-Baltic Section. EUROPARC Federation unites over 350 European parks in 37 countries into an operational network working both at strategic and also partly on tactic level (www.europarc.org). About 100 Nordic national parks and other protected areas are working together in the frame of Nordic-Baltic Section of EUROPARC.

There are also direct contacts between national parks. For example during the last three years Koli NP has carried out projects dealing with environmental education, local relations and natural tourism with Hohe Tauern NP, Gauja NP Latvia and Valja Galda NP Greece. Also, some new plans are presently rising, for example an Interreg IIIc project of a heritage centre network with Vesuvius NP Italy and an Interreg IIIb development project of sustainable tourism network with some national parks in Sweden, Iceland and Scotland. We also have high expectations on our contacts to Russia. This vision is supported by our geographic position near by the eastern border of Europe as well as our good connections to Republic of Carelia and Arkangel region in Russia.

One of our ideas for the future is to build up a network for developing and introducing so called national park products. Developing of products and services in the framework of park's profile together with local society and enterprises is a challenge, which might improve public relations between the park and the local community as well as enhance economic and social sustainability. Change of products and ideas between parks may activate international co-operation and understanding. In Koli NP we see it important that our Heritage Centre Ukko presents information like exhibitions and also possibly some profile products from our sister parks.

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5 Research network of Koli National Park

Finnish Forest Research Institute has managed Koli NP like a natural and social laboratory, where scientists can monitor, collect cumulative data, analyse and create experiments on several research subjects concerning natural environments, species and people. The research issues expand outside of the natural sites since protected heritage in Koli NP also include heritage landscape and other cultural heritage. Koli has been a playground for nature and culture tourism more than 100 years, so tourism research with ecological and social issues is strongly present at the national park.

From 1997 onward Finnish Forest Research Institute has appointed one researcher to Koli NP, who also acts as the park director. Part of the working hours of the researcher-director is used to activate the network based research activities inside the park as well as practical support functions to on-going scientific projects. A new senior researcher's post has strengthened the research network from 2003 onwards. Some researchers of Finnish Forest Research Institute – both in the Joensuu Research Centre and other regional research stations – have directed their research to Koli NP. Latter projects are usually not conducted in a network with other research institutes. However, most projects of Joensuu Research Centre dealing with Koli NP are network projects organised together with the University of Joensuu.

Multidisciplinary research in the national park opens possibilities and options for many research institutes. During last years the research network of the Koli NP has included groups of researcher within Forest Research Institute and 10 other research communities (see Appendix 1). In addition to those, representatives from several different research organisations visit the national park yearly in order to become acquainted with research and development work that is carried out here. Koli NP has acted as an extension site for two EU COST-projects (E4/Strictly

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protected areas and E27/Common classification of the protected areas). The special aim of the COST projects is to compose and prepare scientific co-operational network projects.

Minor studies, which however were useful in national park management and planning, were produced in two different educational institutes (Table 1) in 2000 – 2003. These studies served both the nature conservation programme and sustainable tourism development programme of the park.

Interaction with educational institutes was reciprocal. Students achieved data from the databank of the national park or collected geographic information. Students achieved concrete support in research in the data collection when preparing, collecting and pre-processing the data. Support may also have been given in the form of equipment, workroom or accommodation. Also, partners agree that the support given when preparing and planning the study and instruction given when writing the study report benefited the final outcome.

Table 1. Studies by polytechnic students on the years 2000 - 2003 for the benefit of Koli NP management and development.

Educational institute	Project	Product
North Carelia Polytechnic	Developing the harbour of Koli National Park; customer objectives and entrepreneur analysis	Study reports (2)
	Slash-and-burn plan	Study report (1)
	Renovation plan for some earlier economical forest drainage stands	Study report (1)
	Visualisation of nature management plans	Study reports (2)
	Usage of multimedia in research extension	Study report (1)
	GPS accuracy in hill terrain	Study report (1)
Lapland Polytechnic	Slash-and-burn plan	Study report (1)

Researchers of the Forest Research Institute gave lectures to the students of educational institutes on various issues; like about park management and administration, planning systems used in

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park, research activities concerning landscape management and integrating tourism and conservation functions within the park management. The park researcher-director gave altogether 22 lectures, 4 of them in English, to student groups of the institutions of higher education during 2000 – 2003.

Studies served instantly the planning of the national park. Also, data collected and passed along with the study reports of the students contributed to the geographic database of national park. The park development projects, especially the harbour project and forest and landscape restoration projects, were given additional value by these studies conducted by students.

A special operation plan for developing research profile of the Koli NP is to be prepared according to guidelines defined by the new Master Plan of park. An international research seminar was held in April 2002 and 25 researchers from 13 different research institutes participated in this seminar. The seminar proceedings (Lovén 2004) are displaying multidisciplinary research activities and visions for further development of research in the Koli NP.

