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Federal Agency
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2011 Nature Awareness Study

Population survey on nature and biological diversity

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die Strategie

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Population survey on nature and biological diversity

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Hanover, July 2012

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DEAR READERS,

We live in turbulent times. And we encounter the subject of change on many different levels, be it the change in global political structures, economic restructuring, the demographic change or the climate change. To be able to face these changes, adjustment processes are required. If these are designed wisely and in due time, the change does not confront us with challenges which have to be mastered but also offers chances for our human community, for a sustainable economy, and for the sustainable interaction with nature and landscapes.

The decision of the Federal Government in favour of an energy transition is one such challenge. Therefore, it was obvious to include questions on this subject in the present 2011 Nature Awareness Study in Germany. The study verifies the willingness of the people to basically accompany and support the current, diverse change processes in nature and landscapes taking place in the scope of the energy transition.

The survey shows a marked interest of the population in subjects relevant to the development towards a society which is also committed to sustainability in other areas. Sustainable patterns of consumption are a key element in this process; more than fifty percent of the respondents state to be interested, for example, in the origin and the growing conditions of fruits and vegetables, the fisheries conditions or the environmental compatibility of textiles. In contrast, only a few percent of the total population does not feel concerned about these subjects.

This strong interest encourages hope that the step towards a more sustainable lifestyle, supported by informed (purchase) decisions and committed actions of every single person in everyday life, will eventually be achieved. At this point we also want to continue with our sustainability policy.

Finally, I would like to address the high willingness of becoming involved in nature conservation and protection on a voluntary basis which the study revealed. Markedly more than fifty percent of the Germans can imagine a voluntary commitment in this area or is already active. I enjoy living in a country that shows so much commitment. And I am looking forward to the transformations of time with confidence.

Best regards

Peter Altmaier

Federal Minister for the Environment, Nature Conservation and Nuclear Safety

DEAR READERS,

Nature is valuable, beautiful and useful to the people – or so, at least, states the majority of the population in the current 2011 Nature Awareness Study in Germany.

The answers show that nature is a true affair of the people's hearts. Especially arguments that emphasise the personal Good Life and aspects of justice meet with the strongest personal agreement among a wide range of reasons for the protection of nature. Therefore, the protection of nature means preserving a part of our happiness in life and a good life, and securing the same for future generations, beyond all ecological and economic "turf wars".

The further development of a successful national nature conservation policy is based on solid grounds, since nature conservation is considered an essential political task and a human obligation by a majority of the German population. The answers on the voluntary commitment in nature conservation show that numerous citizens are ready to make a personal and active contribution to nature conservation. Large parts of the population also support the more consistent use of regulations for the protection of nature, the reviewing of subsidies with regard to their environmental compatibility as well as the extension of communication and education measures.

In this regard, the most important aspect is the target group-specific communication to the population. In this study on nature awareness, socially better-off individuals state that they have a higher awareness of nature and an increased willingness to commit themselves to the protection of nature, as was the case in the first survey in 2009. Environmentally friendly behaviour should not only be promoted but strongly demanded.

But also the socially weaker individuals whose nature awareness is not that strong have to be convinced of the benefits of nature conservation by realistic offers of, for example, leisure and adventure activities in return. Easy access, for example to park facilities in residential areas is especially important for children who are otherwise not able to have a corresponding experience outside of their urban surroundings.

First of all, this brochure is intended for the interested professional public of nature conservation players but also contains exciting information worth reading for people who do not belong to this circle, because nature conservation is a task of our society as a whole. The moral principles connected with it need to be made aware and be adjusted constantly in dialogue with all social groups. I hope that all readers find lots of inspiration for a common approach to nature protection.

Best regards

Prof. Dr. Beate Jessel

President of the Federal Agency for Nature Conservation

Summary: Central results and conclusions drawn from the 2011 Nature Awareness Study

The second national survey on nature awareness in Germany was carried out between November 2011 and January 2012. It is based on a representative sample of 2,031 persons of the German-speaking resident population from the age of 18 years taking into consideration all socio-demographic segments and integrating people of all regions in Germany. The central results and conclusions are summarized in the following chapters.

I. Important study findings

A large majority of the respondents consider nature conservation as **an important political task** (86 %) and a human obligation (95 %).

Nearly one-third of the respondents think that nature must not stand in the way of economic development. Markedly fewer respondents (43 %) compared to 2009 (55 %) think that enough is being done for the protection of nature in Germany.

Nature is a **valuable asset** to a majority of the respondents. It provides services to the human being and must be used in a way so as to permanently safeguard the diversity of flora and fauna as well as their habitats, according to 93 % of the respondents.

Asked about the most important services the leading answer is air to breathe (37 % of the answers) and the provision of food (28 %). Relaxing and recreation (26 %) as well as health (11 %) are mentioned more frequently – i. e. aspects which for many people are part of a good and fulfilled life.

In addition to the health and recreational aspects, **important personal reasons** for the protection of nature also include the maintenance of the basis of life of future generations and the right of existence of plants and animals. With regard to the inquired reasons for nature conservation, so-called "arguments of the Good Life and Justice" are preferred among the population over economic arguments which presently play an important role in the discussion on nature conservation.

Different surveys show that the **energy transition** towards a supply with mainly renewable energies is supported by a majority of the people polled (agreement between 85 % and 94 %). This study confirms that the possible consequences for nature and landscapes caused by the development of renewable energies, such as the building of more offshore (87 % agree) and onshore/land-based (79 %) wind parks, expanded areas of photovoltaic plants outside of residential areas (77 %) or the intensified cultivation of energy crops (rape-seed: 67 %, maize: 63 %) are accepted on a general level, too. A high percentage of respondents remain rather critical of the building of overhead power lines (54 %) and the increased economic use of forests (60 %).

Almost fifty percent of the citizens interviewed have hardly noticed any changes in their surroundings in the past twenty years, although severe **changes in nature and landscapes** took place, for example, through the growth of residential areas and industrial zones, the development of traffic routes or expansive measures of renaturation. About one quarter of the respondents mainly noticed deteriorations, almost half as many think that the condition of nature and landscapes in their region has improved. A similar number was not willing to make a judgement on this question.

From the point of view of the respondents, especially companies and the industry (76 % rate the commitment as insufficient) but also the federal and regional governments (58 % and 52 %, respectively) as well as the citizens have to commit themselves more to the protection of nature. The majority of the respondents (62 %) feels personally responsible for the protection of nature and is willing to make a personal contribution, either with regard to **consumer behaviour** or through personal commitment. There is a high interest in information about ecologic and environmental compatibility of consumption options. About half of the population can imagine becoming **actively involved** in the protection of nature, especially through practical work. This includes almost one-fifth of those who consider themselves already actively involved.

71 % of the respondents have already heard about the term **"biological diversity"**, but only 42 % know what it means. Those who understand the term largely use it synonymously with the diversity of species (96 % of answers). The diversity of ecosystems and biospheres is frequently mentioned as well (68 %); in contrast, genetic diversity is mentioned less frequently (37 %). However, the share of respondents who state habitats and ecosystems has almost doubled and, with regard to genetic diversity, even tripled compared to

2009. Therefore, recognition of the complex meaning of the term has increased. It is possible that the increasing presence of the topic in the media has spread the meaning among the population.

The majority of the citizens (67%) are convinced that the biological diversity is decreasing and considers its preservation a social task of prime importance (71%). There are marked parallels to corresponding similar questions on the protection of nature in this study. In principle, the willingness to align one's actions, at least in part, with the goal of preserving nature and biological diversity is high. There is a high personal willingness especially with regard to simple proposals for action: 89% of the respondents state that they would stay away from protected areas to protect biological diversity, and just as many would preferably buy regional fruits and vegetables. 75% of the respondents would change the brands of cosmetic articles and drugstore items if they found out that the production had endangered biological diversity.

However, the aim stated in the National Strategy for Biological Diversity that at least 75% of the citizens will be aware of the meaning of biological diversity and will more and more align their activities with this goal by 2015 is far from being achieved. The indicator introduced to measure the achievement of the goal by collecting individual data on knowledge, attitude and willingness to act, and combining them in an overall index, reached a value of 23% in the 2011 survey. It has practically remained unchanged compared to the 2009 survey (22%).

From the **socio-demographic point of view** there are in part significant differences between the respondents: elderly people and the well-educated have a particularly close relationship with nature. This is often associated with a high appreciation for nature and biological diversity as well as a strong orientation towards nature conservation. The understanding to also assume personal responsibility for the protection of nature is stronger in this segment than in the remaining population. The readiness to align everyday activities, at least in part, with the goal of preserving nature and biological diversity increases with education and income. The lowest share of nature-loving people is in the group of the youngest respondents and among the people with a low income, as was the case in 2009. The sense of personal responsibility for the protection of nature is also significantly lower in these groups, and many think that their contribution would not make any difference.

An analysis differentiated according to **social milieus**[1] shows a significant difference in the nature awareness of the population: in the Socio-ecological and Liberal Intellectual milieus (each 7% of the total population) the closeness to and appreciation of nature is especially high. Members of these two milieus are more willing than others to assume responsibility and to contribute to the protection of nature and biological diversity through personal commitment. The Socio-ecological and the Liberal Intellectual milieus are contrasted by the Precarious (9% of the population) and Escapist (15%) milieus, where the closeness to nature is significantly lower, the protection of nature and biological diversity is rarely considered a highly important matter, and the willingness to make a personal contribution is rather low.

II. Suggestions with regard to strategies and measures

Processes of social transformation and nature conservation

The results of the 2011 survey on nature awareness verify that there is willingness among the population to support and participate in the shaping of social change processes – as shown by the examples of renewable energies, voluntary commitment and consumer behaviour. In order for this to be achieved, a stronger integration of aspects of nature conservation in the present discourse of social transformation is essential.

The vast majority of the German people want both: **renewable energies and preservation of nature and landscapes**. However, it has to be assumed that the implementation of specific measures such as the planning and building of wind energy plants and overhead power lines will not always take place locally without causing a conflict situation. The corresponding participation processes and forms of participation are therefore all the more important for politicians, administrative bodies and the German citizens to find a common way. This is the only way to carry out the necessary implementation work at the regional and local level in an appropriate and timely manner. And this requires an open and detailed communication about what the people of a region have to expect. They are to be integrated in the decision-making process with regard to the planning and development of all measures in the course of a consistent and early upstream level of participation. This is the only way to make the energy transition sustainable, i.e. environmentally and socially compatible.

1 The Sinus-Milieu® model was used (see chapter 1.2)

In wide sections of the population the interest in **information on sustainable consumption** is high, according to this study. This especially refers to foods. It would be a good idea to follow up on this in the communication of nature conservation and to integrate, for example, the conscientious buying of regional or ecological products much stronger in the context of nature conservation. Many respondents also show a great interest in the environmental compatibility of textiles. Here it is important to communicate the relationship between modern raw material production for the manufacture of textiles and aspects of nature conservation through young, well-funded target groups. Furthermore, it is recommended to focus on partners in the field of companies and consumer protection to launch information campaigns or joint projects in order to establish nature conservation even more as a "consumer subject".

The willingness to make a **voluntary commitment** to the protection of nature among the population is high. This applies to activities in the private sector as well as to activities with a stronger orientation towards the public welfare sector. In order to encourage concrete action, it is necessary to address specific target groups and to communicate what can be done for the protection of nature and species, for example, in one's own garden or living environment. On the other hand, new forms of cooperation should be developed in institutional nature conservation to give people with less time and lower willingness the chance of a long-term commitment. Also, offers are needed which do not require so much previous knowledge and adjustment to the professional conservationist "sub-culture" that the interested person is totally unfamiliar with.

The study verifies that the interest in practical activities is high and that especially younger persons under 29 years of age can imagine becoming more active in direct contact with nature. Since especially the older persons state that they are already active in this field, voluntary projects across generations are possible in which older persons impart their knowledge and experience to younger generations. Since the benefit of voluntary work is of greater value for the professional career of young people than of other age groups, corresponding advanced training and certification programmes should be specifically developed for this target group.[2]

Change of landscape in nature conservation discourse

Nature, landscape and use of landscapes interact with the general social conditions and are subject to constant change. The preservation of valuable habitats is as important as the development and modernization of environmentally compatible forms of use adjusted to the necessities of a sustainable development in order to safeguard biological diversity and the services provided by the ecosystems. Nevertheless, this gives rise to conflicts time and again. The different causes of changes and variations of the landscape should be discussed in more detail in the scope of nature conservation planning and discourse – especially with a view to the consequences of the energy transition but also to other socio-political change processes and the climate change.

According to this study, almost half of the respondents have not noticed any changes in the landscape or its appearance during the past two decades. This may be due to the urban lifestyle of many respondents, a weaker personal bond with nature or rare stays in the countryside. On the other hand, one can imagine that people agree to these changes as a part of their familiar environment, get used to it and finally accept the existing situation.

Asked about images of nature, most people have particular images of landscapes in mind (see 2009 study on nature awareness). For nature conservation this means that the communication has to focus more strongly on images of landscapes and the occurring processes of change. Therefore, the emphasis must not be put only on negative changes such as fragmentation of landscapes or monocultures but also on positive aspects such as, for example, renaturation measures. The role of the people as actively shaping nature and the environment in the course of a sustainable social transformation should be emphasized more than before, and their action and organisational skills should be promoted in the scope of an education towards a sustainable development.

Since arguments especially of the Good Life which make nature valuable for a successful and fulfilled human life were stated as personal reasons for the protection of nature, and arguments of Justice and the human obligation to protect nature are popular among the population, it is recommended to make

2 A good example for the certification of voluntary commitment is offered under www.freiwillige-in-parks.de/dateien/u2/Anleitung_Kompetenzbilanz.pdf.

increased use of these lines of argument in the communication of nature conservation.

Good life in harmony with nature – Quality of living for everybody

Nature is a very valuable asset for the German population. Many German citizens feel a close relationship to nature and appreciate its recreational value and the enjoyment of experiencing it, and there is a high level of willingness to commit oneself to the protection of nature. This especially applies to well-educated persons and people with high income. However, this does not mean that their lifestyle is actually more compatible with nature and the environment than the lifestyle of other members of society. Financially better-off persons and households have a worse natural and environmental balance on the whole due to their higher level of consumption. This high level on the one hand, and the understanding of one's own responsibility to protect nature on the other make the higher social milieus an important target group. Activities to protect nature should be promoted but also consequently demanded in this group due to its greater individual creative potential.

Whereas the experience of nature remains largely alien and impenetrable to population groups, which are not only disadvantaged with regard to income and education, and therefore cannot benefit from it. Communicating subjects of nature conservation to socially disadvantaged groups which are not closely tied to nature and activating their commitment can only be achieved on the basis of a stronger awareness of the practical and sentimental value ("Good Life") of nature. Specific and openly accessible offers close to the living environment have to be created for this target group, especially taking into consideration their everyday needs. These everyday needs may include leisure activities and adventure programmes, educational activities for children and the entire family or even, for example, kitchen garden projects in the city.

Specific outdoor offerings for young adults who are not in close contact with nature should be enhanced so that they can integrate such offerings in their familiar leisure activities close to home. Easy access to nature can be achieved by means of nature-oriented green belts and green areas in residential zones which offer the possibility of leisure activities beyond the experience of nature.

These are especially important for children whose parents are not able to offer them the experience of nature outside of their largely urban living quarters due to diverse social disadvantages and excessive strain. In order to bring more nature experience areas and quality of life to the cities, innovative protagonists in the fields of urban planning, nature conservation and politics are required to secure these open spaces.

On the whole, the focus should be put on approaches that enable an equitable access to nature and the experience of nature. The main task of all nature conservation players remains the conscious use of a form of communication which is specifically addressed to the individual social target groups and their attitudes towards nature conservation.

In addition, health and recreation in nature are for many people among the most important reasons for nature conservation. Also, more emphasis should be placed on these aspects as central elements in the communication of nature conservation. With an increasingly health-conscious society, specific communication strategies for totally different target groups can be developed and implemented.

Safeguarding of biological diversity as a component of the sustainability principle

Safeguarding biological diversity is a complex political and social task which – according to the survey results – is not easy to understand and communicate in all its complexity. Protective measures in the stricter sense are one component of sustainability; other important and equivalent components are a sustainable use of nature and the fair balance of advantages and disadvantages of its use. The broad scope of the approach makes the communication of goals and measures of the National Strategy for Biological Diversity to different target groups quite a challenge: each mentioned component requires careful examination and specific communication activities.

The results of the current survey show that enormous efforts are still required in the areas of education and communication in order to get closer to the goal defined for the biological diversity in the National Strategy: at least 75 % of the population is supposed to consider the preservation of biological diversity a priority social task and to align its behaviour accordingly

by 2015. Thus, a communication structured according to subjects and target groups has to be continued. The term “Biological Diversity” should be used with special emphasis in communication strategies and supported by content, striking images and “stories” to facilitate the development of a personal view.[3] The focus topics could also be integrated more strongly in the communication of sustainability since it has already reached large parts of the population and the component of the sustainable use of biological diversity provides good follow-up possibilities.

The protection of biological diversity is a task for society as a whole. The enhanced cooperation with the industry and companies (initiatives such as, amongst others, “Biodiversity in Good Company” or “Unternehmen Biologische Vielfalt”) and other social players in the scope of the implementation of the National Strategy for Biological Diversity should be developed in a consistent way to gain more new players for nature conservation. It is recommended to use the results of exemplary initiatives and model projects in the scope of communication activities.

Furthermore, the UN Decade on Biodiversity (2011-2020) which started in 2011 sets an individual framework with its broad approach which does not only address the well-educated who are interested in nature and the environment but also the social milieus and target groups which have no close relation to nature and are usually not receptive to the communication of nature conservation.

This study on nature awareness as well as a progress report on the indicator used to measure the social awareness of the importance of biological diversity is available on the Internet (www.bfn.de/naturbewusstsein.html). A scientific final report including detailed analyses of the survey results will also be published on the Internet in autumn 2012.

3 Interesting aspects are presented in: Lichtl, M., Rohr, C. und Kasperczyk, N. 2009: Leitmotive für eine moderne Kommunikation zur Biologischen Vielfalt. Naturschutz und Biologische Vielfalt, Heft 80, Landwirtschaftsverlag, Münster.

1 Introduction

1.1 Aim and concept

This brochure presents the results of the representative 2011 population survey on nature awareness in Germany carried out on behalf of the Ministry for the Environment, Nature Conservation and Nuclear Safety and the Federal Agency for Nature Conservation. 'Nature awareness' is used as a term for all memories, perceptions, emotions, ideas, thoughts, assessments and evaluations associated with nature. As our society is subject to continuous socio-cultural change, nature awareness is continuously changing as well. In addition, the attitude towards nature is also influenced by the current discussions on our relationship to nature and the environment. The study on nature awareness was therefore designed as an instrument to observe changes in the relationship of the Germans to nature in a continuous way, i. e. at regular intervals. This ensures that the data used in nature conservation policy as well as in communication, education and public relations with regard to nature and nature conservation is always up-to-date and empirically verified.

The first nationally representative survey on nature awareness was carried out in 2009. At that time, data on the level of knowledge and the prevailing attitude towards biological diversity in the population and the extent of willingness to personally contribute to the protection of nature was collected for the first time. The term 'Biological diversity' includes the diversity of species, habitats and genetic information. Whether the social awareness of the meaning of biological diversity has progressed is measured by means of the so-called 'social indicator'. This indicator was determined by the Federal Government upon resolution of the National Strategy on Biological Diversity (NBS) in 2007. Its development is documented at two-year intervals in NBS indicator reports (last report: BMU 2010) as well as in the NBS progress reports Germany has undertaken to prepare.

The current survey includes questions which were taken from the 2009 survey on the attitude towards nature in the population, emphasizing the chronological development. In addition, new subjects were integrated which have taken on new relevance in light of the political decision to transform the energy system and the increasing social discussion of alternatives to our current lifestyle and economy.

The vast majority of the population had already been aware prior to the Fukushima incident that energy has to be used carefully and that an increased use of renewable energy sources is required for reasons of climate protection. In view of the risks of nuclear power which became evident in Fukushima once again, the political decision was made to permanently switch off the eight nuclear power stations which had been shut down before or after the catastrophe due to re-engineering work, and to gradually disconnect the remaining nine plants according to a defined schedule. This comprehensive response is unique in the world and as a result means that the transformation of the energy system in Germany has to be done more quickly than was originally planned. However, conflicts resulting from the transformation become more and more obvious. An argument which is stated over and over again by those who criticize the specific measures in respect of the energy transition refers to what they see as considerable interventions in nature and landscapes. This is one of the issues which were integrated in the current study on nature awareness.

The understanding, however, that it is not sufficient to develop climate-compatible energy sources is increasing. Our lifestyle and economy with their massive interventions into nature needs to be reviewed as this excessive use of the natural basis of life will eventually lead to a loss of quality of life. In addition, the on-going financial crisis has caused a feeling of insecurity in broad sections of the population as to whether our economic system as a whole will be viable for the future. In this context, the question arises to what extent the population is willing to support a change to a more sustainable lifestyle and economic system. From a broad spectrum of possibilities of action people can use to contribute to a more ecologically and environmentally friendly development, the current study focuses on two, namely the interest in a nature and environmentally compatible consumer behaviour and the willingness to commit oneself to the protection of nature.

Another novelty in the current study is the query whether and to what extent the respondents know and are aware that nature also fulfils vital and essential functions for human society and provides basic services which, among experts, is called 'ecosystem services'.

These will be integrated in the current social and political debate through the presentation of the results under the following headlines:

- **Social transformation**
  How does the German population assess the energy transition? To what extent are the associated changes in the landscape accepted? How strong is the interest in learning about the possibilities of developing a way of consumption that is compatible with nature and the environment? How high is the willingness to personally commit oneself to the protection of nature? What kinds of commitment would be possible? What do those who are willing to get involved more strongly expect from nature conservation activities?

