

# Well-being, forestry and ecosystem services: A discussion paper

Liz O'Brien, Social and Economic Research Group

## Introduction

Well-being has become increasingly important in government policy in the last decade. Ecosystem services have also become a significant focus for government following the Millennium Ecosystem Assessment (MEA). Human well-being is a key aspect of the MEA approach. There is also a growing body of researchers who are exploring how the environment can have a positive impact on physical, mental and social health. This document focuses on the implications for forestry and the Forestry Commission, with the aim of proposing priority areas for future research. The objective of this paper is to stimulate discussion and help focus the well-being research agenda.

I conclude that there are three issues that need to be brought together when researchers and policy makers think about well-being, forestry and ecosystems. These are:

- Those who research and develop social policy on well-being do not often include in their work a focus on the environment and its positive impact on people's well-being.
- Those who research and develop environmental policy on ecosystem services and functions do not explicitly explore how these services contribute to specific aspects of people's well-being, particularly positive impacts.
- Researchers who study the environment and its positive impacts on physical, mental and social health do not focus on wider issues of well-being.

I suggest there is a significant need to work towards integrating these areas of research and policy making through interdisciplinary thinking and research.

## What is well-being?

There is no single definition of well-being and terms such as happiness and life satisfaction are often used instead. The United Kingdom (UK) government's Whitehall well-being working group set up in 2005 developed the following common understanding for policy makers (Steuer and Marks, no date p8):

*'Well-being is a positive physical, social and mental state; it is not just the absence of pain, discomfort and incapacity. It arises not only from the action of individuals, but from a host of collective goods and relationships with other people. It requires that basic needs are met, that individuals have a sense of purpose, and that they feel able to achieve important personal goals and participate in society. It is enhanced by conditions that include supportive personal relationships, security, rewarding employment and a healthy and attractive environment. Government's role is to enable people to have fair access now and in the future to the social,*

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*economic and environmental resources needed to achieve well-being. An understanding of the combined effect of policies on the way people experience their lives is important for designing and prioritising them’.*

This statement illustrates the complexity of well-being and the breadth it covers. Importantly for the Forestry Commission (FC), the forestry and environment sector it indicates that well-being is enhanced by a healthy and attractive environment.

## Why is well-being important?

Table 1 outlines the developing importance of well-being over the past decade. The interest in well-being spans a wide range of policy arenas such as health, community cohesion, education and justice. The UK government puts well-being at the heart of sustainable development (HM Government, 2005). The ‘Sustainable development indicators in your pocket’ report (DEFRA, 2008) provides a group of indicators that try to capture the breadth of well-being. These include indicators on education, health, social justice and overall satisfaction with life.

**Table 1: Developing importance of well-being (adapted from Michaelson et al., 2009)**

Year	Policy focus
2000	UK Local Government Act gives local authorities the power to promote social, economic and environmental well-being.
2002	UK Strategy Unit publishes a paper on ‘life satisfaction: the state of knowledge and implications for government’.
2003	Local Government Scotland Act provides local authorities with a well-being power.
2004	Academics in UK and US call for governments to use well-being measures in policy making.
2005	UK Sustainable Development Strategy commits the government to developing well-being measures
2006	UK local government White Paper ‘Strong and prosperous communities’ defines place-shaping role for local government and its partners as a way to promote the well-being of communities and people
2007	UK government publishes provision national indicators associated with well-being as part of sustainable development indicator set (Appendix B). Well-being explicit in some PSA (Public Service Agreement). DoH (Department of Health) Promote better health and well-being for all.
2008	HM Treasury publishes ‘Development in the economics of well-being’ and suggests a balance is needed between policies that promote well-being and policies that promote economic growth.

## How is well-being studied?

In academia there is much research concerning well-being amongst primarily psychologists and economists but also more recently neuroscientists. Planners, geographers, philosophers, sociologists, and health promotion specialists also study well-being. Economists have used the term human welfare which they suggest equates to broad well-being or happiness. Research in the United States and other countries such as Britain and Japan shows that although there has been an increase in living standards and income over the past forty years there has not been a corresponding rise in people’s happiness. Layard (2005) suggests that once a certain level of income is reached further increases are not associated with an increase in well-being.

A report on well-being for Department for Environment, Food and Rural Affairs (Dolan et al.,

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2006) outlined four key accounts for conceptualising well-being that use different methods from a range of disciplines in researching this subject area:

- Objective lists – theoretical ideas of what is of value and common to all individuals, outlining what is needed for objective well-being such as decent/adequate education, housing, health, and income. These are developed into indicators and used by government to collect data on changes/progress e.g. through Census data and other administrative sources usually at the population level.
- Preference satisfaction – this has been dominated by an economic focus on increases in Gross Domestic Product over the past few decades. The idea is that if an individual's income increases they are able to satisfy more of their preferences and it is assumed that this will improve their well-being.
- Flourishing accounts (sometimes known as psychological well-being) – this account of well-being focuses on people being able to reach their potential e.g. having meaningful goals, and developing as a person, this is also sometimes called eudaemonic well-being. Ryff and Keys (1995) developed a model to measure 'flourishing' based on six aspects: personal growth, life purpose, self acceptance, autonomy, mastery and positive relatedness.
- Subjective well-being – focuses on how people think (cognitive judgements about satisfaction with life as a whole or components such as health etc.) and what they feel (affective judgements about how happy people are) about their lives. National surveys ask people how satisfied they are with their life overall or how happy they are on a scale of 1 (not satisfied) to 10 (very satisfied); this provides a national population picture that can be compared between different countries.