In the future one of the goals of the Forest Research Institute is to direct the research function of the Koli NP so that the park introduces a specific experiment and extension site for researches on slash-and-burn landscape management and forest restoration, as well as research linked with geological and tourism issues. Scientific research seminars would be organised in the park on regular bases and the research results would be of international significance, if possible. In Koli NP there would be a wide range of demonstration sites available for researchers, educational institutions and communities in charge of practical park management. All the research results will be presented on the real sites.

In the vision described above, social capital can be acquired by research and education function of the national park. The forms of social capital would be the knowledge basing on research on natural and cultural values of the national park, educational information, programmes for

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environmental education in nature and heritage centre and continuously developing and strengthening network for co-operation of the scientific and educational communities. This developing know-how is transferred to the public of the park in a joint effort of the scientific community and the local society by means of guidance, interpretation and information systems.

6 Network for financing the Koli National Park

The annual budget available for management and administration expenses of Koli NP was 500 000 € in 2003. The budget for investments in infrastructure rose up to 880 000 €. In 2003 the financing through the Ministry of the Environment covered 85% of the yearly running expenses of Koli NP management and 0 % of the investments. Expectations of results exceeding actions which are possible within the annual budget limits are a normal phenomena within the administration of Finnish and also international national parks. This has led to a decentralised resources administration that attempts to gain resources from outside one's own administration. Decentralised resources administration has had a positive impact over the number of connections between different administrative bodies on national and regional levels including agreements on co-operation and resource allocations.

The annual financial resources of Koli NP originated from several different sources (Table 2). In the year 2003 the resources for management, and investment were allocated from 7 different financial sources. Only 18 % of the total financing and 64 % of the management resources came as outcome of the agreement on management, which was made between the Forest Research Institute and the Ministry of Environment. Only 4 % of the resources were coming from the operative budget funds of the Forest Research Institute allocated by the Ministry of Agriculture and Forestry. Externalised services (hotel and downhill slopes) are not shown in Table 2 since the entrepreneur covers the main responsibility over them according to the contract between the Finnish Forest Research Institute and the company.

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Sources of resources of a NP form a special financial network, which attempts to impact the emphasis and priorities of park management and development out of its' own personal motives. In order to acquire resources park administration has on a regular basis to keep in connections with the finance sources and report on consumption of the previous funds. In order to acquire new financing, the Park manager has to fill in new applications that are specific both in matters of form and operational plans. The outcome of these applications is always involved with a high degree of uncertainty. Substance skills involved with the financial applications are very important, since it is important to assure the financing parties of functional and productive utilisation of the resources.

Mastering the necessary interaction skills, as well as acquiring and keeping up the trustful relation with the financing parties are the key factors for success in the decentralised resource administration. This is the core of social capital created between today's national park administration and its network of financing parties.

Table2. Financing authorities/sources of the Koli NP in the year 2003 (maintenance and investments of the hotel and downhill slopes are not included because the services are externalised).

Source of Financing	Financing in €	
	Management and administration	Investments
Ministry of Agriculture and Forestry	50 000	3000
Ministry of the Environment	400 000	-
EU/LIFE-fund	50 000	-
EU/Regional development fund	-	70 000
EU/Leader+ fund	23 900	

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Labour administration /	15 000	1 670 000
North Karelia Employment and Economic Development Centre		
Employment offices		
Regional Council of North Karelia	4 000	
Municipalities	6000	60 000
North Karelia Regional Environment Centre	2 000	
Universities and other higher level educational institutions	3 000	
Companies	25 000	
Customers	100 000	
Sum total of	678 900	1 800 000

7 Network for environmental education

Tasks of the Finnish national park network that are stated by law (Luonnonsuojelulaki 1996, 1 §) include guidance and interpreting services involved in environmental education, providing facilities for educational activities and promoting park nature as a matter of hobby.

Environmental education involves a vast range of operations in order to, for example, provide the NP customers with sufficient knowledge in order to strengthen the positive nature-man relationship and promote sustainable development. Substance of environmental education includes knowledge concerning NP and special skills needed in order to survive in nature. Tools for environmental education within NP include for example personnel and infrastructure for customer services and a special pedagogically oriented organisation that focuses on environmental education. Pedagogical informative material and programmes support other actions. Environmental education takes place typically as organised group activity, for example camp-school activity, where the educator and the person undergoing the educational program

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relate in a complex interaction relationship and where a diversified network of basic services supports the main operation.

The environmental education is organised in practice in a many different ways within European national parks. In the most active sites the NP administration works in co-operation with a special pedagogical institute for environmental education, which runs diversified programmes both within and outside the park. These environmental education institutes may be located as independent properties within national parks, such as Losehill Hall in Peak District NP England (Wharton 2003), in connection with nature centres like Waterschool in Hohe Tauern NP Austria (Staats 2002) or in the instant proximity of national park such as Alfred Toepfer Academy near by Lüneburg Heide NP Germany (Prüter 2003) or Rantasalmi Environmental Education Institute close by Linnansaari NP in the Lakeland Heritage Centre, Finland.