- **Changing landscapes – endangerment and conservation of nature**
  Are changes in the landscape noticed? If yes, how are they assessed? Is nature perceived as being endangered? How important is nature conservation? Who is held responsible for nature conservation? How are specific measures of nature conservation evaluated?

- **Good life in harmony with nature**
  What is nature to the Germans? How important is it in their lives? How widespread is the knowledge about the services rendered by nature? To what extent is the use of nature accepted?

- **The Challenge: to preserve biological diversity**
  How familiar is the term 'biological diversity' in Germany? What does it mean? How aware are people of the endangerment of biological diversity? How much social significance is attached to its protection? How high is the willingness to personally commit oneself to the preservation of biological diversity

Important findings of the study are summarized at the beginning of this brochure and used as a basis to recommend strategies and measures, especially with regard to political, educational and public relations work in respect of nature and biological diversity.

The images of nature and what nature means to the life of the Germans was analysed in detail in the scope of the 2009 study on nature awareness. This part of the survey was reduced in the current study since it was assumed that the general idea of nature and its meaning in everyday life remain largely unchanged over a longer period. In this respect, the results of the first study on nature awareness remain up-to-date and relevant.

The survey, the results of which are presented here, was carried out between November 2011 and January 2012. The survey included 2,031 people of the German-speaking resident population from the age of 18 years. The sample is representative since all socio-demographic levels were taken into consideration and people from all regions in Germany were interviewed. With regard to the selection of the respondents it was made sure that all socio-cultural orientations in accordance with their share in the population were included. To ensure the socio-cultural representativeness and as categories for a differentiated socio-cultural analysis, the social milieu model of Sinus-Institute was used as basis, as in the 2009 study, but in an updated form (see chapter 1.2). Statements on different attitudes in different social milieus can be made on this basis and specific recommendations can be derived for a communication of nature conservation according to the target group.

Both the current and the first study on nature awareness are available on the Internet (www.bfn.de/naturbewusstsein.html). A scientific final report including a detailed analysis of the survey results will also be published at the end of the project. A report on the results of a quantitative focus study on the understanding and meaning of nature among young adults with migration backgrounds will also be available on the Internet. The survey data will be available to the interested scientist through the data archive for social sciences of GESIS Leibniz Institute after completion of the research project in October 2012.

1.2 Social differentiation by social milieus

How people experience, feel and use nature does not only depend on their age or their level of education. Beyond socio-demographic factors it is especially the basic values and ways of life which lead to different attitudes and approaches to nature. This was already evident in the 2009 study on nature awareness where an analysis was carried out on the basis of the milieu affiliation of the respondent. The Sinus-Milieus® were therefore also integrated in this study as a socio-cultural feature of distinction. Statements on the Sinus-Milieus® are centrally presented with the results and are displayed on a light-green background.

The determination of the target groups by the Sinus Institute is based on an analysis of the different social environments (lifeworlds) in our society. This includes the basic values as well as everyday attitudes towards work, family, leisure and consumption. Social milieus, however, do not obviate the need for social class analysis. A radical 'isolation' of 'objective' and 'subjective' living conditions is hardly upheld anymore today (see e.g. Geißler 2008: 108). One rather assumes a connection between milieu affiliation and social status (Hradil 2006). The milieus (see figure 1) are positioned in a plane spanned by two axes, the socio-cultural basic values and the social status. The higher the location of the milieu in figure1, the higher the level of education, income and occupational group of its members; the further to the right its position, the more modern their basic values in a socio-cultural sense.

The horizontal axis of the Sinus-Milieu Model® shows the change of values in Germany in the 1950s in the form of a consolidation of the respective defining values into corresponding basic orientations. Thus, the basic orientation describes value patterns or value hierarchies – i.e. cognitive and mental dispositions. Basic orientations do not only include values in the stricter sense (such as duty, achievement, family, safety, order, self-realisation, participation, autonomy etc.) but also views held in everyday life and aims in life.

Basic orientations which define a person during his/her socialisation phase take great influence on the way of life and way of thinking later in life – whether in the form of adaption or dissociation. Hence, largely traditional values based on duty and order (Clinging on to & Preserving) was important to the 1950s' generation. Standard of living, status and property gained more social importance in the 1960s, as shown in the section Modernisation (Having & Enjoying). In addition, the central segment of the axis refers to the increasing importance of individualization in the 1970s when self-realisation, emancipation and authenticity became the new social concepts (Being & Changing). Pleasure, multiple options, acceleration and pragmatism were the central elements of the social value range in the 1980s and 1990s. Increasing complexity and insecurities (e.g. in the context of digitalisation and globalisation) have become new challenges since the turn of the millennium, which are tackled by different kinds of reorientation, e.g. exploration, re-focusing or the formation of new syntheses.

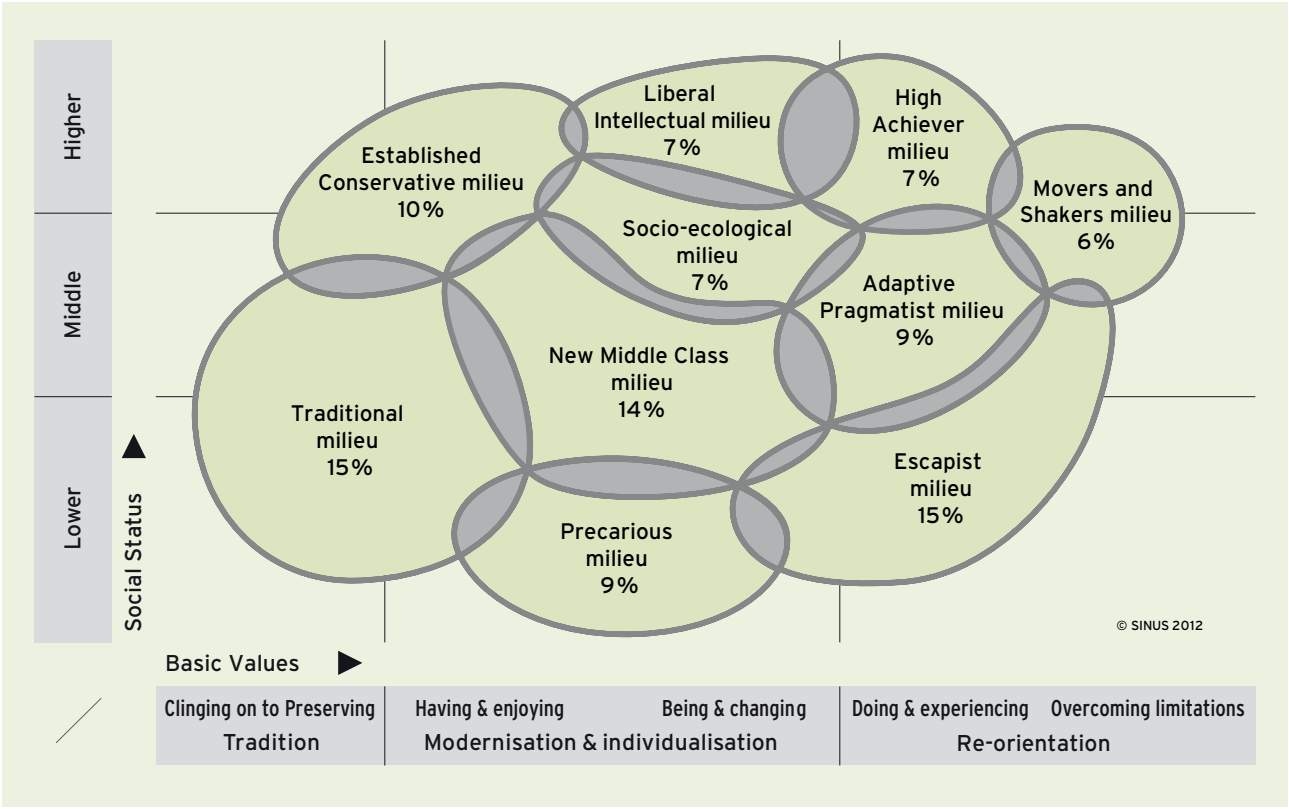

Figure 1: Social milieus in Germany: Sinus-Milieus® 2012

Since society is subject to constant change, the Sinus-Milieu Model® is updated on a regular basis. The last adjustment to accommodate the social reality was carried out in 2010 due to the structural and cultural developments during the past decade.

A brief profile of the current Sinus-Milieus® on the basis of their basic orientations is given in Table 1.

1.3 Comments on the report

The results of the survey on nature awareness are presented and discussed in the following chapters. The findings are mainly presented in charts. With regard to questions with multi-level answer scales (see below), the distribution is shown for all options. Additional tabular evaluations are inserted in the

Table 1: Brief profile of Sinus-Milieus®[4]

Established Conservative milieu 10 %	The classical Establishment: responsibility and success ethic; aspirations of exclusivity and leadership versus tendency towards withdrawal and seclusion.
Liberal Intellectual milieu 7 %	The fundamentally liberal, enlightened educational elite with post-material roots; desire for self-determination; an array of intellectual interests.
High Achiever milieu 7 %	Multi-optional, efficiency-oriented top performers with a global economic mindset and a claim to avant-garde style; high level of IT and multi-media.
Movers and Shakers milieu 6 %	The unconventional creative avant-garde: hyper-individualistic, mentally and geographically mobile, digitally networked, and always on the lookout for new challenges and change.
New Middle Class milieu 14 %	The modern mainstream with the will to achieve and adapt: general proponents of the social order; striving to become established at a professional and social level, seeking to lead a secure and harmonious existence.
Adaptive Pragmatist milieu 9 %	The ambitious young core of society with a markedly pragmatic outlook on life and sense of expedience: success oriented and prepared to compromise, hedonistic and conventional, flexible and security oriented.
Socio-ecological milieu 7 %	Idealistic, discerning consumers with normative notions of the 'right' way to live: pronounced ecological and social conscience; globalisation sceptics, standard bearers of political correctness and diversity.
Traditional milieu 15 %	The security and order-loving wartime/post-war generation: rooted in the old world of the petty bourgeoisie or that of the traditional blue-collar culture.
Precarious milieu 9 %	The lower class in search of orientation and social inclusion, with strong anxieties about the future and a sense of resentment: keeping up with the consumer standards of the broad middle classes in an attempt to compensate for social disadvantages; scant prospects of social advancement, a fundamentally delegative / reactive attitude to life, and withdrawal into own social environment.
Escapist milieu 15 %	The fun and experience-oriented modern lower class/lower-middle class: living in the here and now, shunning convention and the behavioural expectations of an achievement-oriented society.

4 Including share of total population in percent

socio-demographic segments for individual questions of specific relevance. These are generally based on the highest answer level ("strongly agree") with regard to questions which have a uniform agreement/disagreement scale since it covers an unconditional agreement and therefore a more clearly defined attitude than the second answer level ("rather agree"). Significant differences between the respondent groups (e. g. male/female, low/middle/high education[5]) generally show at the highest agreement level. The tables state the percentage of agreement with regard to the respective statement (e. g. "Nature is part of a good life").

Whether deviations of individual segments from the average population (Ø) are statistically significant depends on the number of respondents in the respective group, on the one hand, and on the level of agreement, on the other. Generally, 5 % represent a statistically significant deviation; the statistical uncertainties and thus the significance threshold are generally lower in large population segments. 10 % and more signify a strong deviation. Deviations of more than 5 % or more than 10 % from the average population are indicated in colour in the tables.

The charts and tables always state percentages rounded to whole numbers. This approach may produce values which when summarised in all answer categories of one question are over or under 100 %. In order to balance such cases, adjustments of max. 1.4 percentage points in the category "don't know/no comment" were made. In very rare cases this was determined to be insufficient, and another, usually the highest, value had to be slightly adjusted.

- Multi-level answer scales: Many questions had to be answered based on four-level answer scales. It can be assumed that the two poles (unconditional agreement or disagreement) are only chosen by respondents who have a firm opinion (or tend to make clear statements) and that agreements to the middle answer scales can only be interpreted as trends. A neutral, middle option was not offered in order for the trends to become more visible. A five-level scale was used for some of the questions of a separate research project on 'biological diversity'.
- "Don't know" category: The new answer category "don't know" which was integrated in this 2011 survey in almost all questions was not explicitly offered to the respondents. It was checked whenever a person was unable or unwilling to answer the question.
- Social desirability: Nature has an almost universally positive connotation, as was shown in the 2009 study on nature awareness. The conservation of nature can be considered a social norm. Thus it can be assumed that answer distortions occur in a survey on "Nature and nature conservation", i. e. answers are possibly given that reflect the perceived social standards but not necessarily one's own opinion. This effect should be more pronounced in persons who are particularly concerned about social conformity than in self-confident and/or rebellious persons.

5 The following categories were use: low education – no graduation, secondary modern school/primary school certificate; medium education – secondary school certificate, polytechnic secondary school certificate grade 10, technical education qualifications; high education - general or subject-specific university entrance qualification, university degree or completed course of studies at University of Applied Sciences

2 Society in transformation...

Launched in Rio de Janeiro in 1992, the United Nations Conference for Environment and Development sees its 20st anniversary in the summer of 2012. However, a description of the world's basic environmental issues today would differ only marginally. Although policy makers both at the national and international level have stepped up their efforts to deal with pressing matters during the past two decades, the task of improving the living conditions of all people while at the same time conserving nature and vital resources has become even more challenging (cf. MEA 2005 for example). It is against this backdrop that the German Advisory Council on Global Change (WBGU: Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen) has commented that "the transformation toward sustainability must be a Great Transformation" (WBGU 2011: 62).

Within the framework of the energy transition, Germany has seen far-reaching political decisions being made at the national level to render our lifestyle and general economy more sustainable. The transformation of the energy system, however, can only be successful if endorsed by all citizens. Therefore, decision makers will need to know in how far the energy transition enjoys acceptance among the general population. Increasingly harnessing the power of wind, solar, water and biomass energy and other renewable sources calls for the erection of new facilities to collect and convert these. In addition, the cultivation of energy crops has to be ramped up if the turnover of green fuels and gas is to be increased, all of which necessitating changes to, and interference with, our nature and landscapes. This is also true for the construction of storage media and distribution networks required for power transmission, including new overhead power lines to connect future geographic centres of energy production located in the north of Germany. Therefore, a critical question to be addressed in this chapter is how the general population sees the change in our nature and landscapes that comes with the intensified use of renewable sources of energy. The third chapter will then probe the question as to whether changes in the landscape, made for whatever reason, are perceived by the population, and how they are evaluated.

Rebuilding the energy system is a huge step towards a sustainable lifestyle and economy – but it is not more than a first step. And while efforts in this direction are being made in other fields, only a small part of the population and a handful of companies are determined to gear their lifestyle and economic strategy to a more nature and society-oriented approach. A policy of actively managed change, which has to tie in various dimensions of everyday life, relies on widespread popular acceptance. Possible ways of supporting this policy include pursuing a more ecologically sound approach in day-to-day living, or getting involved in nature and environmental protection. That's why the present survey, on the one hand, aims to fathom civil interest in information regarding ecologically and environmentally friendly consumer behaviour, for instance the ecological compatibility of textile products or the origin and growing conditions of fruits and vegetables. On the other hand, the willingness to contribute to nature conservation and the associated motives and expectations, the preference for different activities as well as possible backgrounds are explored. The question about the individual willingness to act responsibly in everyday life and to voluntary commitment will be raised again in chapter 5 when discussing the topic of biodiversity protection.

2.1 The energy transition

Germans are in support of the energy transition

The energy transition in Germany enjoys strong public backing:

In mid-2011, the TNS Infratest polling institute was tasked by the Agentur für Erneuerbare Energien e.V. with investigating attitudes in the general population as to the importance attached to "renewable energy forms being exploited and developed further" (TNS Infratest 2011). 43 % of the respondents answered with "extremely important", 33 % selected "very important, and 18 % "important" (total: 94 %). Some 6 % rated the increased exploitation and development of renewable energy forms as "less important" or even "not important at all".

Within the scope of an environmental awareness study in 2010, the level of acceptance toward the statement "What we need is a consistent transition to renewable energy forms" was explored based on a four-level scale of possible answers; this was before the Fukushima incident and the German decision to implement the energy transition. At the time, 38 % of the respondents answered "strongly agree", another 47 % "rather agree". 13 % disagreed, 2 % strongly disagreed (BMU and UBA 2010).

Changes in nature and landscapes necessary to bring about the energy transition are largely accepted

This study was based on the question about the acceptance of specific measures as a consequence of the energy transition which affect nature and the landscape: possible changes of the landscape resulting from the development of renewable energy sources such as the increase of wind energy plants on the mainland and in the sea, expansion of maize and rape-seed fields or the increasing number of biogas plants in the countryside are accepted by the majority of the respondents (see figure 2). Although this result does not provide evidence as to how people would respond if they were affected by specific projects in their closer living environment; on an abstract level, however, the acceptance of such changes is high.

An exception is the increase in overhead power lines and the intensified logging to obtain wood energy, where the level of acceptance is as low as 42 % and 35 %, respectively. As for the overhead power lines, this is hardly surprising because they are linear works of engineering that are widely visible landmarks. The attitude toward increased logging isn't very surprising either given the particular affection Germans feel for their forests, as was demonstrated by the study of Kleinhückelkotten et al. (2009) amongst others: 82 % of those interviewed enjoyed the forest for its vitality and diversity, while 73 % quoted using it for relaxation and recreation. Industrial-scale logging is opposed by circa 60 %. It should be noted, however, that the survey did not discriminate between acceptance of an increased rate of energy wood logging in intensively used woodland on the one hand, and in tree populations of particular value from the viewpoint of nature conservation on the other hand. Therefore, the form and extent of additional energy wood logging envisioned by individual respondents remains obscure.

The degree of approval is of the same magnitude as the results obtained in the aforementioned TNS Infratest 2011 survey, which investigated the acceptance

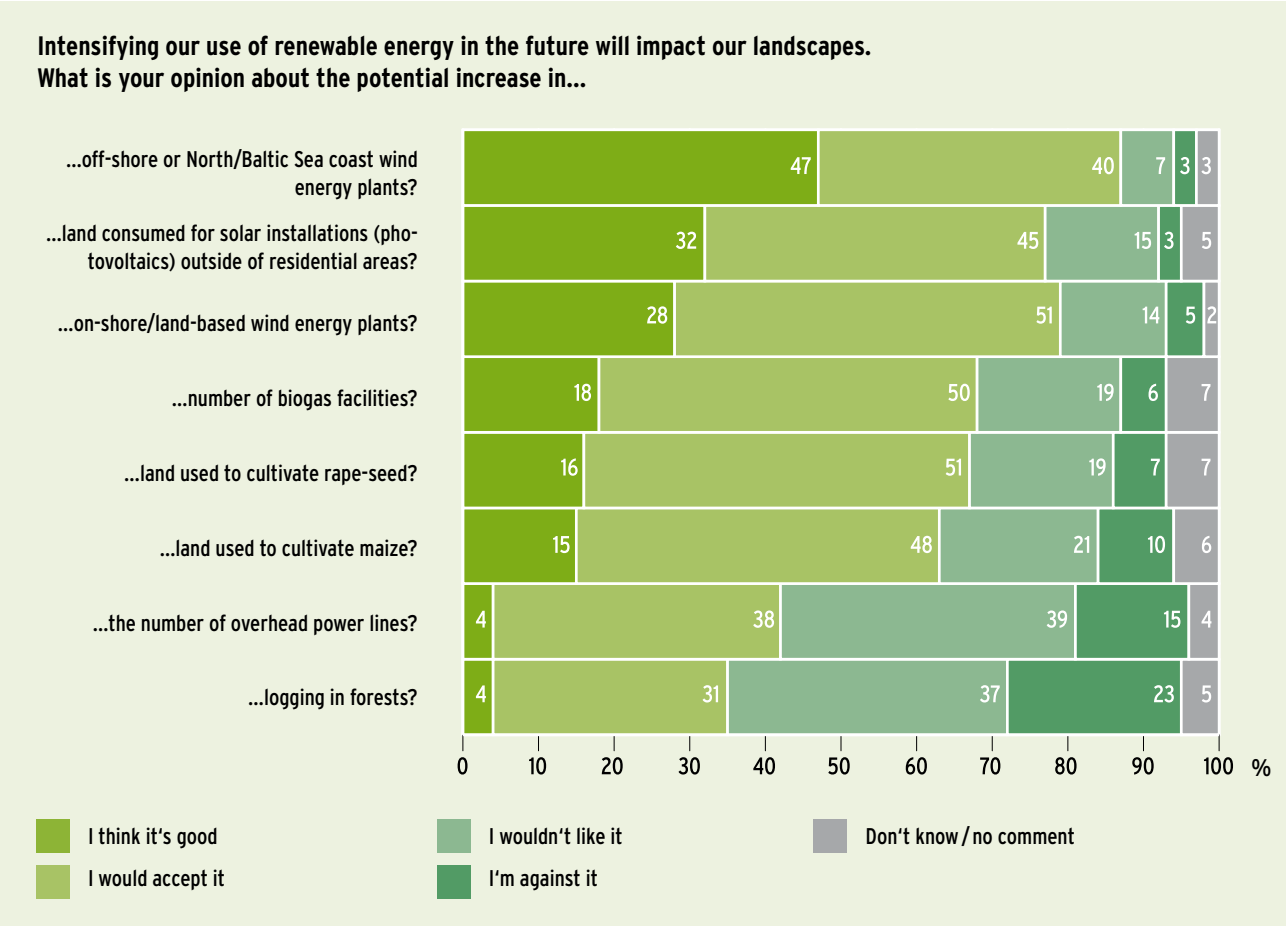

Figure 2: Acceptance of energy transition-related landscape changes

of renewable energy systems in the immediate living environment (answer categories "I think it's great" and "I think it's good"). According to this survey, 76% were pro solar parks, 60% pro wind energy plants, and 36% pro biomass facilities. The study shows that the level of acceptance is above average in respondents being familiar with this type of system from their own living environment: 82%, 69% and 51%.