## Where does the natural environment fit in?

Research over recent years has classified some of the key components of well-being including: family relationships, financial situation, work, community and friends, health and personal freedom (Layard, 2005). But much of the research on well-being does not include any aspect of the environment or the places in which people live and how this affects their well-being either positively or negatively. Environmental health researchers primarily explore the negative impacts of the environment on public health, focusing on issues such as air pollution, hazardous waste, water pollution, pests and diseases. However, there is an increasing amount of research on the positive impacts of the environment on health that suggests that contact with nature can be beneficial in terms of physical, social and mental health (Hartig et al., 1991; Ulrich et al., 1991; O'Brien, 2005). Unfortunately this research does not usually share and exchange findings with those studying well-being and well-being experts often pay little attention to nature and green spaces in their work. Researchers focusing on the positive impacts of the environment on health do not often include wider issues of well-being such as employment, community cohesion and family relationships. Natural and physical scientists are interested in the health of ecosystems and identifying the specific functions and services they provide to society, but they do not usually include the study of specific casual connections to human well-being. The Social and Economic Research Group (SERG) at Forest Research have been exploring the well-being benefits people derive from trees, woods and forests over the past five years and the group's future work will include more explicitly the specific aspects of different habitats that provide well-being benefits

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(O'Brien, 2004, 2009; O'Brien and Morris, 2009). There are concerns about the lack of contact certain groups have with nature including children, black and minority ethnic groups and low income groups. Louv (2005) uses the term 'Nature Deficit Disorder' to highlight how lack of contact with nature can have negative impacts on people in terms of their broad well-being.

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The MEA explored the consequences of ecosystem change over recent decades for human well-being through the work of over 1,300 experts in 95 countries from 2001 to 2005 (MEA, 2005). The MEA talks about the constituents of human well-being in terms of security, basic materials, health, good social relations and freedom and choice. It also outlines cultural ecosystem services including aesthetic, spiritual, recreational and educational services. There is a strong focus in the MEA on highlighting the degradation of ecosystem services over recent decades particularly in developing countries and the impacts this will have on well-being. However as mentioned above, there is currently a significant disconnect between current knowledge and management of ecosystem services and current knowledge of the societal well-being affects of these services. The social distribution of well-being impacts to diverse communities is becoming increasingly important and this distribution is likely to change in the context of climate change, such as increased storms, droughts, flooding and predicted sea level rise.

## Forestry policies

The three Forestry Commission (FC) country forestry strategies and associated implementation and delivery plans have a strong focus on well-being and its components such as health, education and community cohesion. In delivering its policies the FC in each country is undertaking a variety of work. Examples of activities include education and learning which is an important aspect of FC's work being undertaken through projects and programmes such as the Forest Education Initiative (partly funded by FC), Forest School, school visits to woodlands, and events such as nature walks, bat watches and fungi forays that are held in each forest district.

In terms of health the 'Active Woods' campaign aims to raise awareness about the use of woods for health purposes. The FC in each country are running a number of health projects such as Active England, Route to health, and Branching out in Scotland. The Cydcoed project in Wales also had a health component. Partnerships have been developed with the health sector through for example Primary Care Trusts (PCT) and Health Trusts and NHS Scotland. A new development is the NHS Forest which FC is working on with partners such as the Campaign for Greener Health Care, the Woodland Trust and Natural England. The idea is to plant trees in hospital and PCT grounds and link with existing, or develop new, woodlands near to health centres and hospitals that can be used by patients and local communities.

Community development work is taking place through the creation and enhancement of green infrastructure, the creation of woodlands on brownfield sites and projects such as Woodlands In and Around Towns in Scotland, the Community Forests in England, Newlands in Northwest England and Cydcoed in Wales. In these cases TWF are used to engage with communities, enable them to use and enjoy woodlands, involve them in decision-making about their local spaces, contribute to place-making through improvements to neighbourhood green spaces, enable

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communities to utilise woodlands for community events and cultural activities. For recreation new mountain bike trails, free ride areas, family cycle tracks, walking trails and play areas with imaginative play spaces provide a range of opportunities for people to enjoy TWF's.

In terms of ecosystem services a Holistic Ecosystem Health Indicator is to be developed by a DEFRA partnership (including FC) that involves 'integrating ecological and social indicators to provide a comprehensive assessment of ecosystem health' (DEFRA, 2007 p29).

## Gaps in research and policy

This paper has briefly outlined how current policy is increasingly focusing on well-being and that research concerning well-being, environment and health, and ecosystem services is not integrated. SERG's research has identified that communities and individuals tend not to talk about ecosystem services and functions and the specific components of well-being. Instead they talk about their everyday experiences and memories, and provide a narrative of their relationship with specific places over time. In order to start bridging this disconnect, the following ideas are proposed for discussion.

### Research

- Identify how scientific research and evidence based policy/environmental management can integrate knowledge of, and methods for assessing the provision of the ecosystem services of TWF's with knowledge and methods that capture societal well-being effects and their social distribution. This question is particularly important for FC in terms of sustainable forest management.
- Identify how the well-being and social distribution implications of different environmental policy/natural resource management alternatives are currently integrated into regional, national and international decision-making.
- Explore and identify the institutional barriers and intellectual/academic barriers that hinder a holistic focus on well-being.
- Examine the effectiveness of the different models of integration in terms of increasing natural and human systems resilience, adaptation to (dramatic) environmental change and minimising social and environmental inequalities.

### Policy

- Explore how evidence based forestry policy can integrate current knowledge of the provision of TWF ecosystem services with current knowledge of the societal well-being effects of the environment.
- Identify how the above can be done while taking into account the social distribution of ecosystems services and wellbeing benefits and tackling issues of environmental and social equity.
- Examine how policy can be created that explicitly links different types of TWF ecosystem services to people's well-being.