Environmental education function in Koli NP is multilevel in nature. The basis is formed by information freely available for the customers in forms of common guidance, free publications, thematic trails and electronic multimedia. A more sophisticated level is covered by publications, special guided services and electronic databases that are subject to a fee for the customers. These are available to customers in Heritage Centre Ukko, which is the centre for customer services and interpretation in Koli NP. The third level of environmental education includes special services to defined target groups, such as diversified 1-5 days programmes for camp-schools.

Forest Research Institute and its research network produce information to be utilised by the environmental education services. That information includes research publications about Koli NP, information about nature and cultural inventories along the thematic trails as well as information about management and restoration nature such as meadows and slash-and-burn fields or information about cultural heritage like old private farmyards now being the park property. At the moment three environmental thematic trails with guidebooks and additional pedagogical material are to be produced with help of partial financing by the EU/Life Fund. Geological

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Survey of Finland has just published a geological hiking map and a guidebook for a geological nature trail (Huttunen 2003).

Middle and higher-level schools form presently the most important target groups for the environmental education function in the Koli NP. Later these target groups may possibly include other special groups such as seniors and incentive groups, groups for work capacity training as well as management skill training groups.

Preparation, organisation and management of Koli camp-school operation are done by the Friends of Ukko-Koli, a supporting association for Koli NP. The project is mainly funded by EU/Leader+ fund, city of Lieksa and the civic actions development committee of PKO (a regional business co-operative). Supporting association of the NP has an agreement-based partnership relation with Forest Research Institute to operate in Heritage Centre Ukko in the NP, where the association aids park administration in its visitor service function. A steering committee of the central interest groups of the project (Forest Research Institute, City of Lieksa, Vaara-Karelia Leader Association and enterprises providing supplementary services) control the operations of the camp-school project.

Koli camp-school development project started in 2002. The aim of the project was to prepare the pedagogical programmes i.e. teaching modules for camp- schools and activate a network of enterprises (Figure 1) in the Koli resort to produce the basic camp-school services for the practical implementation of the project. During the first 1,5 years a network of 9 agreement-based guidance services entrepreneurs or freelance guides, as well as 13 supplementary services companies (accommodation, meals, transportation, leisure time activities, equipment services) was formed. During its second phase (years 2003 – 2004) the camp-school project tries to form provincial network with other camp-school centres in order to introduce joint programmes, marketing and network operations for camp schools.

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The third phase of the camp-school project that is currently being planned will possibly expand the network to national and international levels. Preliminary contacts to prepare this third phase have already been made for example with the Finnish Foundation for Environmental Education (Lakeland Heritage Centre, Rantasalmi) in order to prepare a national network solution and also with the camp-school centre of north-west Russia (*Vodlalake NP, Russia*), the Alps water school (Hohe Tauern NP, Austria) and the environmental education centre of Alfred Topfer –foundation (Germany) in order to develop an international network.