There are significant differences between East and West Germans in how they perceive some of the activities involved. 44% of the East Germans polled take a critical or outright negative stance on onshore/land-based wind energy plants (answers "I'm against it", "I wouldn't like it"), while in West Germany the percentage is as low as 12%. Offshore wind energy plants and ample solar installations in open spaces too are seen in a more negative light in East than in West Germany (22 vs. 7% and 31 vs. 15%).

There are only slight discrepancies between different socio-demographic segments (see table 2): male respondents are generally more positive towards energy transition activities than female ones. Beside the sex, income is another critical factor. High earners are more likely to support energy transition policies than people with low-income. Only with respect to the issue of logging do the latter show above-average acceptance levels. Younger respondents too were found to be less critical in this regard.

Table 2: Acceptance of energy transition-related landscape changes according to socio-demographic attributes

Intensifying our use of renewable energy in the future will impact our landscapes. What is your opinion about the potential increase in...

Answer categories "I think it's good" and " I would accept it"; data in %	Ø	Sex		Age [years]				Education			Net household income [€]			
		M	F	-29	30 - 49	50 - 65	65+	low	me-dium	high	-999	1,000 - 1,999	2,000 - 3,499	3,500+
...off-shore or North/Baltic Sea coast wind energy plants	87	90	85	87	88	86	88	89	88	84	85	84	89	89
...on-shore/land-based wind energy plants	79	79	79	82	83	77	73	79	79	78	79	75	78	84
...land consumed for solar installations (photovoltaics) outside of residential areas	77	79	76	76	79	79	75	78	81	72	72	74	80	80
...the number of biogas facilities	67	72	63	61	71	67	67	65	67	72	69	65	67	67
...the land used for the cultivation of rape-seed	68	70	64	67	69	69	62	70	70	60	60	66	67	74
...the land used for the cultivation of maize	63	66	60	65	65	64	58	64	68	57	54	65	62	69
...the number of overhead power lines	42	47	38	43	40	43	45	44	41	40	44	41	39	45
...logging in the forests	35	38	31	39	35	29	36	37	32	33	44	34	32	38

10 % and more above average (Ø)
5 % to over 10 % above average (Ø)
5 % to under 10 % below average (Ø)
10 % and more below average (Ø)

Results differentiated by social milieu

Reservations toward some energy sources are expressed even in milieus with the highest degree of energy transition acceptance . The cultivation of rape-seed and maize meets with the disapproval of the Liberal Intellectual and Socio-ecological milieus , or is rejected outright (maize: 43 % Liberal Intellectual, 49 % Socio-ecological, total: 31 %. Rape-seed: 41 % Liberal Intellectual, 47 % Socio-ecological, total: 26 %). Amongst other reasons, this could be due to critical discussions being more readily perceived by these well-informed circled with a major interest in ecological and social issues, e. g. the loss of landscape diversity resulting from the cultivation of maize and rape-seed for energy production, their carbon footprints, and the use of arable land for energy plants.

Members of the Liberal Intellectual milieu (74 %) will also speak out more often against increasing the level of logging, an attitude shared by a majority amongst the Established Conservative milieu (65 %, total: 60 %). As was demonstrated in other surveys, forests are seen by this demographic group as recreational spaces and walking environments, in addition to them being vital cultural assets deserving of protection (BMU and BfN 2010, Kleinhückelkotten et al 2009). While the energy transition is considered important in both milieus, many are unwilling to accept forest overexploitation.

2.2 Interest in ecologically and environmentally friendly consumer behaviour

There is a decided interest in information regarding the ecological and environmental compatibility of consumer behaviour

The transformation toward a sustainable society calls for more than just rebuilding our energy system - an effort has to be made to cut energy consumption significantly, to economise on material resources, render production more ecologically and socially acceptable, and reduce the amount of waste produced. In this regard, citizens can provide valuable impetus by adjusting their consumption behaviour. To investigate the interest in possibilities of managing consumption in a more ecologically and environmentally friendly manner, respondents were asked to specify, for a series of consumption-related topics, if they think of themselves as being well-informed, if they are interested in additional information, if they are not interested at all or if the whole issue is moot to them. It was found that the interest in additional information on ecological and environmental compatibility is high throughout all areas of consumption (see figure 3), with nutrition-related topics apparently taking centre stage.

In that context, both the feeling of being well informed (answer “I already know enough about it”) and the interest in additional information (answer “This is interesting to me”) is higher: with respect to regional products, one third of all Germans think of themselves as properly informed, while with regard to the origin and manufacture of meat/meat products and fruits/vegetables, it is one fifth in each case. The interest in additional information is strongest in the latter two areas. For many, green textiles are another interesting subject.

Older individuals are more readily inclined to consider their knowledge adequate: 42 % of those over 65 years state that they know enough about regional products (total: 33 %), while 33 % think they are well-informed about the origin and production conditions of fruits and vegetables (total: 22 %). In contrast, both respondents of over 65 years of age and younger individuals do not have as much interest in information as do the middle age groups. Moreover, many areas of consumption attract interest depending on the level of education and income. But there are also discrepancies between sexes: Female respondents express more interest in information regarding ecological and environmental compatibility than males. The disparity is particularly noticeable when it comes to the “Ecological Compatibility of Textile Products” (70 vs. 50 %) and “Origin and Cultivation of Medicinal Plants, Tea, and Spices” (65 vs. 50 %). Information on the ecological footprint of textile products attracts much more interest from West Germans (63 %) than East Germans (51 %).

How far are you interested in information on how to render your consumer behaviour more ecologically and environmentally friendly? Please tell me for each of the following categories

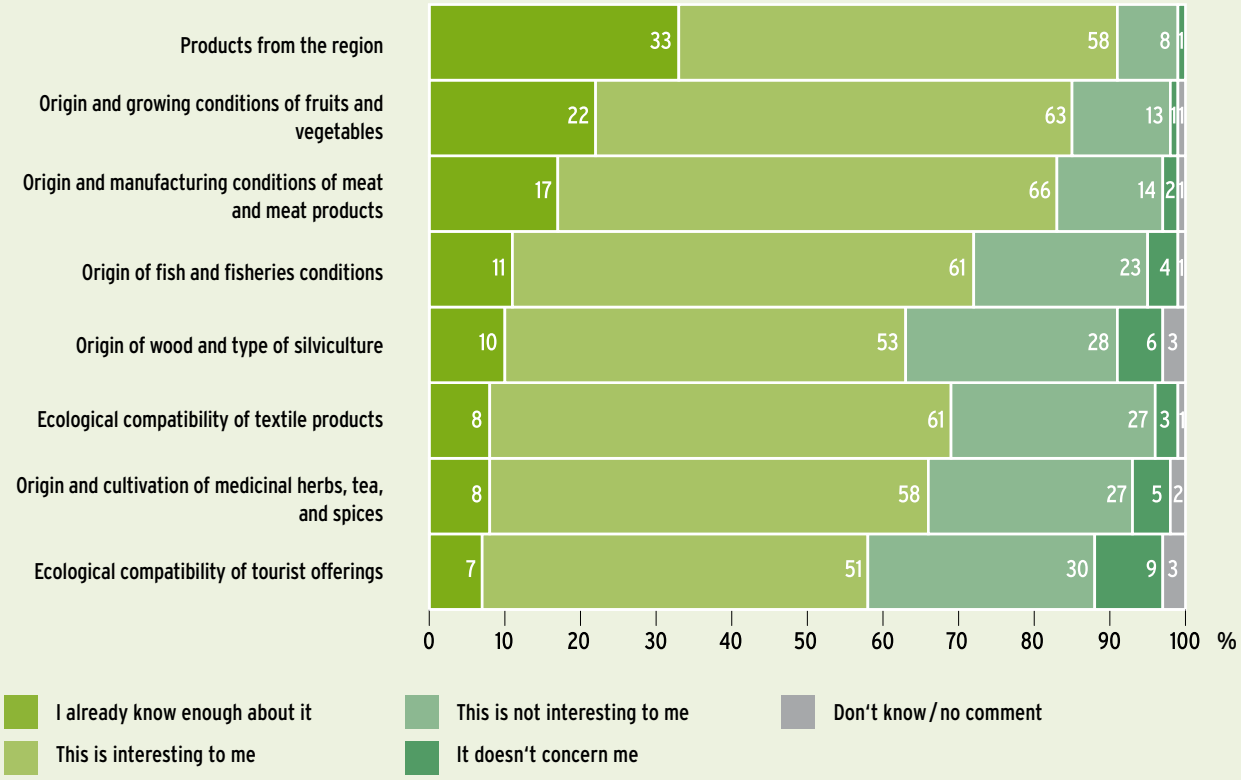

Figure 3: Interest in information

Interest in ecological and environmental compatibility information is most pronounced in the Established Conservative milieu , the Liberal Intellectual, High Achiever, and Adaptive Pragmatist milieus (answer "This is interesting to me"), irrespective of the area of consumption. A lack of interest in information on a specific subject does not necessarily mean that the topic in question just lacks interest - it can also be a consequence of subjectively adequate knowledge. While the Socio-ecological milieu often falls within the population average with regard to interest in information, they are more inclined to consider themselves well-informed. Beside a considerable percentage of members of the Socio-ecological milieu (43 %), it is in particular the Liberal Intellectual and Traditionalist milieu (39 % in each group, total: 33 %) who consider themselves adequately informed on regional products. Other studies have brought to light that the former group will generally attach particular importance to sustainable nutrition, while supporting their native region is paramount to the Traditionalist milieu (cf. BMU and UBA 2010 for example). As for the origin and cultivation of fruits and vegetables, the level of subjective awareness amongst members of the Traditionalist milieu is almost as high as in the Socio-ecological milieu (30 vs. 31 %, total: 22 %). Interest in how to render consumer behaviour more ecologically and environmentally friendly is particularly low in the Precarious and Escapist milieus.

2.3 Willingness to get involved in nature conservation

The potential for commitment to nature conservation is significant

The evolution toward a society that cultivates a more sustainable and ecologically sound lifestyle is a challenge everybody must contribute to. In the private sector, this is possible by adopting more conscious ways of managing everyday life, by joining initiatives or even an association. According to the main report on the 2009 volunteer survey, 71 % of the general population being active in associations, organisations, groups or public institutions. The report classifies the involvement in environmental and natural protection as a medium-level area of commitment, contrasted by the vast social and "sports and activity" areas that attract the most volunteers (Gensicke and Geiss 2010).

That said, the field of everyday activities consciously aimed at the conservation of nature already begins in the individual private sector, e. g. in one's own garden or local environment. It is in that sense that many people see themselves as "conservationists" - with numerous possible courses of action to choose from. Having said that, the segment of organised nature and environmental protection today is largely dependent on volunteers too – be it in the delivery of practical nature conservation measures, campaigns to support green policies, or involvement in awareness training and educational work.

With civil commitment being such a critical factor in adopting a more sustainable and ecologically friendly lifestyle, the present survey also sought to investigate the extent of individual activities in nature conservation today, and to explore any as-yet untapped potential. In addition, the question was raised as to what forms of commitment hold particular appeal, and what expectations are associated with volunteer activities. Those remaining passive were also asked about possible impediments that keep them from getting involved.

It was found that over 50 % of the German population can imagine taking action for the protection of nature, or already consider themselves as being active. The percentage of the latter group is as high as 18 %, proving that the general population is willing to contribute to the protection of nature via everyday activities and voluntary commitment.

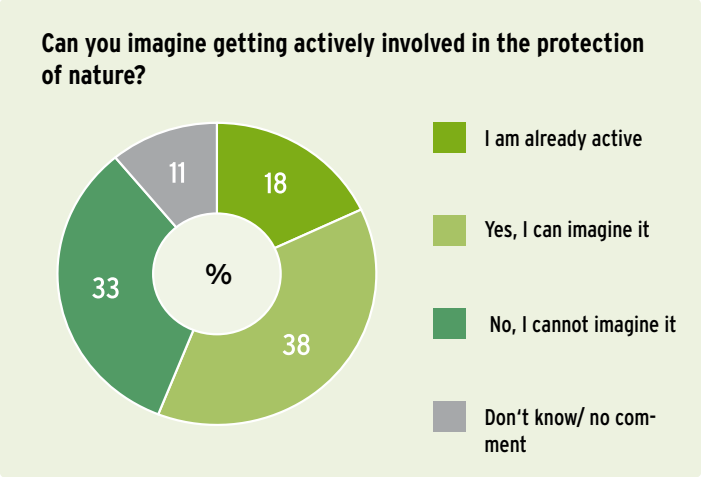

Figure 4: Commitment to the protection of nature

An above-average number of respondents in the 65+ years (23 %) and well-educated group (24 %) saw themselves as already being active. According to their own statements, East Germans are more inclined to contribute to nature conservation than West Germans (22 vs. 16 %). Respondents with a higher education are not only more frequently found amongst the active group but also show an extraordinary willingness to commit themselves (43 %).

This willingness is subject both to the understanding of one's individual responsibility and to the confidence in one's personal skills and capabilities to "make a difference". These issues are addressed in chapters 3.3 and 3.4.

The commitment to the protection of nature is clearly concentrated along social milieus. The field is led by the Socio-ecological and the Liberal Intellectual milieus, who take an active part in nature conservation. The Established Conservative group is another milieu with a high percentage of activists. These milieus are also dominant in other areas of social commitment. In contrast, the Escapist, Precarious and Adaptive Pragmatist groups have produced a comparatively

low number of active conservationists. Among the Adaptive Pragmatists, the percentage of not-yet activists with an interest in getting involved in nature conservation is higher than in other groups (52 %, total: 38 %).

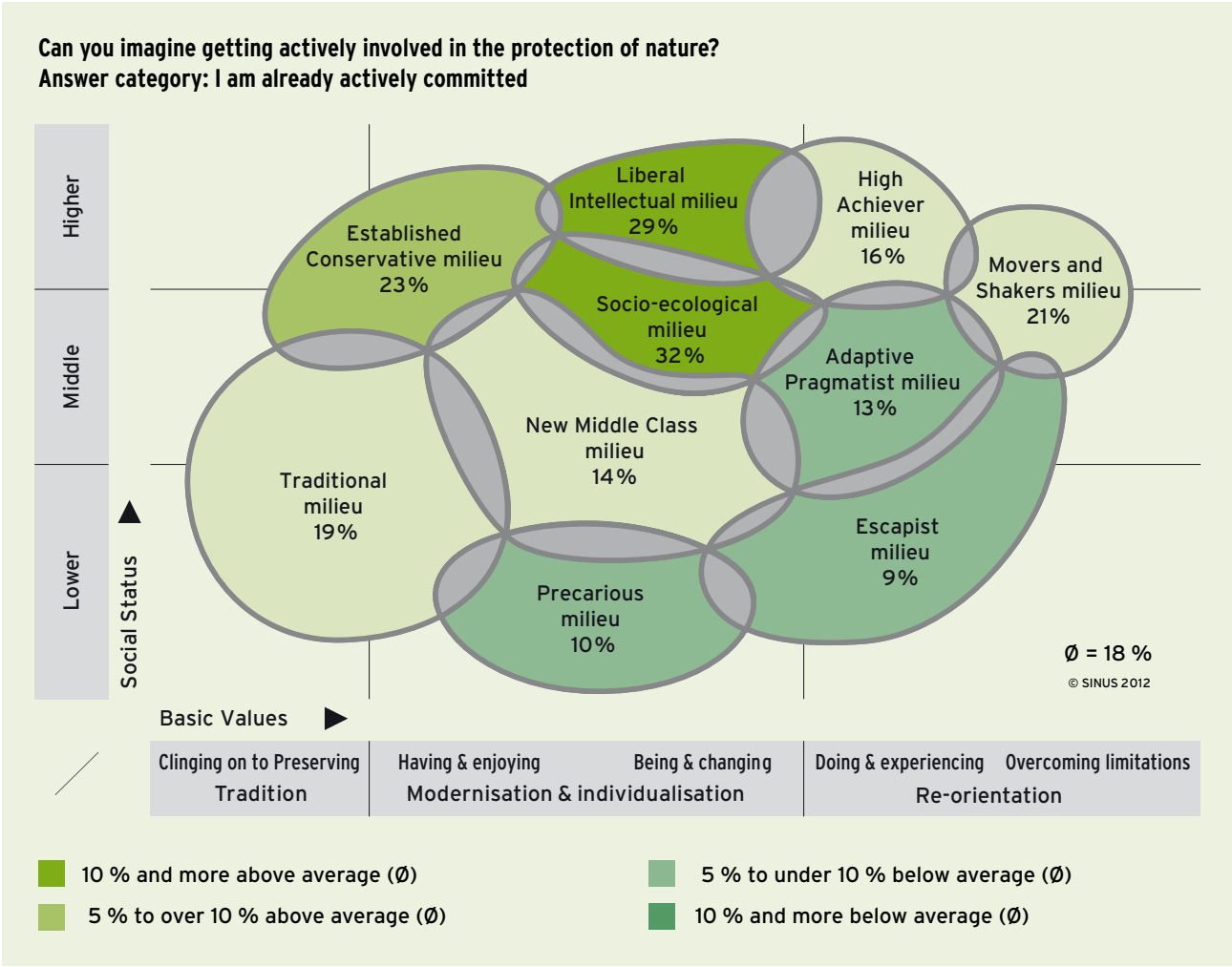

Figure 5: Commitment to the protection of nature according to social milieu

Commitment to the protection of nature means hands-on work, first and foremost

Respondents who are already active in nature protection or who could at least imagine doing so were asked about their areas of activity and possible forms of future commitment, respectively. Making nesting boxes for birds and setting them up, planting trees, constructing ponds and growing hedgerows are the most frequently mentioned activities (see figure 6). These are contributions to nature and species conservation that can be implemented in the domestic garden. In comparing the individual socio-demographic groups, differences were identified that were significant in some cases. Mid-aged and older respondents will perform these activities on a much more regular basis. For instance, as many as 46 % of the 65+years age group who already are – or can imagine being –

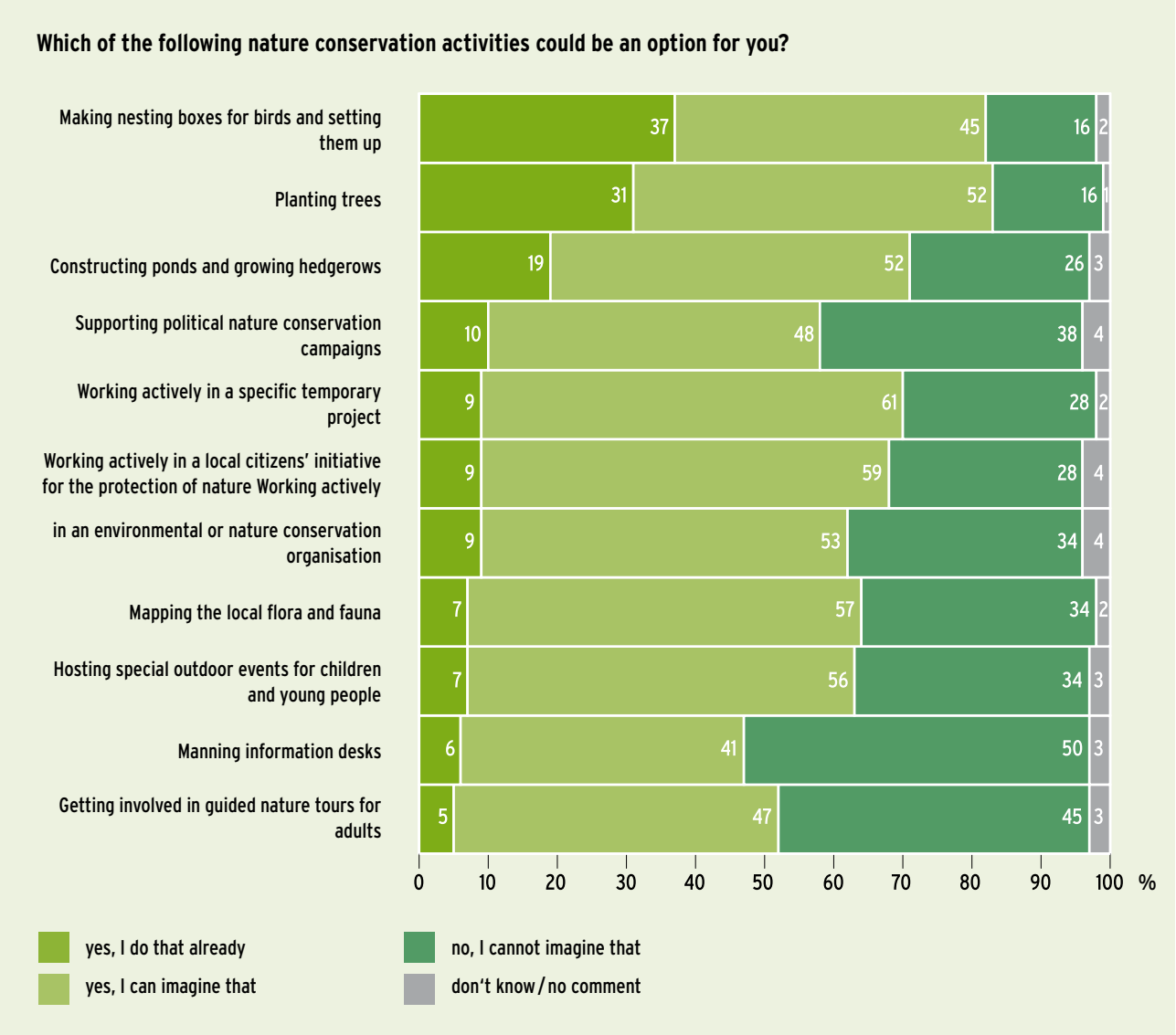

Figure 6: Nature conservation activities

Basis: 1,123 cases (respondents already involved or considering getting involved in nature conservation)

active in nature conservation quote making and setting up nesting boxes, but only 28 % of the younger respondents (up to 29 years). It should be kept in mind, however, that in the latter group fewer representatives have a garden to begin with. Planting trees is also mentioned more often by respondents over 65 years of age (37 %) than by younger individuals (17 %), which is also true for the installation of ponds and hedgerows (23 vs. 11 %). In addition, these activities are more commonplace in East Germany than in the West, and are more often mentioned by men than women.