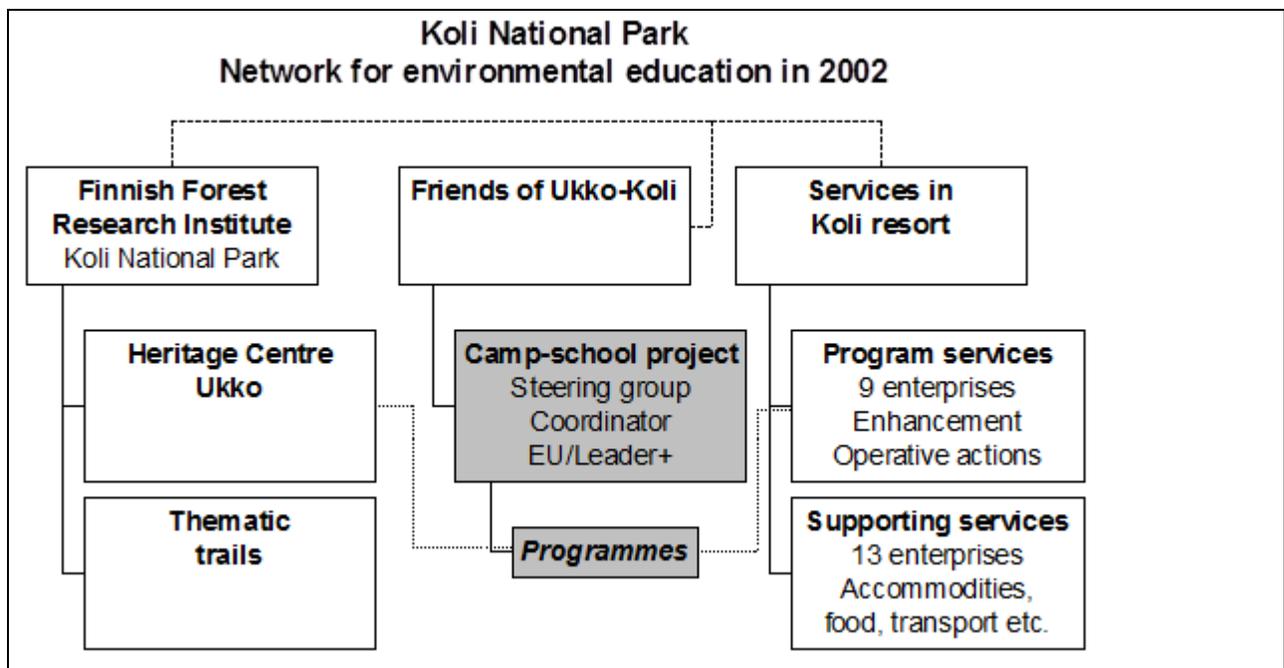


Figure 1. Phase 1 of the Koli environmental education network in 2002. Dashed line implicates contractual relations. Dotted line describes effect on educational context of action.

National park is a natural classroom for the Koli camp- school project and Heritage Centre Ukko on its behalf is an efficient operational centre. Most of the about 100 000 yearly customers of Koli NP acquaint themselves with the services provided by the Heritage Centre Ukko. Forest Research Institute supports the project by transferring scientific knowledge into form of educational and by helping the project create connections to the other actors of the NP's research network. As long as the camp-school project acts as a public non-profitable development project,

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the project is executing as a partner of the Finnish Forest Research Institute the operational network model of environmental education, which was defined in the Master Plan of the NP. In a network model, resource allocation of the NP that is directed toward development of camp-school activities is realised through the operational environment. Due to the partnership relationship, the camp-school project operates free of charge in and with the facilities of the national park. The project finances the direct expenses of activities, such as personnel and operational expenses from the funds of external network financiers. Operational environment support given by Forest Research Institute is not used as basis for EU/Leader+ funding of the project.

Koli camp- school project is an innovative example of a network based operation for development between the NP and local partners. As by-product of this partnership the change of information increases, the operational network knows one another better than earlier, chances for economic progress grow better and the internal trust in the network strengthens. In the local society the Forest Research Institute and the NP is realised to be the central, even though passive, actor in this play. The connections between park and the local enterprises also increase, which enables to distribute information more effectively and open a platform for planning of common operations. These positive development trends significantly increase social capital of all actors. The positive network image also improves the experiences of the park customers on service quality and contributes to social capital gaining among the customers.

8 Partnership network for visitor services

8.1 The previous model on partnership in Koli

A partnership model that forms a network between public administration and the third sector is not a fully new idea in Finland or in Koli resort. In fact the partnership model has been operating in one way or another in Koli already since the 1890s. In the Koli-case the most well-known

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example about partnership model is the organisation for tourism services for running the Ylämaja-hostel on the Ukko-Koli scenic point. The hostel, which was enlarged as hotel in 1930s, provided the basic services (accommodation and food) for tourists in Koli through the activities of the Finnish Travellers' Association, a non-governmental organisation for tourism promotion, with managerial complaisance and financial support of governmental authorities. The scenic tourism services of Koli were funded partly by customers (service fees) and partly by the government (investments on infrastructure).

Tourism infrastructure of Ukko-Koli included for example the hostel-hotel buildings, roads, harbour and network of hiking and skiing trails. Forest Research Institute organised the guidance system for Ukko-Koli during the 1930s. The system included signs for the trails, a hiking map and guidebook as well as a park ranger for fieldwork. The task of the Travellers' Association was to take care of the practical tourism services in the Ukko-Koli hostel and a visitor hut in the harbour doing business with some amount of financial support by government. A prerequisite for public funding was that the governmental authorities could have appropriate influence on the operational context and goals of the Traveller's Association. As the administrative officer of the area, Forest Research Institute had a permanent representation in the Board of the Traveller's Association..

The Traveller's Association started to act in Koli already in 1894 by renting a small piece of land on top of the Ukko-Koli Hill from a private landowner. The Association built a small pine lodge on the site in 1896. The government bought the land in 1907 and the lodge in 1908. Since then until 1996 the Traveller's Association worked in good co-operation with the governmental authorities, especially with the former state forestry authorities. The Finnish Forest Research Institute entered the picture in 1923, when it was authorised as a new multifunctional public and scientific organisation to manage several well known valuable Finnish landscapes like Koli, Punkaharju and Kilpisjärvi. The strategic aim of the co-operation was to introduce Koli and several other valuable scenic sites as important symbols of the Finnish national identity by means of the tourism approach.

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Partnership between the state government and the Travellers' Association ended in Koli finally in the year 1996, as Hotel Koli Ltd bought its business licence. Hotel Koli Ltd was formed by two shareholders; the North-Karelian Co-operative (PKO) and the Finnish state's tourism development company Nordia Ltd. Hotel Koli Ltd rented the hotel and the site for down-hill skiing centre, presently known as part of the national park property, from the Finnish Government represented by the Finnish Forest Research Institute. The contract for rent was then completed with an agreement on co-operation basing on the joint visions on national park development. This agreement combines and adapts the company activities to the overall development of the NP and especially to the development of its vital guidance services. According to the agreement, the company takes also partial responsibility to secure the funds for visitor guidance operations in the NP.

8.2 The 21st century partnership model in Koli NP

Forest Research Institute carries out the Koli NP visitor guidance function with a partnership network (see Table 3). The network includes three organisational levels; strategic planning and control, tactic co-operation and operative action.

The level of strategic planning and control of the guidance activities include connections to management control, and connections to international and national-provincial partners and regional co-operation bodies. The management control network was introduced earlier in the chapter 3. The network connections between different co-operation partners and regional co-operation bodies are presented more in detail in Table 3 and later in chapter 8.3. Operationally these network contacts include the transfer of information, negotiations, planning and agreements on common operational guidelines as well as common visitor guidance projects that are carried out according to the partnership principles.

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Table 3. Network for visitor guidance in Koli NP in 2003.

Strategic level	Tactic level	Operative level
<p>Management controllers: Ministry of the Environment Forest Research Institute; Headquarters</p> <p>International, national and provincial co-operation partners: EUROPARC; Nordic-Baltic Section National Board of Forestry; nature services Geological Survey of Finland North Karelia Regional Environment Centre University of Joensuu North Karelia Polytechnic North Karelian Museum Regional Board of North Karelia North Karelia Employment and Economic Development Centre Karelia Expert Gallen-Kallela Museum Finnish Tourism Board Finnish Nature Conservation Union PKO; Civic action group</p>	<p>Regional co-operation boards: Strategy board of Koli Marketing group of Koli tourism entrepreneurs Koli skiing trail coup Lieksa Travel Ltd Steering group for Koli Camp-School Project</p>	<p>Operative co-operation boards: Guidance integration of Koli NP partners: Ukko-Koli “Quartet” (Forest Research Institute / Koli NP, Hotel Koli Ltd, Eräsniikka, Friends of Ukko-Koli Association) Guidance services of Heritage Centre Ukko: Forest Research Institute / Koli NP, Friends of Ukko-Koli Association and enterprises providing guidance services Exhibition services of Heritage Centre: Forest Research Institute / Koli NP Supporting group for exhibition operations</p>

8.3. The “new model” of partnership for visitor services

Visitor guidance services in Finnish NP visitor centres are mainly organised with workers of park administration and with the help of voluntary trainees. Local people are employed within these centres especially when the funds of local labour authorities are available. Small visitor centres

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servicing around 5000 – 10000 customers per year are only open during the high season. They provide visitor guidance services and organise exhibitions. In mid-sized visitor centres serving up to 20000 – 30000 customers per year, guidance and exhibition activities are open also during the low season, if necessary, with less staff and shorter opening hours during the weekdays. Some of these mid-sized heritage centres, such as the Lakeland Centre in Rantasalmi or the Fell Lapland Nature Centre in Enontekiö, provide supplementary services with the help of their guides, such as small-scale selling of maps, postcards, posters and souvenirs.

Large Heritage Centres serve up to 50000+ customers annually in Finland. Only the Lapp Museum Siida in Inari, Heritage Centre Kellokas in Ylläs, Heritage Centre Oulanka in Kuusamo and Heritage Centre Ukko in Koli NP reach this level of customers. The organisation for guidance and exhibition in Siida is based on the co-operation of two public organisations, the Finnish Forest and Park Service and the Lapp Museum, and externalised restaurant-cafeteria service operating as a private enterprise. The Finnish Forest and Park Service takes care of the visitor guidance services in Oulanka and Ylläs Heritage Centres with workers financed by the labour authorities.

About 55 000 customers visit Heritage Centre Ukko of Koli NP every year. During the first full operating year of 2001 the amount of customers was around 75 000. Due to the lag of resources (both ministerial and local labour office) a new type of operation model has been called for. This operational network model should activate the customer responsibility on resources and still clearly meet the objectives for visitor service, defined in the law and the Master Plan of the NP.

In Koli NP, as well as in other Finnish national parks, the visitor guidance service has been considered as a core operation of the park management that cannot be fully externalised. Low profitability of the visitor guidance services is also an obstacle for externalisation; considering the realistic customer flows in Finland, externalisation of visitor guidance services is not viable in case all operating expenses are compared toward the sales. Also, visitor guidance and exhibition service conducted as entrepreneurial activity would not fit the overall management

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concept nor the profile image of the NP, since it is normally seen as a public operational entity managing and protecting public national heritage and the costs covered with budget of the government..