Activities that fall into a category of commitment outside one's immediate living environment, such as conducting flora and fauna surveys, delivering special outdoor events, working in nature conservation organisations or action groups were stated by a maximum of 10 % of those polled. This is quite similar to the results of surveys conducted in 2009 and 2010 on volunteer work in nature and environmental protection, where 9 % (BMU and UBA 2010) and 3 % (Gensicke and Geiss 2010) of the respondents declared being active. The present study shows that among the group with a higher level of formal education and

The social milieus of the Liberal Intellectuals, Socio-ecologicals, Traditionalists and the New Middle Class have produced a relatively high number of practising conservationists. Activities that enjoy more popularity in these milieus than in others include creating nesting places and planting trees. Activities that lean more on the political side or focus on education and information, such as supporting political action, manning information desks or working in nature/environmental protection organisations or citizens' initiatives are especially popular as avenues to contribute to nature conservation with the Liberal Intellectual, Socio-ecological and Movers and Shakers milieus. In the fun and adventure-oriented Escapist milieu, the urge to take action and become involved is rather poorly developed – but then again, special outdoor events for children and young people are organised twice as often as in the population average.

income, the percentage of activists in these fields (up to 15%) is well above the population mean.

Interestingly, many can imagine getting committed in areas involving more than technical and/or practical skills (see figure 6): approx. 60% of those polled showed interest in contributing to temporary projects or local action groups working in nature conservation; and almost as many sympathise with the idea of hosting outdoor events for children and young people or mapping the local flora and fauna. The other activities listed in the question were seen as attractive by 50% of the respondents in each case. While still considered an option by 40%, manning information desks attracts the least interest. Many types of activities are especially appealing to respondents of up to 49 years.

Furthermore, it is worth pointing out that respondents below 29 years – as depicted above – are quite underrepresented in the field of practical work involving immediate contact with nature, although they can readily imagine getting active in this area. 73% express willingness to plant trees, while 67% contemplate growing hedges and constructing ponds. The interest in some of the activities increased in line with the level of education. Income, on the other hand, appears to be uncorrelated with the level of interest. Respondents in the lowest as well as the highest income groups are more open-minded to most of the commitment possibilities than the population average. East and West Germans do show differences in their willingness to get involved; but while the percentage of those already active in East Germany is higher than in West Germany in most respects, West Germans can more readily imagine getting active in the future.

Individual commitment is supposed to benefit nature, be fun, and serve as a role model

The commitment to nature conservation is associated with a variety of motives and expectations. The majority of already active respondents attach the most importance to "helping" nature (see figure 7). Also, the activity itself is supposed to be fun, serve to inspire children, and convey a feeling of doing something significant. Another motive quoted by many respondents is to further the common good. Other expectations such as recognition and occupational benefits gained through the involvement, although strongly emphasised in discussions about voluntary commitment in recent years, appear to be less important to most of those already active (see table A2.5 in the appendix). Younger respondents, however, are clearly more inclined to see this as "very important" or "rather important". 67% of those under 29 years quote recognition as a desirable outcome of their commitment (total: 47%), while 47% expect to generate occupational benefits from it (total: 38%).

Those who can imagine getting active in nature conservation have similar expectations to those already active in the field. The portion of individuals seeking recognition and occupational benefits is higher, though (see table A2.6 in appendix). These expectations were more frequently voiced in the youngest questionnaire segment (60 vs. total: 55% and 57 vs.

total: 50 %). Respondents in the low-income bracket too attach significant importance to receiving recognition for their work (62 %), as well as creating career advantages (55).

Lack of time is the primary obstacle to an increased commitment to nature conservation

Not-yet conservationists (including those who can't imagine becoming active) were polled about possible obstacles interfering with voluntary commitment (see figure 9). It should be noted, however, that the filter question was based on the statement "I don't care about nature conservation", with those giving an unreserved "yes" being excluded from further questioning about potential obstacles. Again, the data underscore the fact that nature conservation generally has a positive connotation with the German population, with as few as 4 % expressing complete disinterest in nature conservation and another 15 % tending in this direction.

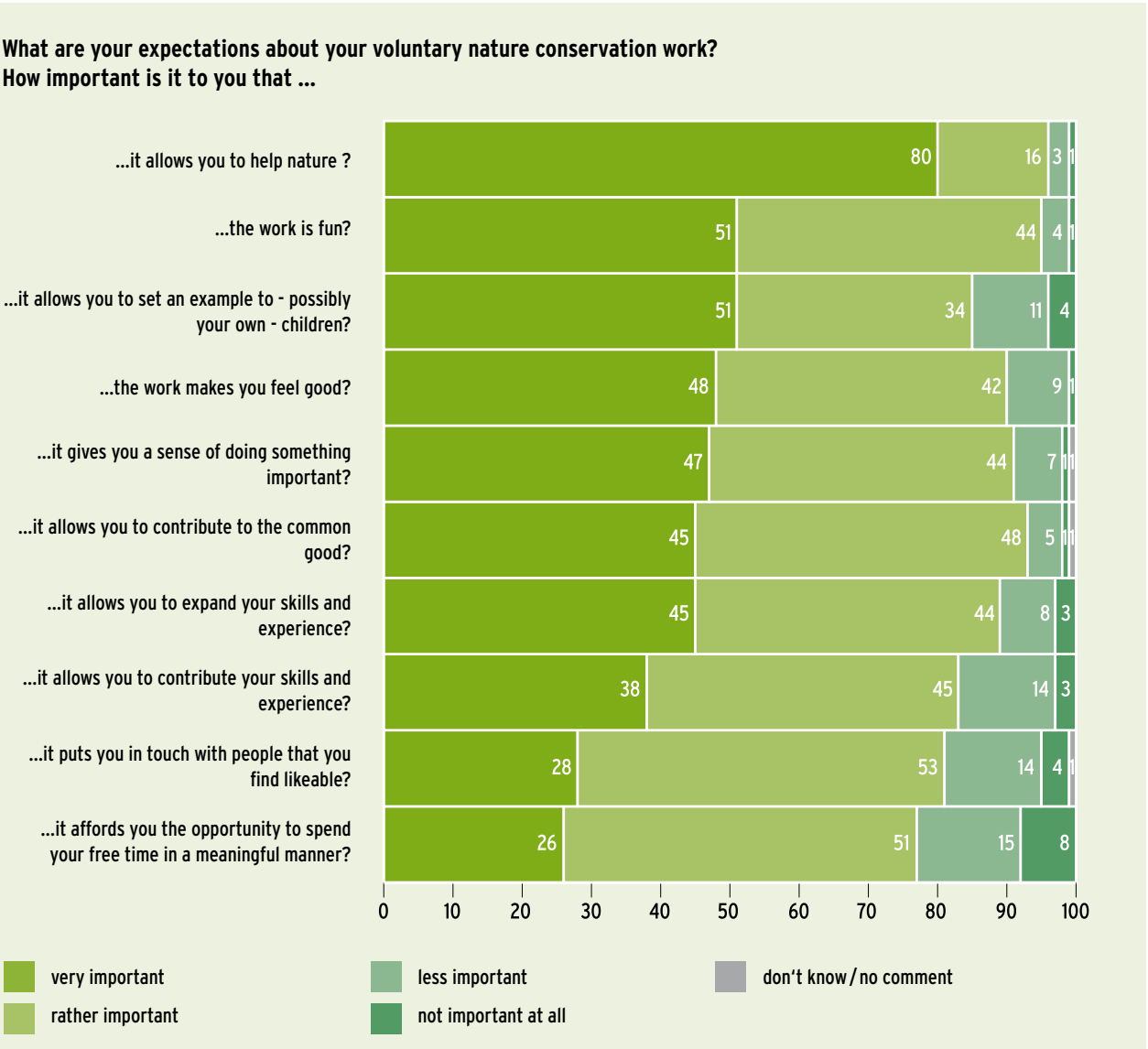

Figure 7: Commitment-related expectations (already active respondents)

(presented below are the answers to the 10 statements that were rated as important by most)
Basis: 359 cases (already active respondents)

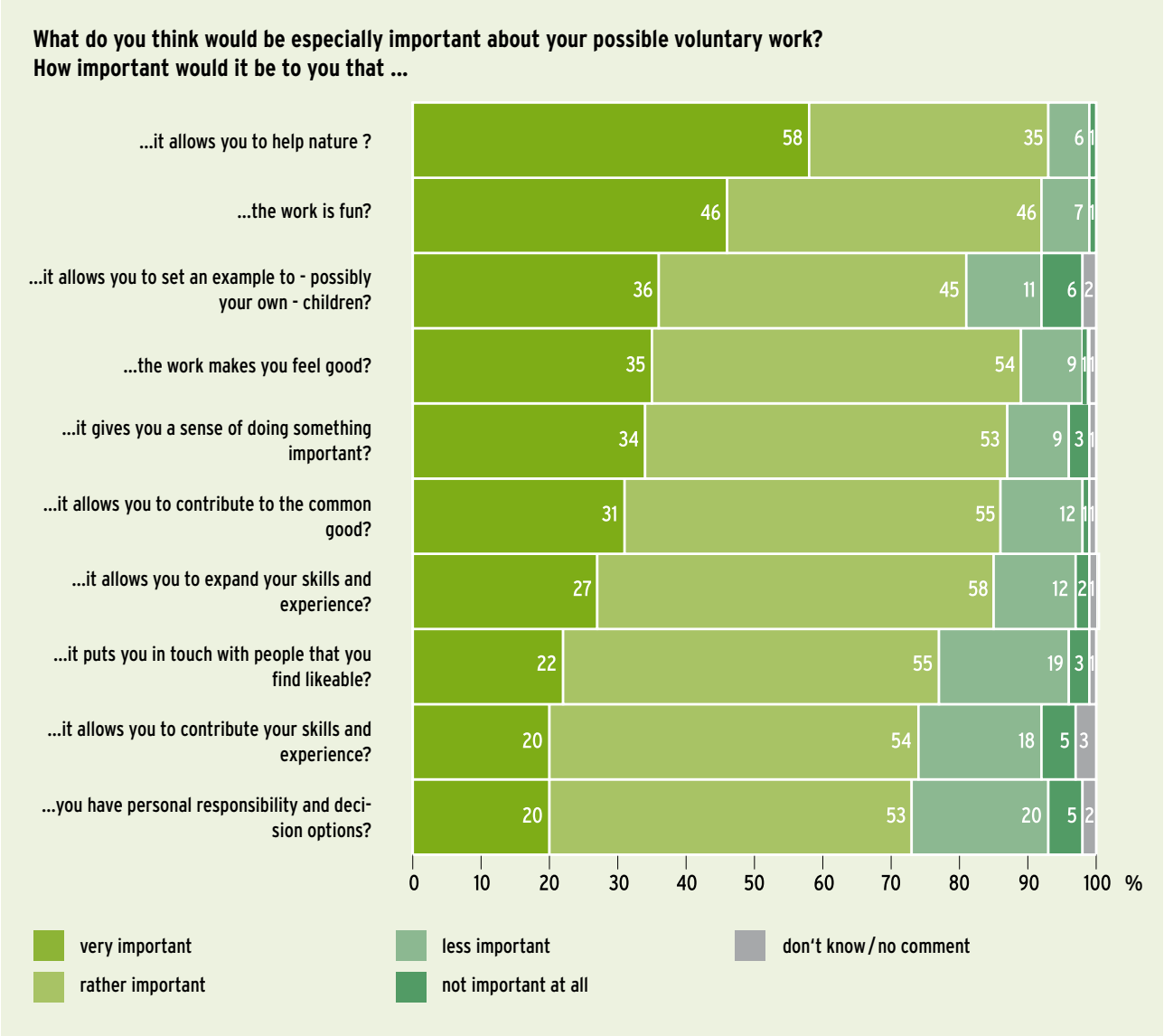

Figure 8: Commitment-related expectations (potential activists)

(presented above are the answers to the 10 statements that were rated as important by most)
Basis: 763 cases (respondents who can imagine getting actively involved in nature conservation)

Respondents voicing at least some interest in nature conservation quote a lack of time and refusal to take on long-term commitments as the most important obstacles. About two third of those interviewed agree to the corresponding statements either fully or by tendency. The lack of time criterion becomes less important with increasing age. While 52% of the youngest respondents fully agree with the statement "I don't have the time right now", only 10% of the 65+-years group do. To well-educated persons (46%) and high earners (48%), the lack of time is a significant obstacle, too (total: 36%). Other obstacles quoted as applicable - either fully or by tendency - include a feeling of not fitting in with the conservationist setting, and a subjective lack of relevant know-how. Some 50% of the respondents are deterred by member fees and travel costs. Interestingly, 60% quote not knowing where and how to get committed (again both levels of agreement). In particular, respondents of under 29 years of age (26%) and in the low formal education/low-income segment (22% and 34%) seem to be hindered by a lack of information (total: 17%, top level of agreement).

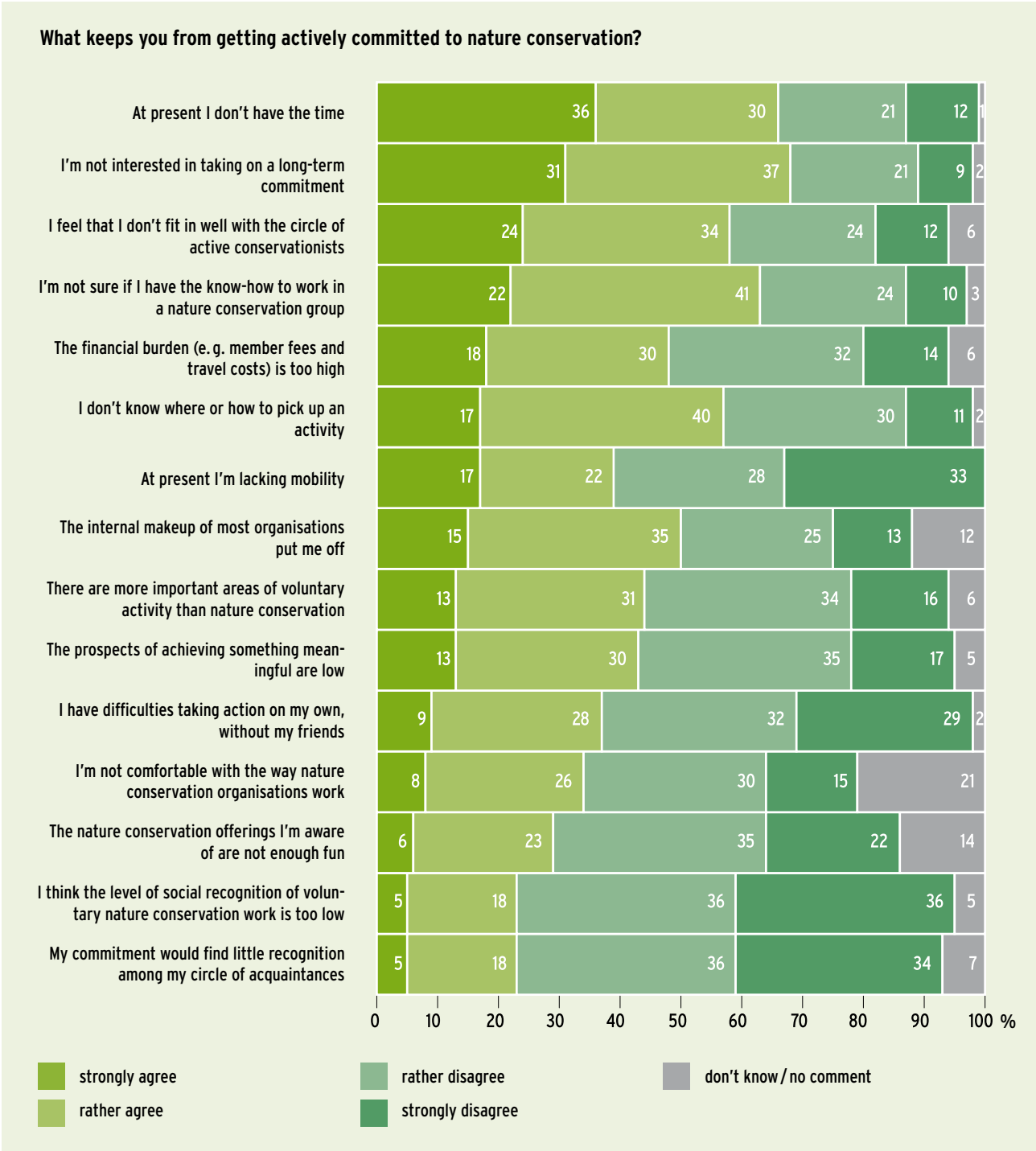

Figure 9: Obstacles hindering a commitment to nature conservation

Basis: 1,383 cases (respondents not yet actively committed to nature conservation but showing at least some interest)

The overarching reason identified by members of the Modern Pragmatist milieus as precluding an active commitment to nature conservation is the lack of time (Movers and Shakers: 47 %, Adaptive Pragmatist 51 %, High Achiever 50 %, total: 36 %). Liberal Intellectual (42 %) and Socio-ecological (45 %)milieus too see this as a prime obstacle. In the less well-off Precarious milieu, the financial burden imposed by member fees and travel costs is a significant deterrent (43 % vs. total: 18 %). An above-average number of Escapists (21 %, total: 15 %) is put off by the internal structure of many associations.

3 ... Changing landscapes – endangerment and conservation of nature

Most Germans associate with nature green, structured landscapes. This includes forests, meadows and water but also fields and their own garden. They do not mainly appreciate wilderness but a grown cultural landscape (BMU and BfN 2010: 25ff). People have interfered with nature for centuries and changed it according to their wishes and needs. These change processes accelerated increasingly in the 20th century. Many natural habitats did not only lose their ecological quality or were even destroyed by human interference, but the landscape changed considerably in many regions. Driving forces were and are most of all the growth of residential areas, the densification of the traffic infrastructure, the intensification or surrender of agricultural land use, changed methods of cultivation and regulatory intervention in water. Especially severe changes within a short time took place in the East German states after the German reunification as well as at first mainly in the north of Germany where wind parks were built starting in the 1990s. In recent years, the landscape has changed in many German regions due to the intensified cultivation and the use of energy crops. The landscape changes caused by the extended use of renewable energies were already described in chapter 2.

How the change of nature and landscapes in the past two decades is perceived and evaluated by the population, which positive and negative changes people noticed and how severely they think that nature is endangered, was ascertained in this study. The survey results will be presented in the first part of this chapter (see chapter 3.1).

The second part is about nature conservation. It is of considerable importance to the German population, as was already shown in earlier studies and especially the 2009 study on nature awareness (BMU and BfN 2010). In this study, questions were asked to verify whether the social importance of nature conservation has changed over the past few years in the light of a changed political and economic situation on the one hand (see chapter 3.2). And on the other hand, questions were asked about the personal reasons in favour of nature conservation (see chapter 3.3). Finally, this chapter deals with the question about the responsibility different social players have towards nature conservation (see chapter 3.4) and how defined measures of nature conservation are rated (see chapter 3.5).

3.1 Perception of landscape changes

The changes of nature and landscapes are perceived in very different ways

The landscape markedly changed in many German regions during the past two decades: residential areas grew, the infrastructure was developed, wind energy and biogas facilities were built and new reserves designated. Still, about fifty percent of Germans state that they did not perceive any major changes with regard to the condition of nature and landscapes in their region during this period. A good quarter of the respondents noticed deterioration; only 13 % thought that the condition of nature and landscapes improved in their region; 11 % had no opinion. The fact that so many of the respondents did not perceive any changes or did not know how to answer the question is remarkable but cannot be explained based on the present data. It has to be considered that about 25 % of the respondents spend rather little time in nature (see chapter 4.1) and that many who state that they spend much time in nature refer to their own garden or public parks, as was shown in the 2009 survey (BMU and BfN 2010: 33). It seems plausible, at least for this group, that they hardly noticed any changes in the open landscape. In addition, massive interference with nature and landscapes did only rarely occur in city forests and other recreational areas in the proximity of residential areas during the past twenty years.

Deterioration is much stronger perceived by the respondents of the West German states than by those of East Germany (see figure 10). While changes in nature and landscapes are positively evaluated by 25 % of the East Germans and only 12 % perceive deterioration, the respondents of West Germany see it almost the other way around: 32 % state that the situation mainly deteriorated and only 10 % perceive an improvement.

No major changes with regard to the state of nature and landscapes are noticed by an above-average number of respondents with a low income (58 %). Also younger people and middle-aged respondents see the situation of nature and landscapes more often as generally unchanged (51 % and 52 % vs. 46 % and 45 % of the respondents above 50 or 65 years of age, respectively). In contrast, older rather than younger people tend to perceive an improvement (18 % of the respondents above 65 years of age, total: 13 %). This evaluation is also more often found among the well-educated (18 %).

Do you think that the state of nature and landscapes in your surroundings has generally improved, remained the same or deteriorated in the past twenty years?