Since the early days of operating in June 2000, the operational model for the visitor guidance services of Koli NP has been based on a new type of a partnership principle and network implementation. Forest Research Institute as the administrative officer of the NP is in charge for the operational outlines and context as well as central physical resources and their maintenance. Friends of Ukko-Koli Association, a “legal body” type of association that operates as a 3rd sector partner of the Forest Research Institute, contracted the responsibility for most of the visitor guidance activities and tidiness of the operational facility. A written mutual partnership agreement defines the conditions of partnership. The supporting association has a right to acquire operational resources through independent fundraising like selling the “Ukko Passport” (see Figure 2). The income from the service fee comes from the customers and the commission of the sales comes merely from the producers of the products. Forest Research Institute buys the basic minimum guidance services covering one guide’s yearly pay as so called basic administrative service from the supporting association yearly.

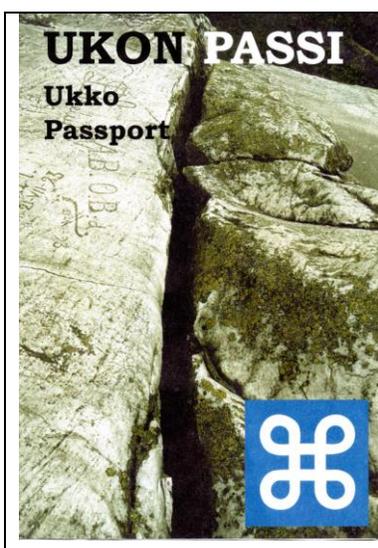


Figure 2.

The most important tool for customer payback is the supporting fee covering the costs of the special services, which is paid by the customers when buying the so called “Ukko’s Passport”. The other part of the payback is the commission coming to the Association of the Friends from the sales of products sold in the Nature Shop of Heritage Centre.

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The supporting association of NP may hire employees or make subcontracts with guidance service enterprises in order to operate the every day guidance services in the Heritage Centre Ukko. During the 2000 – 2003, Friends of Ukko-Koli Association has operated in the form of the network service organisation defined in Figure 3. The main part of the customer service taken care of by the association is done by the small local guidance services enterprises, that all have their own special skills areas and customer segments, but all of them are profiled as actors of Friends of Ukko-Koli Association in the eyes of the customers. Yearly around 4 – 6 such local enterprises take part in visitor guidance activity of Ukko.

A special customer feedback system is applied in monitoring the success of visitor guidance services in Heritage Centre. Customer feedback gives information over how the tourists and hikers are satisfied on the quality of service provided by the new partnership approach (Lovén 2002). According to the preliminary results, the experiences have been rather encouraging. Thus the Ministry of the Environment has given a permanent task to Koli NP for further developing of the network based customer service.

The strong cultural profile of Koli resort and the North Karelia Region affect the operations of Heritage Centre Ukko. Culture as a main stream runs through in oral guidance, brochures and guidebook publications supporting guidance, exhibitions as well as media programmes of Heritage Centre Ukko. Cultural heritage is linked also to the profile of the first Nature shop in the Finnish National Park Network, the Nature Shop “Vakka” in the Heritage Centre, being part of the customer services of Ukko. Nature Shop integrates the guidance services to the profile of the demonstrated and marketed products. The guides of Heritage Centre demonstrate local traditional products and handicrafts in the Nature Shop quality and display.

A “national park product” is a new innovative idea for park related products, and Heritage Centre Ukko is the first site to introduce the idea to park customers in Finland. Some European NPs have already for some years developed the “national park” brand in marketing of products that are produced within or in connection to the NP area.

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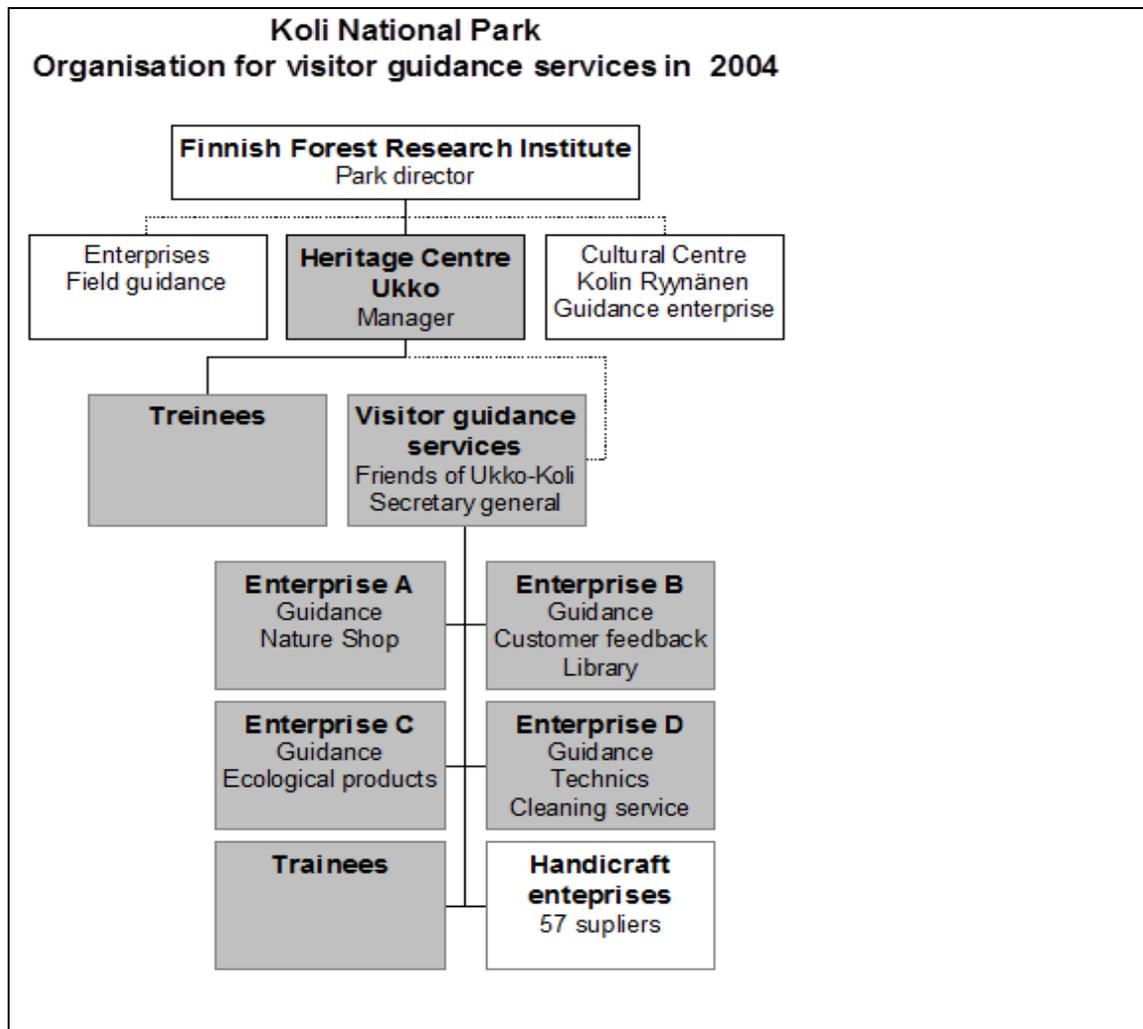


Figure 3. A partnership network model for Koli NP guidance services in the beginning of 2004.

Several European NPs include substantial privately owned areas, where business activities such as agriculture, forestry, refinement of natural goods, tourism industry and even small scale local industrial activities take place. When the production process of a product is in harmony with principles of sustainable development and the product itself fits in the management idea of the NP, the product may be marketed as a national park product. Such products include by far for example dairy products (Spain, Poland, Czech), leather and wool products (Greece, Austria,

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Latvia), spring water (Norway) and wine (Austria). Also the concept of “national park service” or “national park hotel” has been introduced to public (Hohe Tauern NP, Austria).

So far only the slash-and-burn (swidden) turnip (*Brassica rapa*) and brown bread made of slash-and-burn rye (*Secale cereale*) have been presented as special ”NP products” of Koli NP. The slash-and-burn turnip has been sold to customers as part of the menu of Hotel Koli. The slash-and-burn rye bread has been offered to customers in different NP festivities such as the local culture festival of this particular seminar.

A network of local handicraft enterprises, in early 2004 about 50 small companies, delivers their products to be demonstrated and sold in the Nature Shop of Heritage Centre Ukko. The Friends of Ukko-Koli Association achieves a sales commission that is used to finance the guidance activities in the Heritage Centre. The handicraft suppliers take part of the responsibility on resources by financing the operations by maintaining their ownership to most of the products until they are sold to customers. The handicraft entrepreneurs in the role of subcontractors of the Friends association may also be considered as partners of the NP visitor guidance service network. The Association of the Friends acts as co-ordinator for the connections of these subcontractors as the key actor of the network. In the visitor service network the park itself and especially the Heritage Centre create the core playground, a new type of centre for development. Together the park and local society creates a network which strives for sustainable development. In this role the park and the Heritage Centre act as the ideal intermediary organisation for developing social capital.

9 Conclusions

Social sustainability is one of the three main dimensions of sustainable development. Successful managing for social sustainability as criteria of the development of a NP requires both conceptual and operational development in order to create valid indicators for monitoring the real social

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development. Social capital is created for example through network activity, in case it is successful from the point of view of the parties involved in operations.