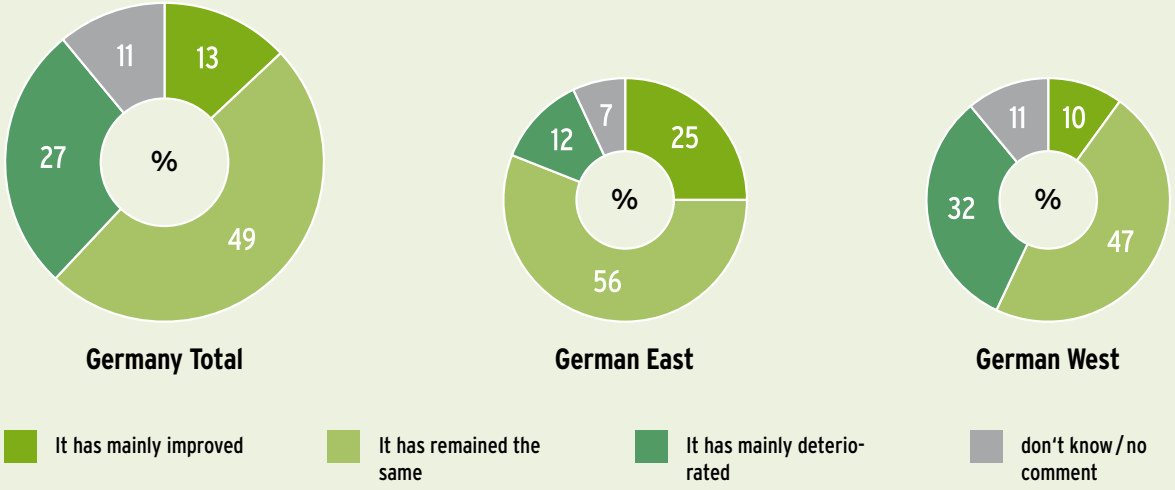

Figure 10: Perception of changes in nature and landscapes

Table 3: Perception of changes in nature and landscapes according to socio-demographic segments

Do you think that the state of nature and landscapes in your surroundings has generally improved, remained the same or deteriorated in the past twenty years?

data in %	Ø	Sex		Age [years]				Education			Net household income [€]			
		M	F	-29	30 - 49	50 - 65	65+	low	me-dium	high	-999	1,000 - 1,999	2,000 - 3,499	3,500+
It has mainly improved	13	15	11	10	11	16	18	11	12	18	7	12	14	14
It has remained the same	49	49	49	51	52	46	45	48	52	47	58	52	51	45
It has mainly deteriorated	27	26	29	27	26	30	28	30	27	24	24	27	27	28
don't know / no comment	11	10	11	12	11	8	9	11	9	11	11	9	8	13

10 % and more above average (Ø)
5 % to over 10 % above average (Ø)
5 % to under 10 % below average (Ø)
10 % and more below average (Ø)

In comparison, there are many respondents in the Liberal Intellectual milieu who think that the state of nature and landscapes in their surroundings has rather deteriorated in the past twenty years (38 %, total: 27 %). The same applies to the Socio-ecological milieu, albeit not to the same extent (31 %). The negative evaluation of the development which is found more often in these two milieus is probably due to their above-average orientation towards nature conservation (see chapter 3.3).

Improvements are noticed with regard to air quality and the state of rivers and lakes

A follow-up open question, i. e. without defined answers, as to what exactly had improved or deteriorated was only posed to those respondents who stated they had noticed changes in nature and landscapes. The 267 respondents (13.1 % of the basic population) who thought that the state of nature and landscapes improved most often stated progresses which belong to the following categories: lower air pollution and higher air quality, better protection and state of rivers and lakes, higher awareness of nature conservation as well as better protection and state of forests (see figure 11).[6]

There were respondents who stated improvements which they could not have noticed themselves but had learned about indirectly, for example from the media, as well as those who described specific personal experiences such as in the following examples:

"The rivers are clean again. Cars need much less petrol than before. Cities have environmental zones. In exchange for every new industry built green areas have to be developed subject to special conditions. It used to be a good sign when the chimneys were fuming. Luckily this has changed today. Research is still going on." (Male, age 77)

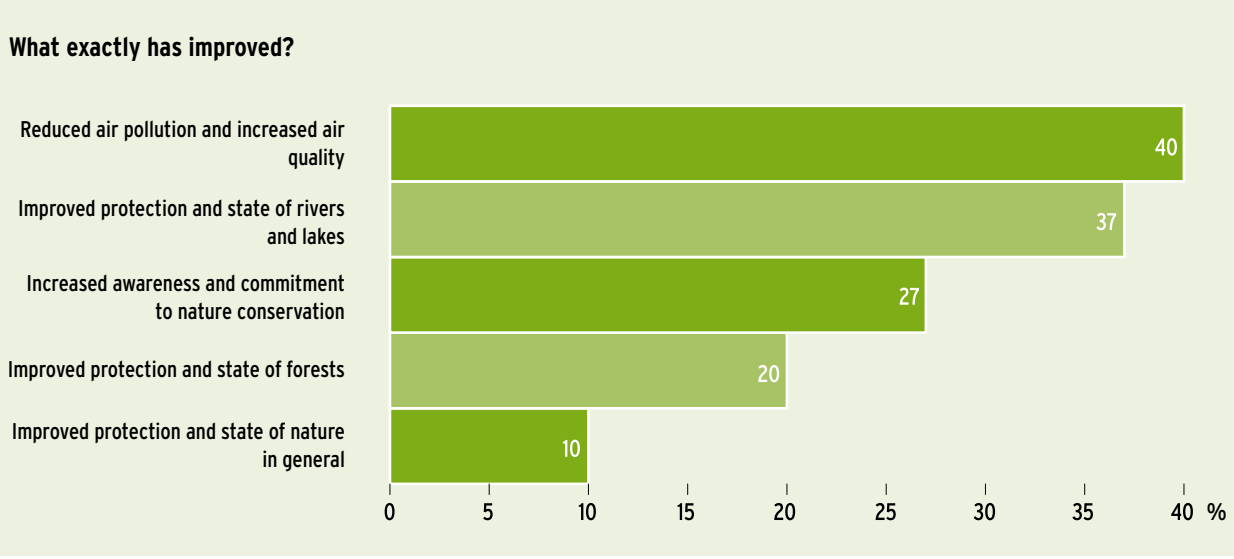

Figure 11: Most common answers given in respect of an improved state of nature and landscapes

Question: What exactly has improved? (Open question, multiple answers possible, answers given by at least 10 % of the respondents)
Basis: 267 cases (respondents who state that the situation improved)

6 Asked about the improved conditions of nature and landscapes, in each case between 5 and under 10 % of answers of the following categories were given: general reduction of environmental pollution, establishing of reserves (national parks, nature parks, nature reserve), environmentally friendly agriculture; development of nature conservation areas and green areas as compensation measure, reduction of industry, design and development of green areas and recreational areas, better cycle paths and hiking routes, development and maintenance of biotopes and renaturation.

"Here in the south of Duisburg a lot has happened what you could call ecological urban development. A major compensation is ensured. When new buildings are erected a corresponding green area is developed in exchange, and afforestation was ensured in the surroundings. Old industrial wasteland was turned into green monuments worth preserving." (Female, age 58)

The loss of natural areas, green areas and arable land is complained about the most

The 557 individuals (27.4 % of all respondents) who mainly perceived a deteriorated state of nature and landscapes think that most of the problems are caused by the consumption of space used for the building of residential areas as well as by air pollution and global warming (see figure 12). Further, the respondents are concerned about the state and the increasing economic use of forests. Answers in the category 'Species extinction'[7] were given relatively often.

Only a few respondents who state that the condition of nature and the environment has deteriorated refer to personal experience such as in the following example:

"We live here in the Thuringian Forest. To see how huge machines leave their traces in the forest, how footpaths are destroyed by vehicles and how often wind and snow damage occurs today, I think that these are the consequences of the ruthless exploitation of our forests. I used to go into the forest with my grandfather. It was quiet; you could hear the trees whisper. Today, the forest is an industrial zone, vehicles and machines. In former times you walked along grass paths in the forest; today you have gravelled paths and after heavy rainfall you cannot walk anywhere anymore because everything is washed away due to the gravelled paths." (Male, age 43)

The majority of answers given are statements of general deterioration:

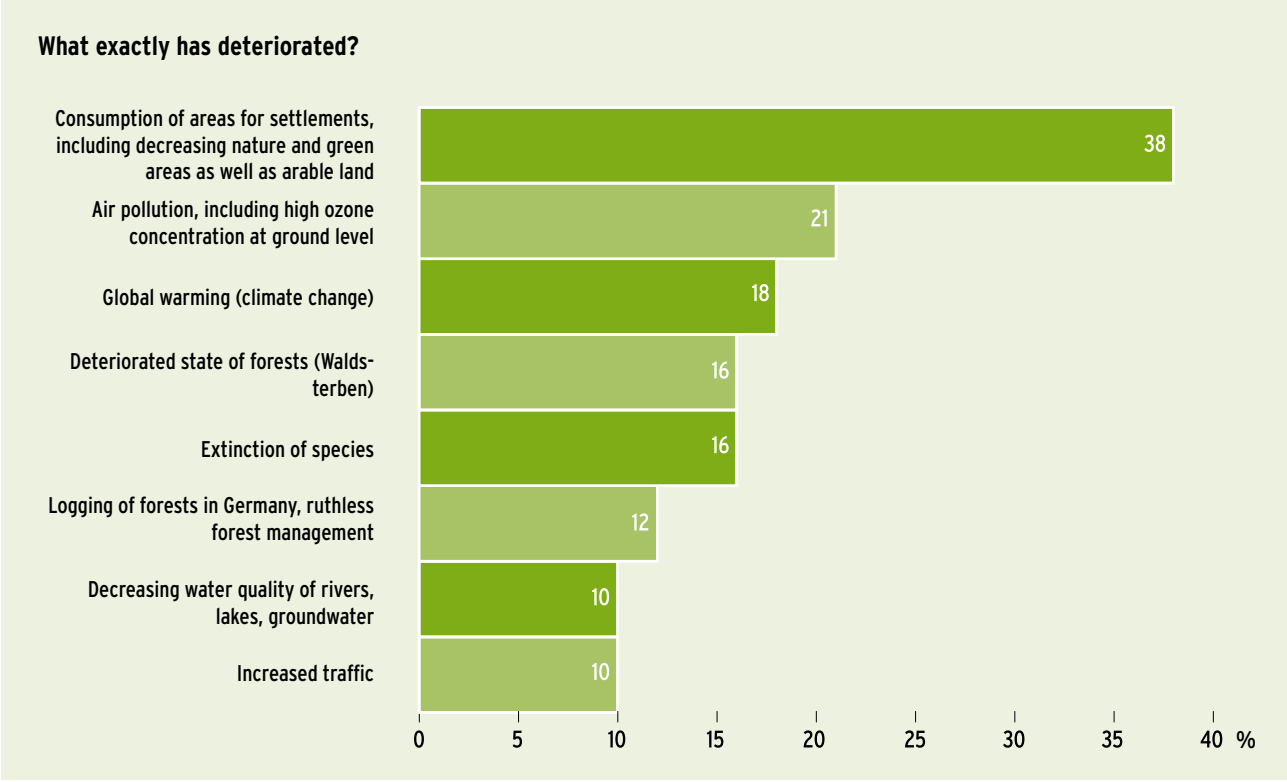

Figure 12: Most common answers given in respect of a deteriorated state of nature and landscapes

What exactly has deteriorated? (Open question, multiple answers possible, answers given by at least 10 % of the respondents)
Basis: 557 cases (respondents who stated that the situation deteriorated)

7 Asked about the deteriorated conditions of nature and landscapes, between 5 and under 10 % of the respondents also mentioned the following categories: disfigurement of the landscape by monocultures for energy, increasing environmental pollution/destruction, the ozone hole, industrial agriculture (except factory farming and monocultures).

"There isn't that much nature anymore because many buildings and industrial zones were and still are being built. Traffic on our roads has increased considerably." (Female, age 82)

"Built-up areas have increased. In exchange, moor and forest areas had to disappear. And in addition, we have an absolutely detrimental maize monoculture for the supply of biogas plants." (Male, age 18)

3.2 Perception of endangerment of nature

The Germans are concerned about the state of nature

The majority of the German population is concerned about the endangerment of nature (see Figure 13). They get annoyed about the reckless attitude of many people towards nature and are afraid that not much intact environment and nature will be left for future generations. The answers to these questions have changed only little compared to those of the 2009 survey on nature awareness. The deviations are between 2 % and 3 %, i. e. within the range of statistical uncertainty. The introduction of the "Don't-know category" could have had a small effect (see chapter 1).

At first, the prevalent concern over the state of nature appears to be in conflict with the findings that the majority of the respondents do not perceive any positive changes or any changes at all in respect of the state of nature and landscapes in their surroundings (see chapter 3.1). In fact, this is only a phenomenon which is known from earlier studies, namely that the environmental conditions in the immediate surroundings can be better evaluated than the general condition of the environment (see BMU and UBA 2010: 28).

The share of those who feel threatened by the "destruction of nature in our country" has markedly decreased compared with 2009. While the percentage of respondents was as high as 50 % in 2009, only 38 % strongly or rather agreed to the respective statement in 2011. There is no obvious explanation for the marked change. It is possible that the recent, extremely large-scale environmental catastrophes that received extensive media coverage but had no direct impact on Germany – including the nuclear accident in Fukushima, Japan, at the beginning of March 2011 or the oil spill in the Gulf of Mexico in the spring of 2010 – contributed to the fact that the risks in one's own country is considered less serious by a share of the respondents at present. Women feel significantly more often personally concerned by the destruction of nature than men (43 % vs. 34 %); the agreement decreased, however, by about 10 % in both segments compared to 2009. Women also agree more often with the other two statements on the endangerment of nature than men. Concerns about the state of nature are more prevalent among older persons than among younger ones. Thus, on a percentage basis, more people over 65 years of age are annoyed about the reckless attitude of many

Here are some statements on the protection and use of nature. Please tell me for each statement whether you strongly agree, rather agree, rather disagree or strongly disagree.

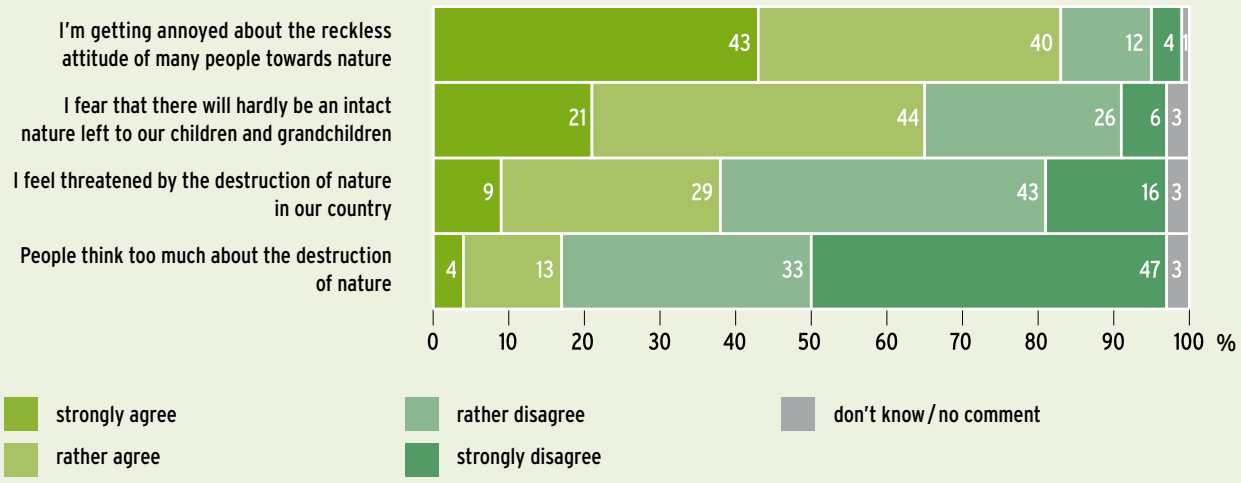

Figure 13: Perception of the endangerment of nature

people towards nature than respondents below the age of 29 years. (88 % vs.75 %, both levels of agreement, each time).

The concern about the destruction of nature is generally more prevalent among the West German respondents: 67 % of these, but only 53 % of the East Germans, fear that the ruthless exploitation of nature is at the expense of future generations (total: 65 %, both levels of agreement). In contrast to 2009, the general tendency to agree with this statement remained unchanged in West Germany, while East German respondents showed a significant decrease of about 20 %. This cannot be explained based on the present data. On a percentage basis, far more West Germans than East Germans feel personally threatened by the destruction of nature in our country (41 % vs. 30 %).

Mainly, members of the Socio-ecological milieu (67 %), the Liberal Intellectual milieu (54 %) and of the Traditional milieu (52 %) are annoyed about the reckless attitude of many people towards nature (in total: 43 %, highest level of agreement each time). For the members of the Traditional milieu, it is a social norm to treat nature with respect, deviations from the norm cause annoyance. In the modern milieus (Escapists: 26 %, High Achievers: 33 %, Adaptive Pragmatists: 37 %) as well as in the Precarious milieu (35 %), less members mind a reckless attitude towards nature. The share of those who feel threatened by the destruction of nature in our country is the highest in the Liberal Intellectual milieu (14 %, total: 9 %).

3.3 Personal reasons for the protection of nature

Nature conservation is an important political task

The opinion that it is the duty of man to protect nature is shared by almost all Germans: adding the two higher answer levels, the approval amounts to 95 %, even the highest level of agreement alone shows a majority of 59 % (see figure 14). Compared to 2009 (92 %), the level of agreement slightly increased, especially the share of those who strongly agree with

Here are some statements on the protection and use of nature. Please tell me for each statement whether you strongly agree, rather agree, rather disagree or strongly disagree.

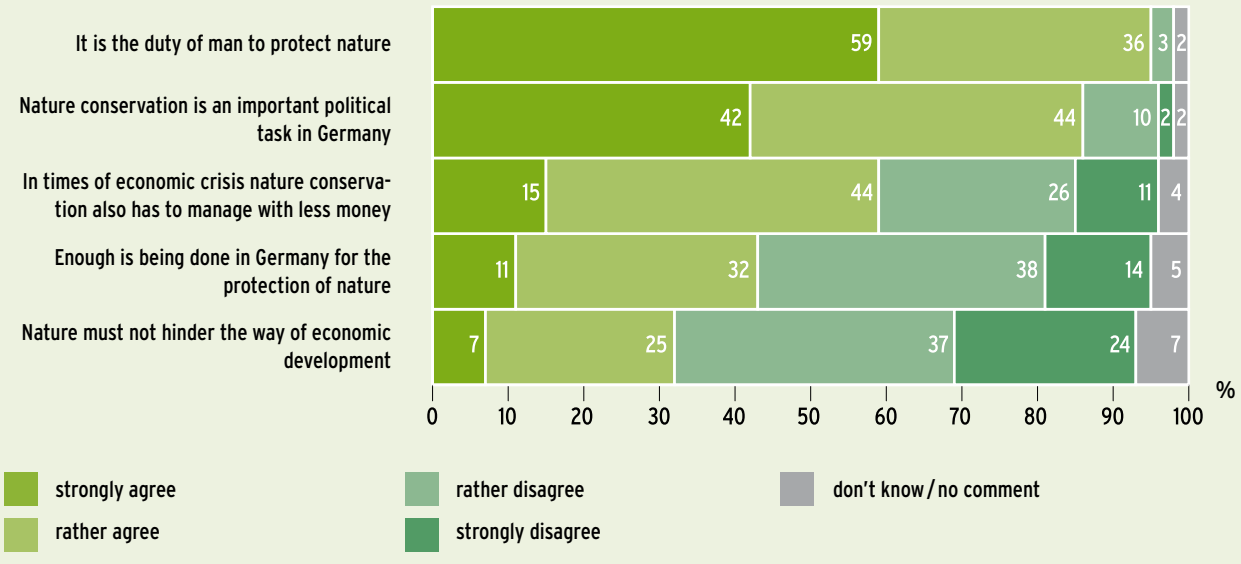

Figure 14: Attitudes towards nature conservation

the statement (2009: 54 %). Nature conservation is therefore evaluated by the majority of the respondents as an important political task.

The statements that qualify the importance of nature conservation in favour of other issues meet significantly less approval: In 2011, 43 % of the respondents (2009: 55 %), for example, are of the unreserved opinion or tend to think that enough is being done for the protection of nature in Germany. Also, the share of the respondents decreased who think that in times of tight budgets nature conservation has to manage with less money as well (59 %, 2009: 65 %). Even if the population feels less threatened by the destruction of nature in our country, as was the case in 2009 (see above), the local protection of nature is nevertheless seen as highly important. This is possibly a consequence of the catastrophes in the Gulf of Mexico and in Fukushima, Japan.

The protection of nature is more important to women than men (see table 4). It is seen as important by an above-average number of respondents with a high formal education and high income. Taking both answer levels together, East Germans, rather than West Germans, think that enough is being done for nature conservation, as was the case in 2009 (56 % vs. 39 %, 2009: 60 % vs. 54 %), and that the economic development must not be barred (40 % vs. 30 %, 2009: 44 % vs. 34 %).

Table 4: Attitudes towards nature conservation according to socio-demographic segments

Here are some statements on the protection and use of nature. Please tell me for each statement whether you strongly agree, rather agree, rather disagree or strongly disagree.

Answer category "strongly agree" data in %	Ø	Sex		Age [years]				Education			Net household income [€]			
		M	F	-29	30 - 49	50 - 65	65+	low	me-dium	high	-999	1,000 - 1,999	2,000 - 3,499	3,500+
Nature conservation is an important political task in Germany	42	40	44	43	42	41	46	38	41	50	39	40	41	49
In times of economic crisis nature conservation also has to manage with less money	15	17	13	19	15	11	16	16	15	11	23	17	12	14
Enough is being done in Germany for the protection of nature	11	13	9	16	11	8	10	11	13	8	17	11	11	14
It is the duty of man to protect nature	59	54	64	54	60	60	65	56	59	65	56	56	61	64
Nature must not hinder the way of economic development	7	9	5	8	8	6	6	8	8	4	8	7	7	7

10 % and more above average (Ø)
5 % to over 10 % above average (Ø)
5 % to under 10 % below average (Ø)
10 % and more below average (Ø)

"It is the duty of man to protect nature." 87 % of the Socio-ecological milieu, 74 % of the Liberal Intellectual milieu and 70 % of the Adaptive Pragmatist milieu strongly agree with this statement. The percentages are markedly higher in these milieus than in the total population (59 %). The share of the Escapists (40 %), Precarious (46 %) and High Achievers (50 %) is much lower.

Many people, mainly in the Socio-ecological milieu (69 %) think of nature conservation as an important political task (total: 42 %). This opinion is also held by an above-average number of members of the Liberal Intellectual (48 %), the New Middle Class and the Movers and Shakers (both 47 % each) milieus. Nature conservation is of markedly less importance among the Precarious (32 %) and the Escapists (27 %). This and the following statements and figures again refer to the percentage of answers at the highest agreement level. Also with regard to the question whether nature conservation should manage with less money in times of economic crisis, a lower interest in nature conservation is evident in the Precarious milieu. 24 % of the members of the Precarious milieu strongly agree with this statement (total: 15 %). This is possibly due to the fact that many members of this milieu have an insecure employment status and are more likely to be affected by an economic recession. Outstandingly many members of this milieu (19 %, total: 11 %) think that enough is being done for nature conservation in Germany. By comparison, this opinion is also held by many respondents of the High Achiever milieu (20 %). Only very few of the Socio-ecological milieu agree with the statements that qualify the importance of nature conservation (6 % or 5 %).

Mainly well-educated and older people feel responsible for the preservation of nature

The share of respondents who feel a personal responsibility towards the preservation of nature is high with 62 % (see figure 15). It decreased, however, by 6 % compared to 2009 (68 %). Well-educated and older people (65+) more often state that they feel personally responsible for the preservation of nature. The unreserved agreement is about 5 % above the average of 17 % each time. This is why in these segments the actual commitment to nature conservation is higher than in the average population (see chapter 2.3). Personal responsibility is less frequently felt among younger respondents (10 %) who state outstandingly often that they cannot contribute much to protect nature, as is the case with respondents with a low income (24 % and 28 %, respectively, total: 18 %). The number of those who estimate their possible contribution to nature conservation as low increased slightly in the past two years, taking both levels of agreement into consideration (2009: 50 %, 2011: 54 %).

Especially members of the Socio-ecological milieu (36 %, total: 17 %) and those of the Liberal Intellectual milieu (23 %) feel personally responsible for the preservation of nature. The lowest percentage of responsible people exists in the Precarious milieu (9 %). Due to multiple social disadvantages their attention is focused mainly on their own close surroundings and the management of everyday challenges (UBA and BMU 2011b). Escapists and High Achievers also feel only little personal responsibility for the preservation of nature (11 % and 12 %, respectively).

An above-average number of respondents of the Precarious milieu think that a single person cannot contribute much to protect nature (29 %, total: 18 %). This attitude is probably due to the fact that many members of this milieu have the impression that they can hardly take influence on their way of life and therefore they do not dare to take influence on wider developments. Also in the young, modern middle class, in the Adaptive Pragmatist milieu, many members feel that they have only little possibilities of contributing to nature conservation (28 %). In contrast, only very few respondents of the Socio-ecological milieu (6 %), the Established Conservative milieu (7 %) and the Liberal Intellectual milieu (13 %) feel powerless.

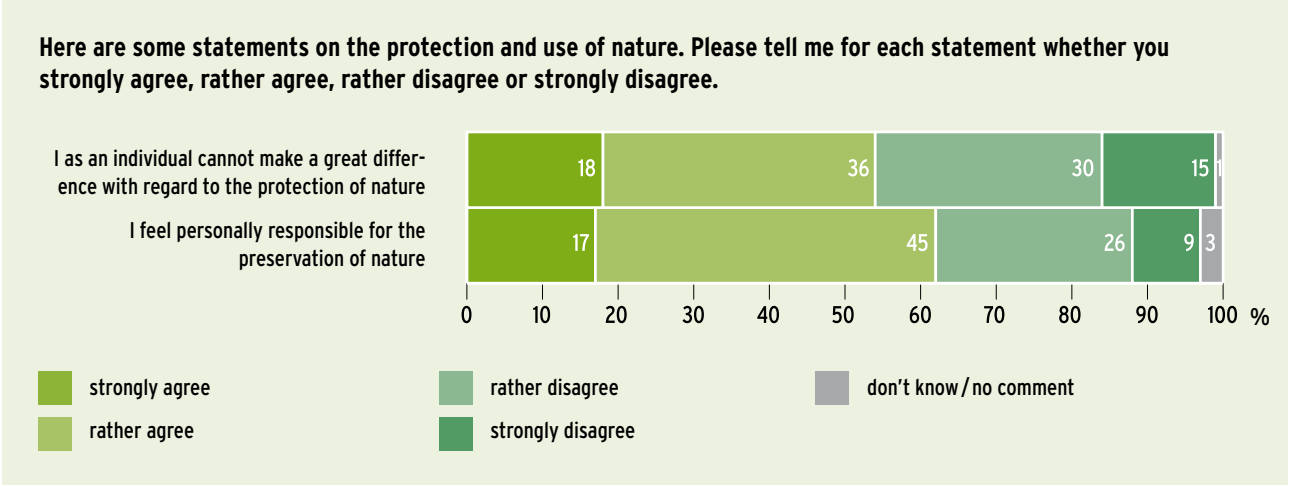

Figure 15: Personal contribution to the protection of nature

Justice and the personal Good Life are important arguments for the protection of nature

The 2011 survey on nature awareness included the agreement with different ethical reasons for protecting nature. These were identified in the scope of the expert report "Ethische Argumentation-slinien in der Nationalen Strategie zur biologischen Vielfalt (Eser et al. 2011) " supported by the Federal Agency for Nature Conservation (BfN). Three categories of arguments werde distinguished:

Arguments of Prudence justify the protection and sustainable use of nature and biological diversity by means of well-understood self-interests. These arguments aim at the direct and indirect usefulness of nature for human purposes such as, for example, the provision of resources and the model function for innovations.

Arguments of Justice focus on the perpetrators and victims of the progressive damage caused to nature and the right of all people, living today and in the future, to an intact nature as well as the right to use it. Examples include arguments which reject the excessive use of natural resources at the expense of the population in poorer countries or which formulate an own right of existence of nature.

Arguments of the Good Life are based on the importance of experiencing nature for a good and truly human life. This is closely linked to the duty of preserving the conditions for a happy relationship with nature. Examples include arguments which emphasise the aesthetic and cultural importance of nature.

Intersections between the mentioned main lines of argumentation may occur. The recreational effect of nature, for example, may be understood as an argument for the Good Life for protecting nature but also as an argument of Prudence if health is considered purposeful and useful.

It turns out that all reasons given are compatible with the majority of the population (see figure 16). The importance of nature for the health and recreation of people as well as the right of future generations to an intact nature and environment are unreservedly accepted by a majority as reasons for protecting nature. This is followed by statements that animals and plants have an own right of existence and that beauty and diversity can be experienced in nature. Reasons which are based on thoughts of Justice and the Good Life as arguments in favour of nature conservation meet with a stronger response than arguments which focus on the economic benefit of nature for man and thus belong in the category of prudential arguments.

The level of agreement with most of the statements increases with age and education as well as with income, although not to the same extent (see table 5). Younger people (under 29 years) and respondents with a low income agree significantly less frequently with statements that refer to health, recreation and a fulfilled life with nature. The answer tendency shows that the awareness of nature conservation as a necessity was important for the answering of the question. Therefore, it is not surprising that women attach more importance to most of the statements than men. The

economic argument alone that nature provides important raw material is more important to male respondents. Also East Germans strongly agree with it to an above-average extent (48 % vs. a total: 41 %).

Here are some possible reasons for protecting nature. Please tell me for each statement whether you strongly agree, rather agree, rather disagree or strongly disagree.
Protecting nature is very important to me ...

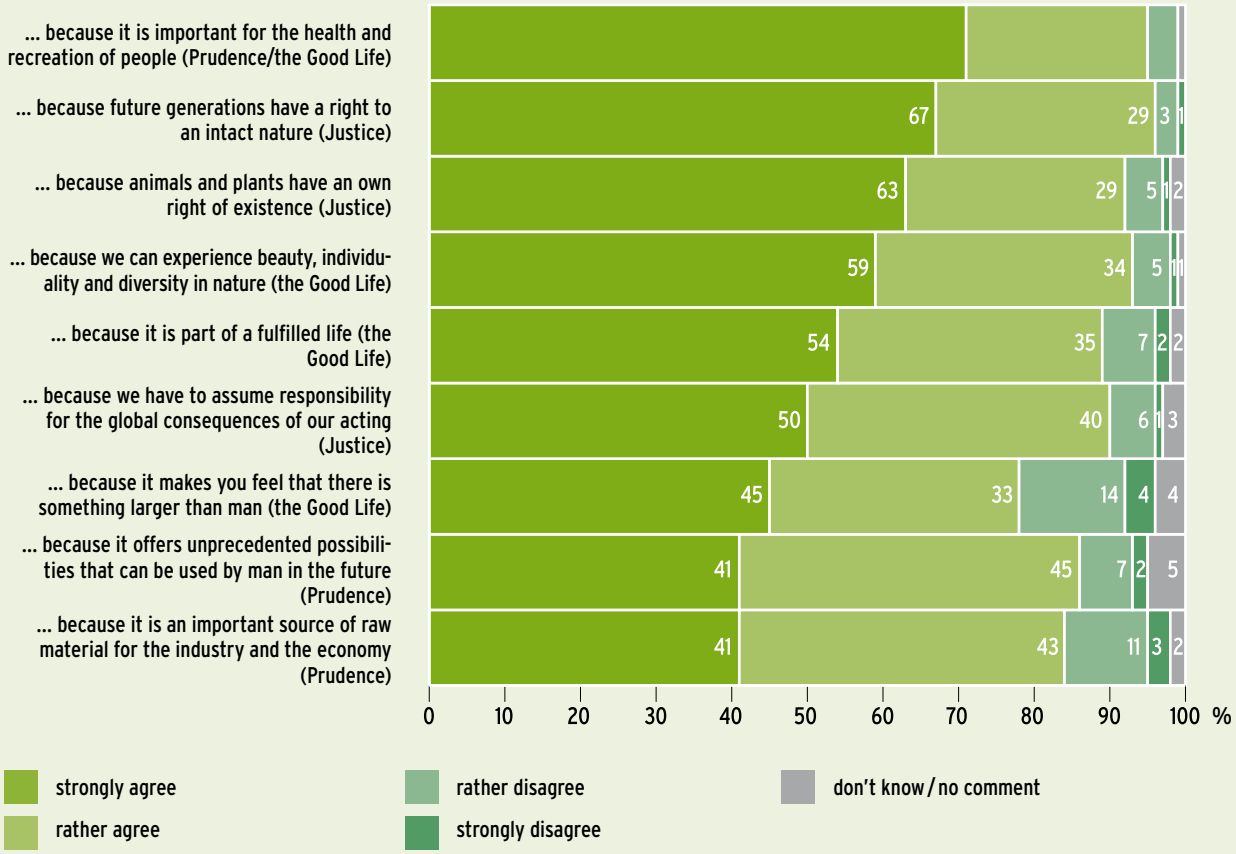

Figure 16: Personal reasons for the protection of nature

All in all it can be determined that the milieus which generally have a closer relation to nature conservation (especially Socio-ecological and Liberal Intellectual milieus) also agree much more strongly with the reasons given in favour of the protection of nature asked in the scope of this study. In the milieus which do not feel close to nature conservation (especially members of the Escapist and the Precarious milieus) can relate to the stated reasons to a significantly less extent.

Figure 17 shows the unreserved agreement with the statement "Protecting nature is important to me because future generations have a right to an intact nature" in the social milieus. It is especially high in the Socio-ecological and the Liberal Intellectual milieus but is markedly above average in the Adaptive Pragmatist milieu. One reason for the strong agreement in these milieus may be that many are currently involved in family affairs or in a family planning phase and that the thought of their own children makes them consider the welfare of the next generation.

The arguments of Prudence which aim at the economic benefit of nature reveal the different answer patterns in the social milieus, which is quite interesting. Especially the Liberal Intellectual (55 %), Adaptive Pragmatist (51 %) and Socio-ecological (48 %) milieus show high levels of agreement (total: 41 %) with regard to the reason that nature offers unprecedented possibilities to man. In contrast, the importance of nature as a source of raw material is stated by respondents of the New Middle Class milieu and the Precarious milieu with an above-average frequency (46 % each, total: 41 %).

Table 5: Personal reasons for the protection of nature according to socio-demographic segments

Protecting nature is very important to me ...

Answer category "strongly agree" data in %	Ø	Sex		Age [years]				Education			Net household income [€]			
		M	F	-29	30 - 49	50 - 65	65+	low	me-dium	high	-999	1,000 - 1,999	2,000 - 3,499	3,500+
... because it is important for the health and recreation of people	71	70	73	65	70	73	78	68	71	76	58	69	74	74
... because future generations have a right to an intact nature	67	65	68	66	66	68	69	63	67	72	65	64	68	68
... because animals and plants have an own right of existence	63	59	67	60	61	65	68	63	64	64	58	62	64	63
... because we can experience beauty, individuality and diversity in nature	59	55	63	54	58	61	65	55	60	65	48	58	60	60
... because it is part of a fulfilled life	54	51	57	43	53	58	63	53	55	57	44	55	56	55
... because we have to assume responsibility for the global consequences of our acting	50	48	52	42	49	55	53	46	51	55	47	47	50	53
... because it makes you feel that there is something larger than man	45	42	48	37	43	47	54	45	45	44	43	49	45	42
... because it offers unprecedented possibilities that can be used by man in the future	41	42	41	42	39	42	43	39	39	47	39	40	40	48
... because it is an important source of raw material for the industry and the economy	41	46	36	42	38	42	44	40	39	44	36	40	41	45

10 % and more above average (Ø)
5 % to over 10 % above average (Ø)
5 % to under 10 % below average (Ø)
10 % and more below average (Ø)

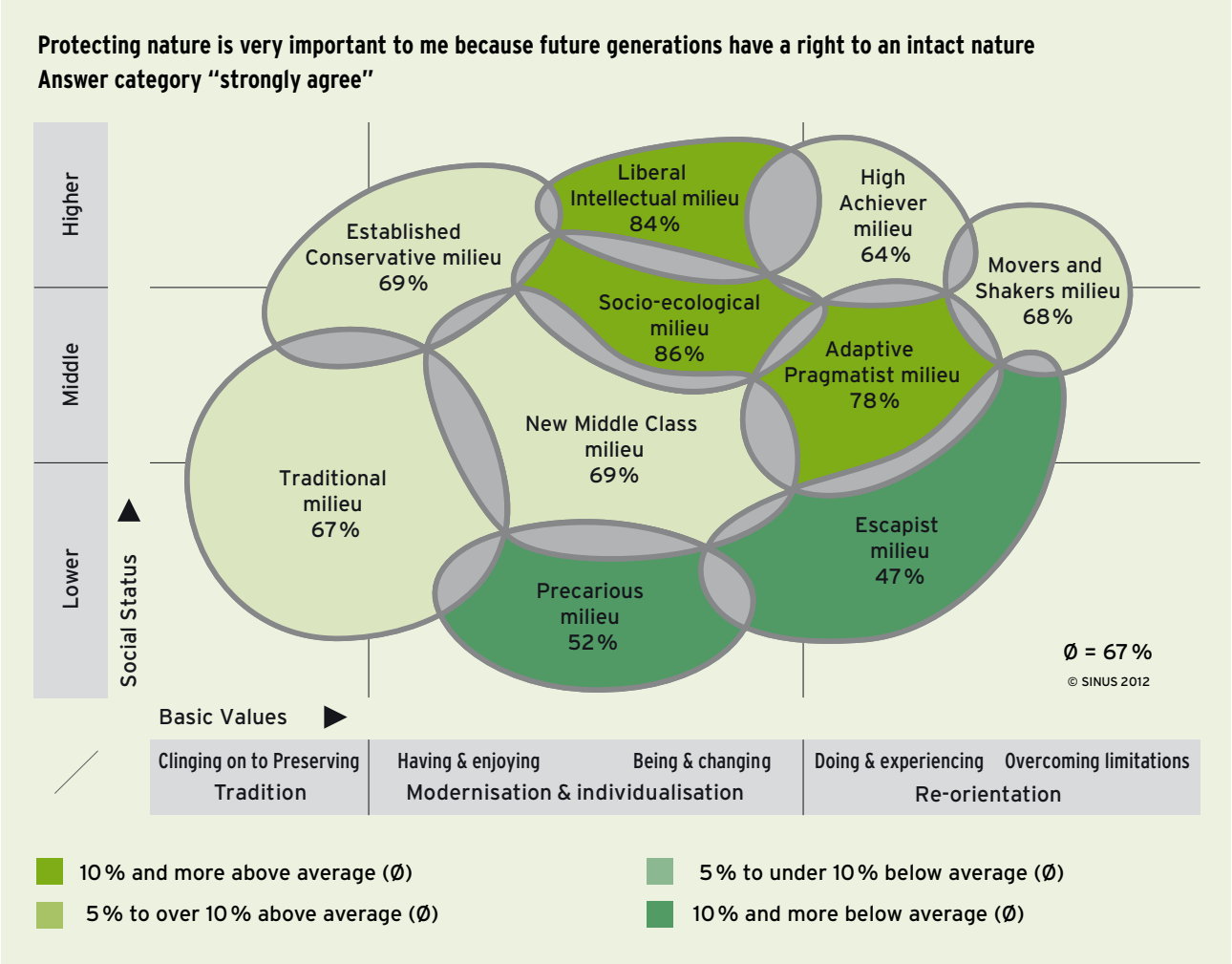

Figure 17: Agreement with the argument of generational justice in the social milieus

3.4 Responsibility for the protection of nature

Companies and industrial enterprises should do more for nature conservation

Comprehensive protection of nature can only be achieved if all social players make their contributions. The question is, however, whether they have contributed to a sufficient extent so far. According to the German population especially companies and industrial enterprises have to assume more responsibility for the protection of nature (see figure 18). 76 % of the respondents think that their commitment so far has been insufficient. The efforts of the German government, of their own state government as well as of the German citizens are also considered not good enough by the majority of the respondents. Only the involvement of nature conservation and environmental protection associations and forestry management is considered to be sufficient by the majority. About one-fifth even thinks that the commitment of nature conservation and environmental protection associations is overdone.

Respondents of high formal education and high income criticize the insufficient commitment of the mentioned players to an above-average extent. Comparing the answers of women with those of men, it is evident that men rather tend to be content with the commitment of these players, whereas women tend to be more critical. Therefore, 59 % of the female respondents think that the German citizens could do more for the protection of nature, compared to 54 % of the male respondents. 22 % of men think that the involvement of associations is exaggerated, in the case of women only 15 %. The different answer pattern of East and West Germans is especially striking. Respondents of the Western federal states are more frequently of the opinion that the mentioned players are not sufficiently involved in the protection of nature. The East Germans rather see

The protection of nature is a task many people can contribute to. Please tell me how you rate the commitment of the following: overdone, just right, insufficient?

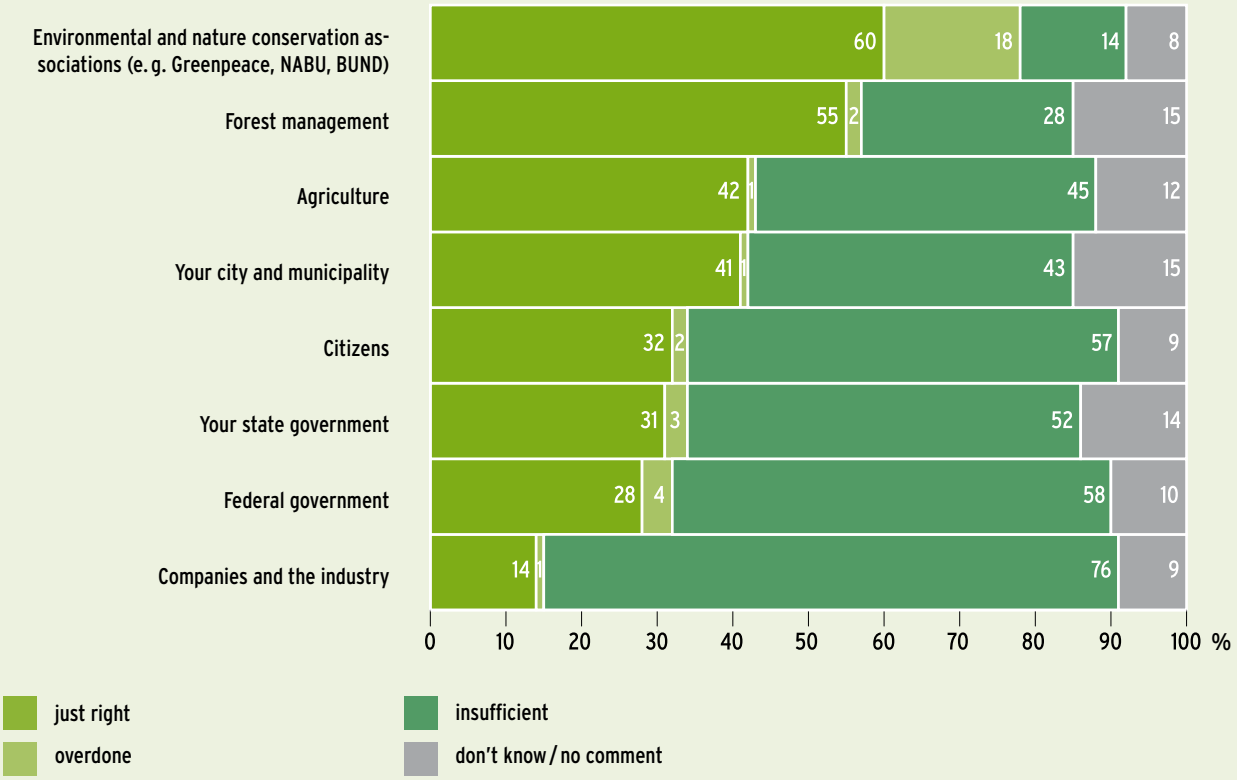

Figure 18: Responsibility for the protection of nature

3.4 m Results differentiated by social milieus

The majority of the members of the Liberal Intellectual and Socio-ecological milieus regard the commitment of federal and state governments, cities and municipalities, companies and industry, agriculture, German citizens as insufficient with regard to nature conservation. Their level of criticism is consistently above average. The expectations for all players who have a potentially high influence on the state of nature are high in these milieus with a strong awareness of nature conservation. With regard to forest management alone and even more distinctly with regard to the nature conservation and environmental protection associations, slightly less respondents think that these are not doing enough. Forestry management, however, is also evaluated critically by an above-average number of respondents (Liberal Intellectual: 44 %, Socio-ecological: 35 %, total: 28 %). The confidence in nature conservation and environmental protection associations and interest in their work are especially high in the Socio-ecological milieu. In addition, an above-average number of the members of this milieu are active in nature conservation (see chapter 2.3).