Koli NP is one of the smallest NPs in Finland since it covers only 30 km² in size. The social networks of Koli NP for different aspects of management and operations of are remarkably wide and multidimensional. Social capital of the operational community is developed through network connections and activities. This includes development and transfer of know-how, skills for connections and horizontal and vertical partnerships. Also it includes special investments on enhancement of responsible relationship with nature among visitors by means of research, education and customer guidance. Connections between the research institutes are strong both in Finland and over the borders.

In case of Koli NP, network enhancement has been actively developed in the areas of research, planning, resource management and funding, environmental education and visitor guidance services. In Koli, a network of environmental education and visitor guidance activities has been developed as a special experiment. The latter includes a special programme for monitoring of the effectiveness of the activities. The visitor guidance network consists of co-operation of public administration, enterprises and the third sector society. The key actors of this network are the Finnish Forest Research Institute as the administrative and managerial officer of the NP and the supporting association of NP acting as the leading partner. Local visitor guidance enterprises (4 – 6) and handicraft enterprises (around 50) are attached to the network through the NP supporting association. Entrepreneurs bring along to the network their local knowledge and cultural skills that are of great importance to the NP operational profile. The supporting association and the entrepreneurs adjust their operations to the basic development vision of the NP.

The vast network model for the guidance services tightly unites the NP to the local community and the regional economy. Network activity enables better transfer of information, joint planning for development and strengthening of the internal trust between the parties. Also, common goals and contractual operation models lessen the future uncertainties of everyone's operations. NP is

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evolved to form a new type of a development centre that enhances economic and social sustainability in remote area that is struggling with unemployment and rural recession problems. In the broad sense, the NP is seen as an intermediary actor for gaining new social capital; the existence of park itself and especially development of park network connections will strengthen the accumulation of social capital on the sphere of park influence.

One of our initiatives is to develop the transboundary co-operation with the change of local information and maybe also some profile products for trade. The project can be called as enhancement for “national park products” to lower the borders and create better understanding. This may also contribute the creation of economical and social sustainability in the local societies. In the future, we would like to see in Heritage Centre Ukko more international park information, exhibitions and profile products from our partner-parks.

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Appendix 1.

Koli National Park - research network partners and projects during 2000 – 2003.

Partners in charge	Project	Product
Forest Research Institute	Development dynamics of natural forests	Establishing test-fields and collecting data
	Forest inventory	Spatial database
	Forest litter monitoring	Forest litter samples
	Pistil bloom monitoring	Experiment plot measurements
	Visitor monitoring and customer satisfaction	Research publications and general articles
	Snow monitoring	Establishing a monitoring field and collecting data
	Study on fauna in the national park	Research publication and general articles
	Vegetation and fungus succession of the Huhuhta slash-and-burn	Research publication and general articles
	Ground frost test	Establishing an experiment field and monitoring
	VMI extension plot	Establishing an experiment plot and measurements
Forest Research Institute and University of Joensuu	Birch genetical experiment	Measuring and management of the birch forest plots
	Nesting ecology of the birds	Establishing experiment plots and collecting data
	Dead wood study	Collecting data
	Effect of slash-and-burn on soil chemistry	Pro gradu –study and a research publication
	Key-biotope study	Licentiate study and research publications
	Tourism research	Research seminar publication General articles
	Environmental responsibility of the tourism entrepreneurs in Koli area	Pro gradu –study and research publications
	Ecology of the ants	Experiment field and monitoring

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	Planning model for slash-and-burn method in landscape management	Pro gradu -study
	European aspen clone	Pro-gradu study
	Ecology of the beaver	Pro gradu -study
Forest Research Institute and University of Lapland	Customer segments and their relationship with nature	Collecting data
Forest Research Institute and University of St. John and St. Marc, England	Park and local society	Pro gradu -studies (2)
Forest Research Institute and North Karelia Regional Environment Centre	The heritage landscape management; impact monitoring	Special management plan Collecting data General articles
	Insect monitoring on heritage biotopes	Collecting data General articles
University of Joensuu	Insect survey on the slash-and-burn	Research report and general articles
	Esthetical evaluation of landscape	General articles
Geological Survey of Finland	Geological survey	Koli ground soil map Koli rock map Koli geological guide map and nature trail
	Research extension	General research publications
	World Heritage Investigation	A global comparison on geological qualities of Koli
Finnish Meteorological Institute	Meteorological follow-up	General article
University of Jyväskylä	Koli and the artists	Research publication and general articles
University of Lapland, University of Kuopio	Fungus survey on key biotopes	Research publication
Kainuu Regional Environment Centre	Insect monitoring on heritage biotopes	Collecting data
Forest Research Institute and Forest Fire Monitoring Centre, Univ. of Freiburg, Deutschland	Slash-and-burn as a method in landscape management	Internet publication

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