As nature conservation is less important to members of the Escapist and Precarious milieus, they expect significantly less of the players involved and consequently consider their commitment rarely as insufficient, whereas in the other milieus average expectations prevail.

the respective commitment as just right. The commitment of environmental protection and nature conservation associations is considered as too high by 29 % of the East Germans, but in the case of the West Germany only 15 %.

3.5 Evaluation of measures for nature conservation

Regulations, prohibitions and rules are considered important instruments of nature conservation policy

Nature conservation policy requires the support of the population. Therefore, it is important to know how the German citizens regard measures for the protection of nature. A corresponding question was included both in the last and this survey. In the process, three types of instruments were mentioned: 1) Regulations, prohibitions and rules, 2) Incentives and subsidies as well as 3) Communication, information and education (see figure 19). In this survey three possible measures were defined for each category. It turns out that the majority of the respondents consider all measures of nature conservation mentioned as "very important" or "rather important".

The perpetrator principle has top priority: It is very important to about 60 % of the respondents that any interference with nature has to be paid for appropriately. Stricter regulations on marine conservation, a linking of the subsidies for the use of renewable energies to the environmental compatibility of the projects and stricter import controls of rare animal and plant species as well as better ecological and environmental education in schools is considered worthwhile by more than or exactly half of the respondents each time. Measures rated as particularly important include regulations, prohibitions and rules. This corresponds to the 2009 survey results when the same measures were in the top three positions.

The level of agreement with almost all measures is the highest in the high-earners segment and the lowest among the respondents with a low income. Both segments are continuously above or below the population average (answer "very important"). Some dependence on the age and level of education can be determined as well: older people and the well-educated tend to regard the measures as very important compared to younger people or respondents with a low formal education. Information activities are considered slightly less important by East Germans than by West Germans.

The Socio-ecological and the Liberal Intellectual milieus stand out markedly from the rest of the population with regard to the evaluation of the measures for the protection of nature. The continuously high rates of agreement with all measures mentioned reflect a generally strong orientation towards nature conservation in these milieus. In milieus where less importance is attached to nature conservation, the measures are markedly less often evaluated as very important, especially in the Escapist and the Precarious milieus. A majority agreement with all measures is, however, obtained when combining the two agreement levels "very important" and "important".

Which of the following measures for the protection of nature should be preferably used? Please tell me for each measure whether you consider it very important, rather important, less important or not important at all.

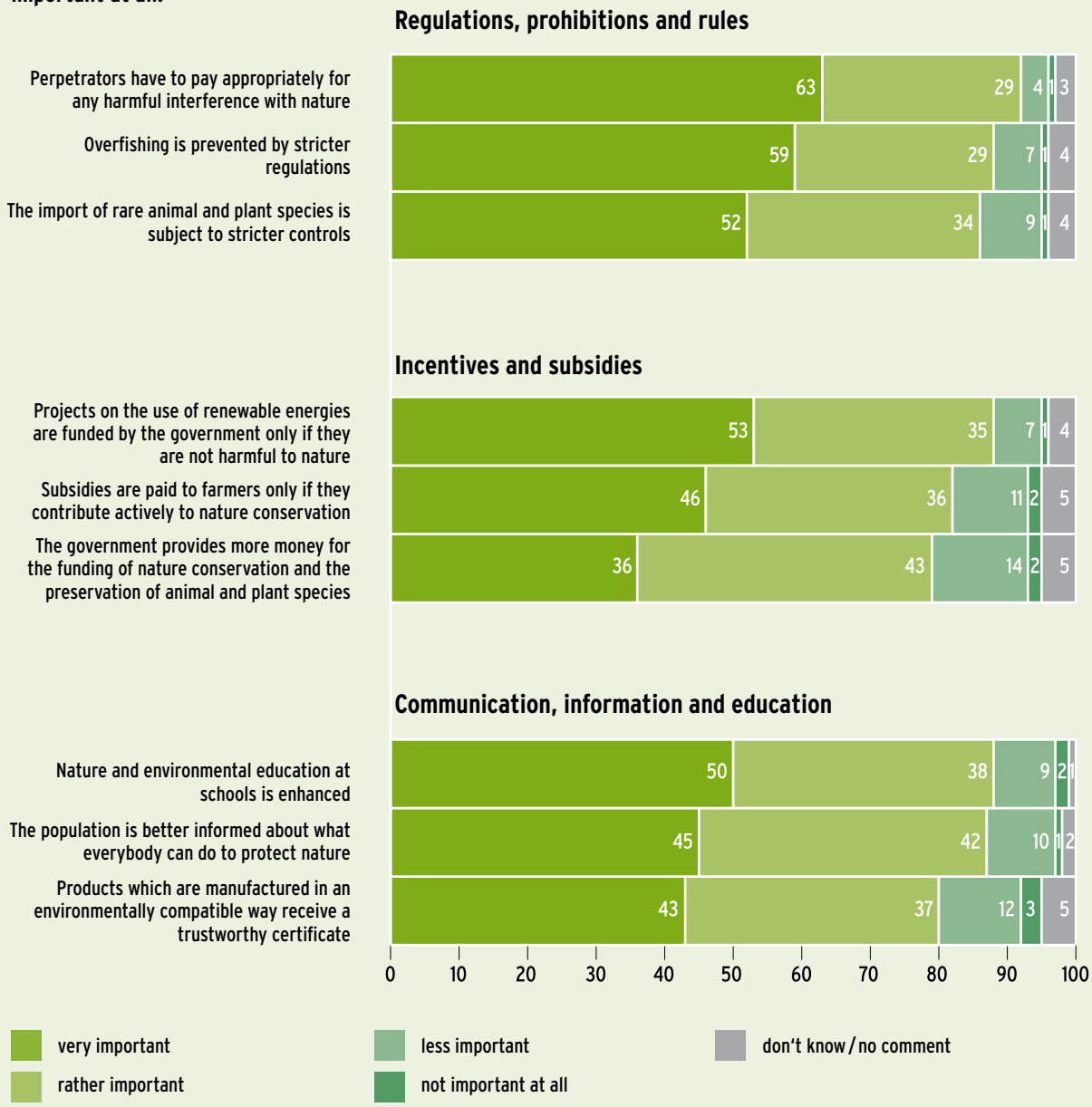

Figure 19: Preferred measures for the protection of nature

4 Good life in harmony with nature

What are the basics to sustain human life? What makes a good life? For decades, a society's affluence and welfare have been gauged on the basis of the gross national product and the income of its members, and not only in Germany.

However, there is an ever growing recognition that this notion of affluence is just too simple, with more complex concepts introduced to the discussion that make allowances also for the principles of sustainable development.

This calls for an instrument capable of measuring the "economic, social and ecological wealth as well as the cohesion and sustainability of a society" (EK WWL 2012).

This also begs the question as to the function nature has in a more comprehensive concept of affluence. Many philosophers who have sought to analyse the prerequisites of a good life, see the solidarity with animals, plants and nature itself as an integral part to this. This is an idea the vast majority of Germans would embrace, as was demonstrated by the 2009 Nature Awareness Survey. That said, it cannot be ruled out that this fundamental approval is overshadowed by the tide of events, social discourse, and economic trends. To address this, the present survey asked questions about nature's rational and emotional relevance, with the data discussed in chapter 4.1.

A reasonable and more conscious approach to the utilization of nature could be instrumental in leading a good life as a human being. For a start, chapter 4.2 will investigate the level of public awareness of nature's services. In this regard, distinction can be drawn between 'ecosystem services' of the providing, regulating, supporting and cultural type (MEA 2005: 39ff). Providing-type ecosystem services include the production of building material and food as well as pharmaceutical raw materials extracted from plants or animals. The category of regulating ecosystem services covers the pollination of (cultivated) plants and storage of carbon dioxide in the form of biomass, and others. Humus formation is an example for supporting services, while the availability of diversified recreational settings exemplifies cultural services.

In most cases however, exploiting nature's offerings also means encroaching on the natural world. With many Germans giving high priority to nature protection, it is safe to assume that the utilization of nature will only be accepted under certain conditions. Chapter 4.3 undertakes to explore the level of public support for the requirements of a sustainable utilisation of nature and the level of acceptance for these sustainability principles. Under the "quality of life" heading, the National Sustainability Strategy passed by the Federal Government in 2002 points out the importance of understanding the non-material and material value people attach to nature (Federal Government 2002). In order to preserve that quality of life, and safeguard it for future generations, it is mandatory that natural assets only be expended in line with their rate of regeneration, and that the level of pollution stay within the limits of what the ecosystem is capable of compensating.

4.1 Individual significance of nature

For most, nature is valuable, useful, and beautiful

In order to investigate the associative environment nature is placed in, respondents were presented with multiple pairs of opposite adjectives (e. g. beautiful-ugly) and then asked to specify the attributes that come closest to their understanding of nature, using a scale of five levels between these opposites. The outcome is particularly relevant for the target group-specific communication of conservation-related issues.

Based on the arithmetic mean of the ratings, figure 20 depicts the profile of attributes that the respondents ascribe to the natural world. Nature is valuable, useful and beautiful – over two third of the respondents strongly agree with this characterisation (answer level 1). The arithmetic mean on the axis from 1.0 to 5.0, covering the range from valuable to worthless is 1.3, 1.4 for useful - useless, and 1.4 for beautiful - ugly. Other commonly given attributes are attractive, well-known, familiar, thrilling, and tranquil. Percentages of the two agreement levels (1 and 2, 4 and 5) exceed 70 % in both cases. With 46 %, a significantly lower portion of respondents see nature as calming, one fourth find it thrilling, and another fourth dither between the two poles. The arithmetic mean for the thrilling – calming pair is 3.3; also, no clear picture emerges regarding the vulnerable – robust and threatening – harmless pairs. While a slim majority feels that nature is vulnerable rather than robust, almost a third ends up in the middle between poles. 43 % think that nature

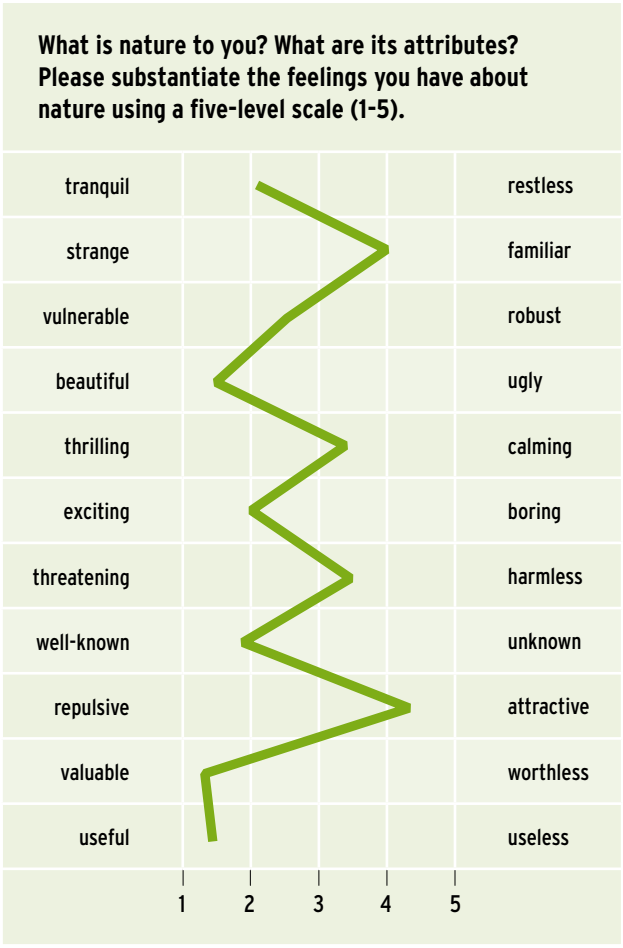

Figure 20: Attributes assigned to nature

is harmless rather than threatening, and 44 % remain undetermined.

The attribute profiles obtained for the different socio-demographic segments that represent the arithmetic means of the attribute levels differ but slightly from the profile obtained for the general population (see figure 20). Significant discrepancies between socio-demographic segments, however, can be found when comparing the percentage of the highest attribute levels being assigned (see table 6): in the below-29-years age bracket, the percentage of positive attribute levels assigned is clearly lower than in the population average. In contrast, it is clearly higher in the oldest age group. Across all socio-demographic segments, a majority of respondents had no reservations assigning the adjectives valuable, useful, and beautiful (see table 6).

Germans have close ties to nature

Most of the respondents attach great value to nature. Nature signifies quality of life and is associated with health, leisure and good life in general (see figure 21). Appreciating nature's diversity, many believe it is important to give children an understanding of the natural world. The rate of unreserved acceptance of the relevant statements lies between 50 and 60 %. 80 % of the respondents (when adding up both acceptance levels) feel a strong affinity to their local nature and

The results according to Sinus-Milieus® show significant differences in some areas: nature is seen as valuable (as opposed to worthless) especially by members of the nature-loving milieus (Liberal Intellectuals): 94 %, Socio-ecological: 87 %, total: 76 %). Approval rates for these attribute levels are also high in mainstream society (members of the New Middle-Class milieu: 80 %, Adaptive Pragmatist milieu: 81 %) and Traditional milieu (81 %). However, it is likely that nature is seen as valuable for different reasons. While in nature-loving milieus this attribution is mostly based on ecological reasoning and nature's intrinsic value, members of mainstream society and the Traditional milieu also quote utilitarian considerations. In the more modern Escapist (53 %), Mover and Shaker, and High Achiever (each 70 %) milieus, nature is significantly less often seen as a value in itself. A similar distribution across the milieus was found for the useful - useless pair of attributes.

Beauty is not just in the eye of the beholder - aesthetic appeal is also coupled to milieu affiliation. Nature is beautiful (as opposed to ugly) first and foremost to respondents from the Adaptive Pragmatist (78 %, total: 66 %), Liberal-Intellectual (77 %), Socio-ecological (75 %), and Traditional (73 %) milieus. The percentage of respondents regarding nature as beautiful is considerably lower in the Escapist (44 %) and Mover and Shaker (54 %) milieus.

On the question of whether nature is well-known (as opposed to unknown), the field is led by members of the nature-loving Socio-ecological (56 %, total: 40 %) and Traditional (53 %) milieus. The same is true for the attribute familiar. The closeness to nature commonly found amongst members of the Socio-ecological milieu can probably be ascribed to the fact that they like to spend a lot of time outdoors and hold a general interest in the subject. The Traditional mindset is likely to have been shaped by childhood experiences. Members of this milieu were children in the (post) war period, when watching TV as a pastime was the exception rather than the rule, and children would generally spent much time in the open air.

Nature is described as being attractive in particular by members of the Liberal-Intellectual (70 %, total: 49 %), Socio-ecological (60 %), and Traditional (57 %) milieus. The more entertainment-orientated Escapists (31 %) and Adaptive Pragmatists (44 %) are less inclined to think of nature as attractive.

Table 6: Attributes assigned to nature according to socio-demographic characteristics

What is nature to you? What are its attributes?

Agreement with each adjective on the highest level data in %	Ø	Sex		Age [years]				Education			Net household income [€]			
		M	F	-29	30 - 49	50 - 65	65+	low	medium	high	-999	1,000 - 1,999	2,000 - 3,499	3,500+
valuable	76	75	76	70	72	78	83	74	72	81	68	73	77	76
useful	71	71	72	66	68	77	78	69	71	76	72	69	72	76
beautiful	66	63	69	57	64	72	71	65	66	67	61	66	69	62
well-known	40	39	42	32	34	46	51	44	40	36	34	45	41	38
tranquil	33	31	34	23	31	39	38	35	34	29	30	35	31	35
exciting	30	30	31	25	29	30	37	27	28	37	23	30	30	41
vulnerable	23	22	24	24	22	21	25	20	25	26	25	22	21	28
attractive	49	47	51	41	47	53	57	49	45	55	42	48	50	51
familiar	35	32	38	22	29	43	48	38	37	29	31	39	35	35
calming	21	19	23	12	21	22	28	21	23	19	19	21	19	27
harmless	17	16	18	15	17	16	20	16	18	16	14	18	17	15

10 % and more above average (Ø)
5 % to over 10 % above average (Ø)
5 % to under 10 % below average (Ø)
10 % and more below average (Ø)

landscapes. Many also state that they try to spend as much time in the outdoors as possible. Only a small minority of those interviewed are made to feel alien or uncomfortable.

Compared to the data of the 2009 Nature Awareness Study, there is only little difference in the distribution of answers if considered separately. On the other hand, the statements do show a collective trend: all statements to the effect of a positive relationship with nature show a 2 to 5% decline in approval for the highest two answer categories. Although 75% of the respondents still agree with the statement "I try to spend as much time in the outdoors as possible", this means a drop by 10% compared to 2009. In this context, the time the survey was conducted could have some influence: the 2009 study was conducted during the summer months June and July - it is quite possible that questions about the frequency of spending time outdoors, and the feeling of health and happiness in the outdoors received more positive answers than in the winter months in which the 2011 survey took place.

As in 2009, the lowest portion of nature lovers is found in the below 29 years of age and low-wage segments, contrasted by the highest percentage in the older and well educated groups. This is hardly surprising given the fact that the obtained attribute profile (see above) and perceived endangerment/need for protection (see chapter 3.3) already point in that very direction. Women tend to be on more positive terms with nature than men. Besides, differences can be made out between East and West Germans: as in the 2009 Nature Awareness Study, respondents from East German federal states were more inclined to agree unconditionally with statements conveying a positive bond with nature than their West German counterparts, although the effect is not as substantial as in the last survey.

This is to assess the role that nature plays in your life. To this end, I ask you to consider the following set of statements. Please specify, for each of these statements, if you agree strongly, rather, rather not, or if you disagree strongly.

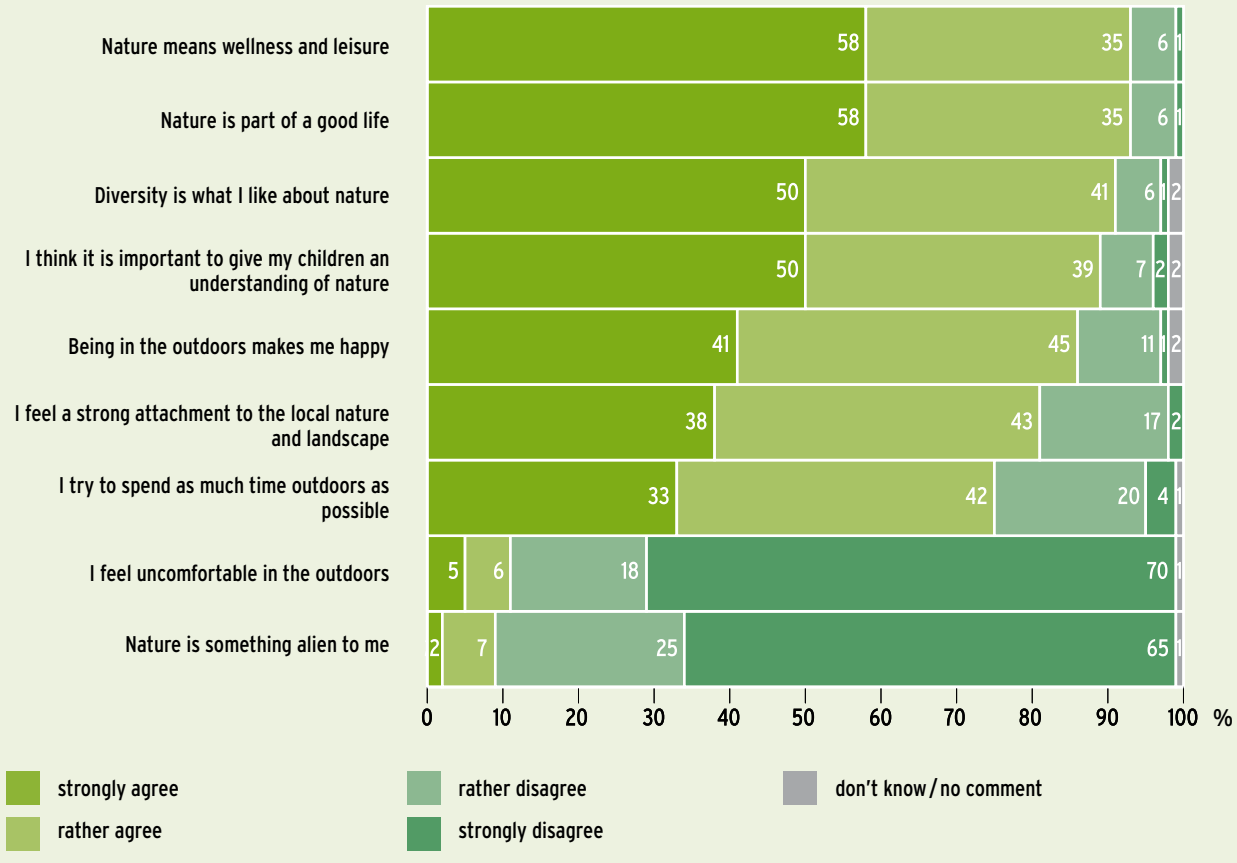

Figure 21: Personal significance of nature

Many consider being knowledgeable about nature important

A majority of respondents believe it is important to understand interrelationships in nature, and to have an idea of the native flora and fauna. But this interest does not only extend to nature itself - many think it is also desirable to get a better understanding of nature's economic significance. It should be noted in this regard that the approval expressed in the topmost answer category ("strongly agree") is considerably lower for the statements regarding the

Table 7: Personal significance of nature according to socio-demographic segments

This is to assess the role that nature plays in your life. To this end, I ask you to consider the following set of statements. Please specify, for each of these statements, if you agree strongly, rather, rather not, or if you disagree strongly.

Answer category "strongly agree" data in %	Ø	Sex		Age [years]				Education			Net household income [€]			
		M	F	-29	30 - 49	50 - 65	65+	low	me-dium	high	-999	1,000 - 1,999	2,000 - 3,499	3,500+
Nature means wellness and leisure	58	55	60	46	55	63	68	54	58	63	47	56	60	58
Nature is part of a good life	58	55	61	49	56	60	67	54	58	63	45	55	60	59
Diversity is what I like about nature	50	47	53	40	51	51	57	45	53	56	37	48	51	53
I think it is important to give my children an understanding of nature	50	46	53	42	51	48	57	44	50	58	42	45	52	55
Being in the outdoors makes me happy	41	38	44	29	38	42	56	39	39	47	36	42	41	41
I feel a strong attachment to the local nature and landscape	38	37	38	17	34	42	57	37	33	44	33	39	37	39
I try to spend as much time outdoors as possible	33	31	35	19	32	34	46	32	34	34	20	35	35	34
I feel uncomfortable in the outdoors	5	5	5	5	5	4	6	5	5	5	6	4	5	3
Nature is something alien to me	2	2	2	2	2	2	1	2	2	2	3	1	2	2

10 % and more above average (Ø)
5 % to over 10 % above average (Ø)
5 % to under 10 % below average (Ø)
10 % and more below average (Ø)

The milieu-specific evaluation of the statements as per table 7 (answer level: strongly agree) yields a picture that corroborates the results of the other survey questions. An above-average number of respondents from the Socio-ecological and Liberal Intellectual milieus show a strong attachment to nature. A significant touch with nature is also manifest in the answers given by members of the Established Conservative and Adaptive Pragmatist milieus. In contrast, a more reserved relationship to nature is observed across the Escapist, Precarious and High Achiever milieus.

significance of the knowledge of nature than those regarding affinity with nature. Obviously, being knowledgeable about nature does not constitute a prerequisite to having a close relationship with nature. While as few as 20 % of the respondents take the statement "Nowadays it's not important anymore to be knowledgeable about nature" (agreement levels "strongly agree" and "rather agree", see figure 22), about a quarter of the population is not very interested in nature.

The relevance attached to being knowledgeable about nature increases with age and the level of education: a "mere" 70 % of respondents below 29 years stating that they are concerned about understanding interrelationships in nature is contrasted by 84 % in the 65+ years segment (total: 79 %, the two upper agreement levels); only 53 % of those below 29 years but 81 % in the older segment are concerned about having some knowledge about the domestic flora and fauna (total: 70 %). Amongst the

This is to assess the role that nature plays in your life. To this end, I ask you to consider the following set of statements. Please specify, for each of these statements, if you agree strongly, rather, rather not, or if you disagree strongly.

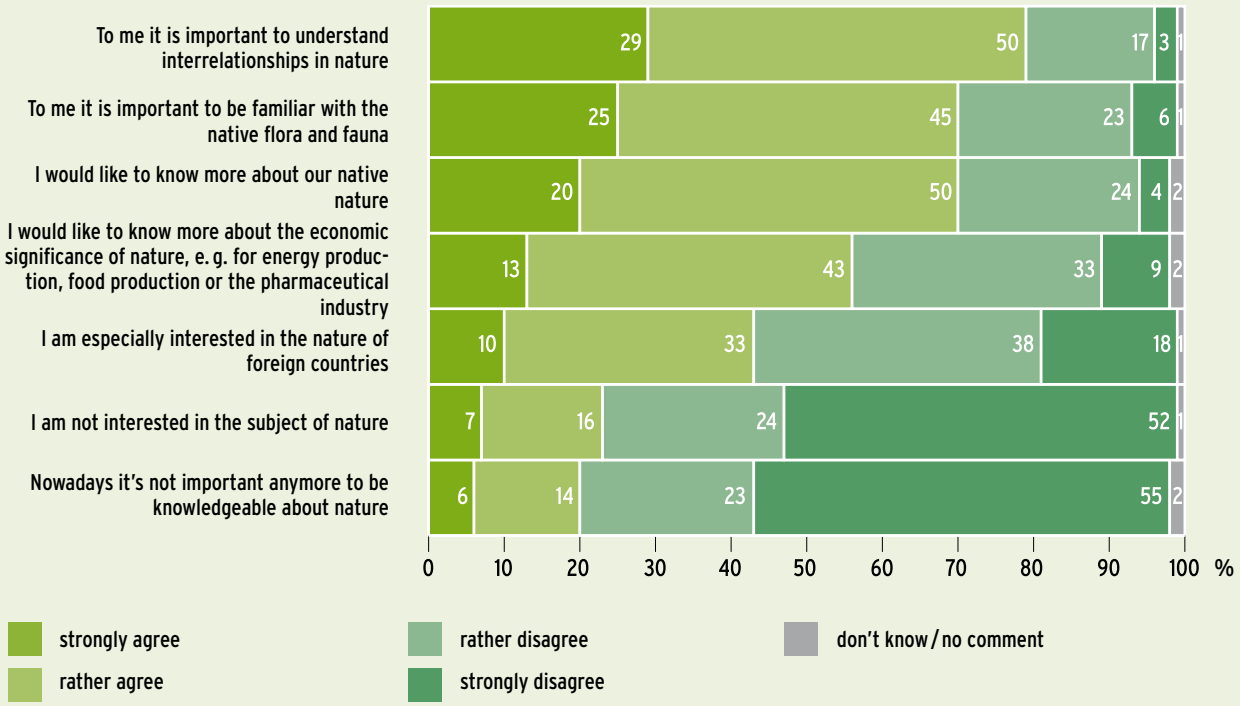

Figure 22: Significance of being knowledgeable about nature

well-educated population, 87 % attach high importance to being knowledgeable about natural interrelationships, which is contrasted by "only" 73 % among those with low formal education. The desire to have a better understanding of the local natural world and nature's economic significance is much more common amongst well-educated people (76 % vs. 64 %) than respondents with low educational achievements (65 % vs. 50 %).

Understanding interrelationships in nature is seen as important especially by respondents in the Liberal Intellectual (strongly agree/rather agree: 92 %, total: 79 %) and Socio-ecological (90 %) milieus. These individuals are fascinated by the interweaving of different mechanisms of action and processes at work in the natural world. Having said that, a large portion of individuals who value an understanding of ecological interrelations is also found in the Adaptive Pragmatist (87 %) and Established Conservative (87 %) milieus. In contrast, the percentage of respondents concerned about "having an understanding of nature" is much lower in the Precar-

I would like to know more about the economic significance of nature, e. g. for energy production, food production or the pharmaceutical industry
Answer category "strongly agree", "rather agree" data in %

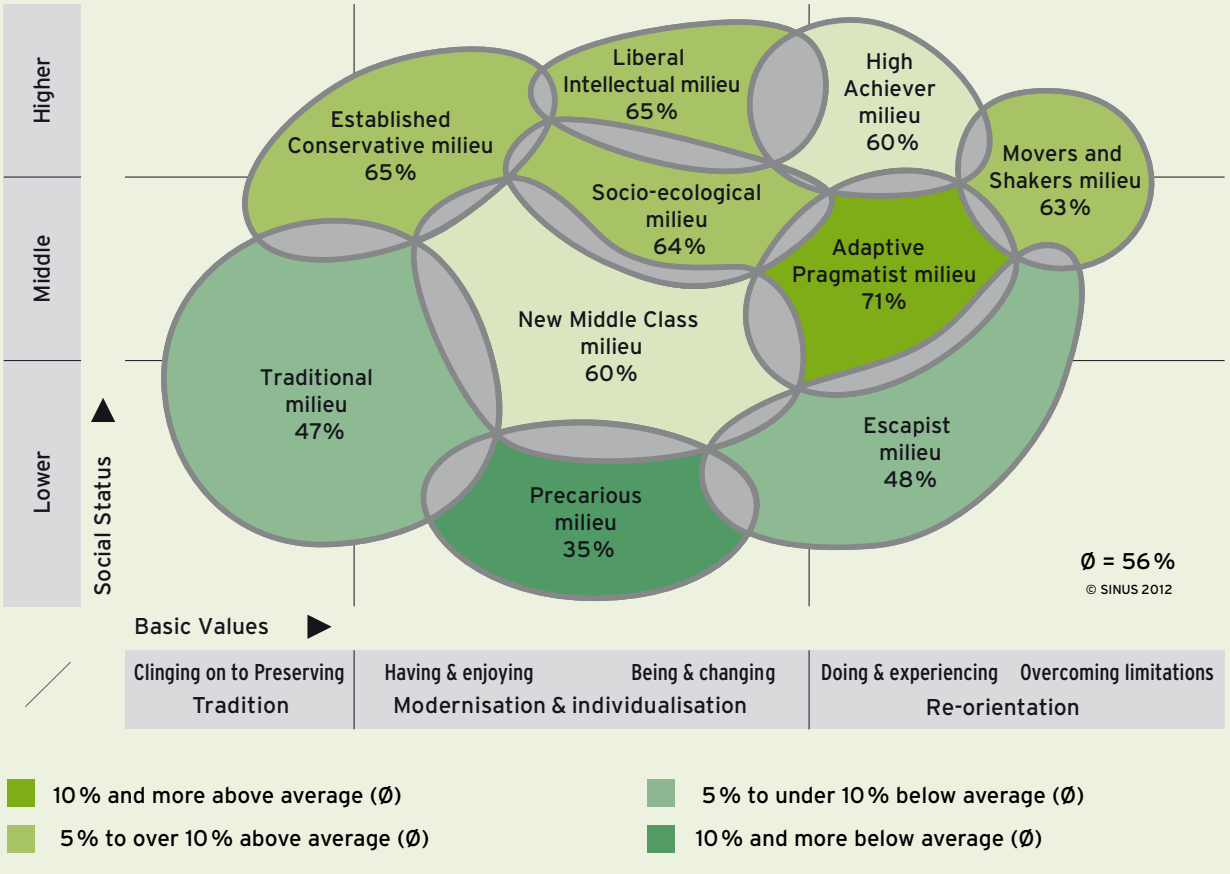

Figure 23: Interest in having an understanding of nature's economic significance in the social milieus

ious (60 %) and Escapist (62 %) milieus. As for the statement "Having an idea of the native flora and fauna is of personal importance to me", which is similar in context, and the question about interest in becoming more knowledgeable about the regional natural world, the answer distribution is quite similar.

A better understanding of nature's economic significance is sought by an above-average number of respondents in the middle and higher social strata (Adaptive Pragmatists: 71 %, Liberal Intellectuals and Established Conservatives: 65 %, Socio-ecologicals: 64 %, Movers and Shakers: 63 %, total: 56 %, see figure 23). This is contrasted by the socially disadvantaged milieus, which seem to be clearly less interested in the subject matter (Traditional: 47 %, Escapist: 48 %, Precarious: 35 %).

4.2 Recognition of natural services

Air, food, relaxation and recreation are identified as the primary services provided by nature

Nature does not only secure largely stable living conditions and the supply of material goods required to sustain human life, but also constitutes an important source of cultural benefits and the foundation of our wellbeing. To investigate the prevalence of knowledge about nature's services among the German population, and to pinpoint which of the so-called ecosystem services are seen as particularly relevant, respondents were asked the following open question: "What do you think are nature's most important services benefiting mankind?". The range of answers given to these questions covers a broad spectrum of ecosystem services. Ecosystem services identified by the respondents comprised providing, regulating, supporting and cultural types, as exemplified below:

"It gives us food, building materials for housing, drinking water, and our trees produce oxygen. And the list goes on." (male, 39 years)

"It has ecological functions, provides raw materials, balances the climate, affords living environments, allows us to escape from daily routine." (female, 59 years)

"It is a source of food, plant life delivers oxygen, our natural environment allows for recovery and health. An intact natural world can also provide for a normal climate, and let's never forget the coming generations." (male, 49 years)

The answers freely formulated by the respondents were broken down into 24 different categories. Figure 24 lists the categories that were touched on most frequently.[8] Over one third of the respondents answered spontaneously that nature provides mankind with breathing air and oxygen. This natural service is clearly more frequently mentioned by West Germans than East Germans (39 vs. 28 %), while the latter are more likely to emphasise the fact that nature in general constitutes the basis of human existence (32 vs. 17 %). This all-encompassing role of nature is stated by a total of 20 %. Other important natural services, respectively mentioned by a rough fourth of the respondents include the provision of food and its positive effect in terms of recreation an relaxation. Entries in the categories "water and rain" and "health" are relatively numerous, too. The "health" rubric had entries with the following tenor: "Nature does provide a lot of benefits for human health", "nature's healing powers", "man's natural antidepressant", "medicinal herbs". 11 % of those interviewed indicate that nature is an important supplier of raw materials in general. The explicit reference to renewable raw materials made by 3 % of the respondents was recorded separately. Energy production was referred to by 5 % of the respondents either in general or in the form of mineral coal and gas. 2 % specifically mention renewable energies such as biogas, biopetrol and solar, wind and water energy. Also, direct reference was made to how ecosystem services are conducive to human welfare and a fulfilled and good life. This includes the categories "nature's beauty" (6 %), "opportunities for experience and free time activities" (6 %), "quality of life and wellness" (5 %), "tranquillity" (4 %), and "joy" (2 %).

8 Statements were also assigned to the following categories: tranquillity, ecological balance, renewable raw materials (wood, without renewable energies), joy (happiness), renewable energies, strength, jobs, nature as a source of inspiration to science and technology (e.g. bionics), miscellaneous. 13 % of the respondents could not or would not answer to this question.

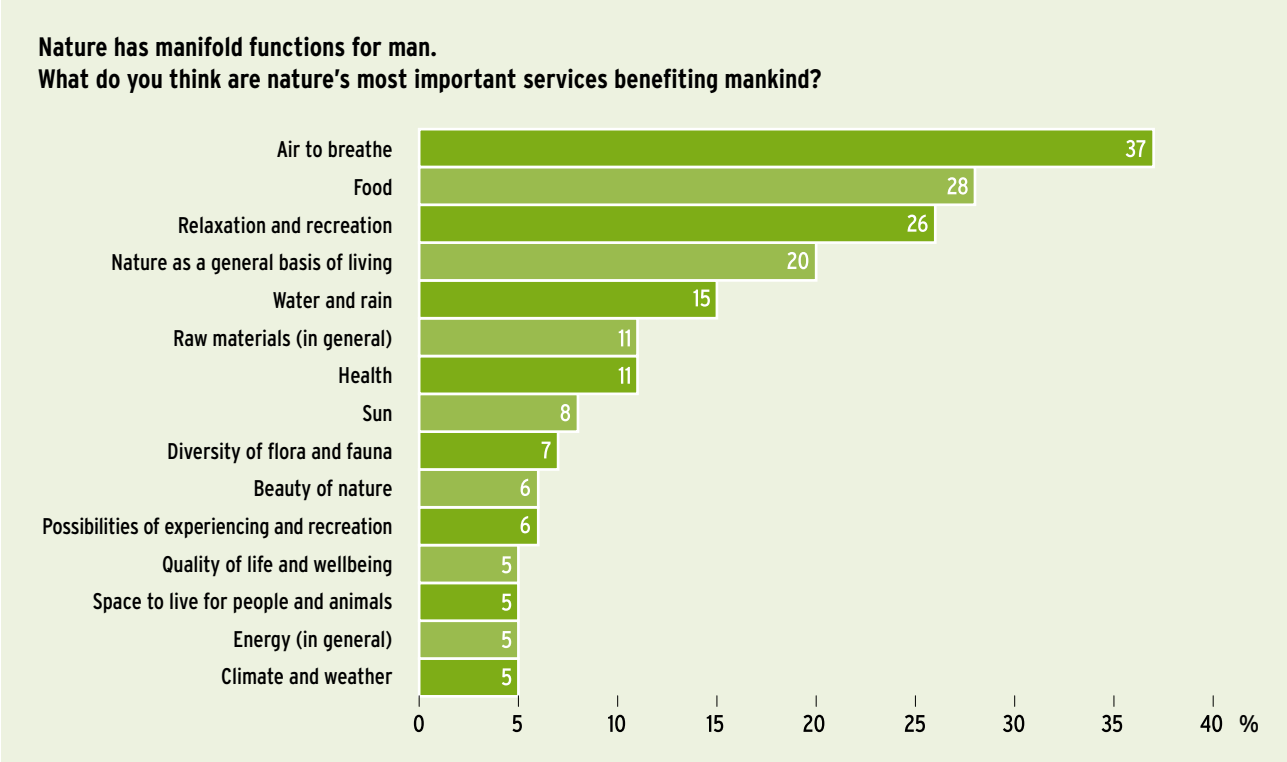

Figure 24: Recognised natural services

Open query (multiple answers possible, given by at least 5 % of the respondents)

4.3 Attitudes towards the utilization of nature

Utilization of nature should be sustainable

The German population appreciates the natural world for the wealth of services it provides to the benefit of mankind (see above), and attach great importance to its protection (see chapter 3). The appreciation of nature for the services it provides for the good of mankind, as well as the high priority given to nature conservation amalgamate into a high level of approval toward a sustainable utilization of natural resources (see figure 25): the utilization of nature should be limited so that its resources will be available to future generations to the same extent (93 %), the diversity of plants and animals and their habitats are safeguarded (93 %), and its beauty and special character are preserved (92 %). In addition, a vast majority of respondents (91 %) holds that the exploitation of nature at the expense of less affluent countries should be banned. This outcome is largely consistent with the results of the 2009 Nature Awareness Study (BMU and BfN 2010). This means that the fundamental support of the principles of sustainability continues to be high, as was also demonstrated by the results of the environmental awareness surveys (see e. g. BMU 2008).

While the disparities between the different socio-demographic segments are less obvious than in the 2009 survey, the trends are comparable: women are more likely to support the principles of sustainability than men. In the low-income segment, the level of agreement with all statements tends to be somewhat lower, in the older and well-educated groups somewhat higher. The present study shows that imposing restrictions on the utilization of natural resources by virtue of fairness towards coming generations and people in other countries is supported by an above-average number of respondents with a high level of formal education (see table 8). The preservation of nature's beauty and special character is seen as important by a major portion of the 65+ segment. Younger people and low earners are clearly less inclined than the population average to agree with the statement that nature should not be exploited at the expense of poorer countries.

What is your opinion on the below statements? Please specify, for each of these statements, if you agree strongly, rather, rather not or if you disagree strongly.

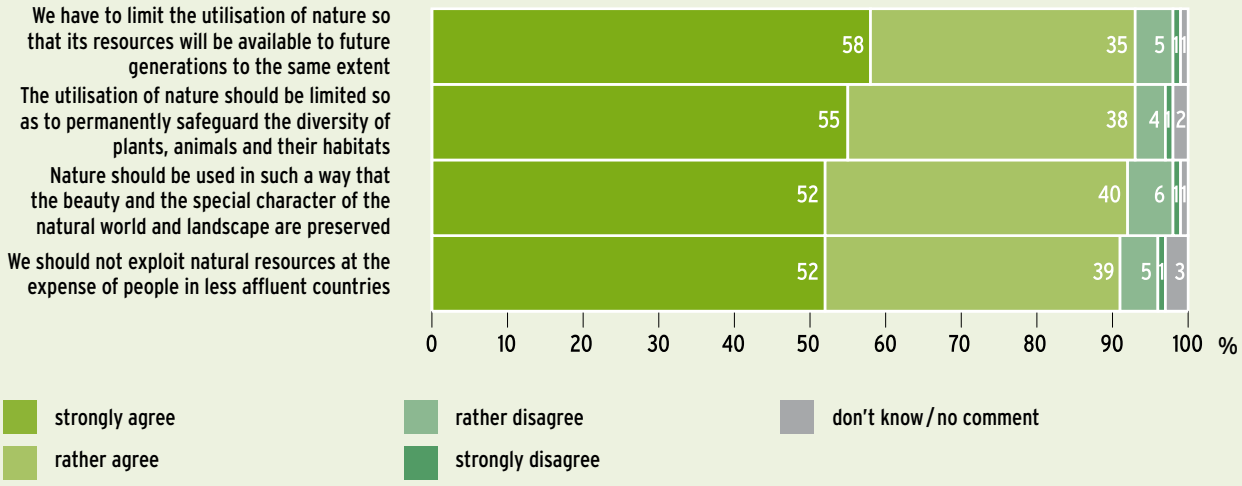

Figure 25: Support of the principles of a sustainable utilization of natural resources

Table 8: Support of the principles of a sustainable utilization of natural resources according to socio-demographic segments

What is your opinion on the below statements? Please specify, for each of these statements, if you agree strongly, rather, rather not or if you disagree strongly.

Answer category "strongly agree" data in %	Ø	Sex		Age [years]				Education			Net household income [€]			
		M	F	-29	30 - 49	50 - 65	65+	low	me-dium	high	-999	1,000 - 1,999	2,000 - 3,499	3,500+
We have to limit the utilization of nature so that its resources will be available to future generations to the same extent.	58	55	61	54	59	57	61	55	58	63	54	55	59	61
The utilization of nature should be limited so as to safeguard the diversity of plants, animals and their habitats.	55	50	59	56	53	56	57	53	56	56	52	53	59	53
We should not exploit natural resources at the expense of people in less affluent countries.	52	48	55	51	49	52	58	49	53	55	46	49	52	54
Nature should be utilized in such a way that the beauty and special character of the natural world and landscape are preserved.	52	52	53	46	53	53	56	49	51	59	45	51	54	53

10 % and more above average (Ø)
5 % to over 10 % above average (Ø)
5 % to under 10 % below average (Ø)
10 % and more below average (Ø)

As to the attitude towards the utilization of nature, a similar milieu pattern emerges as with regard to the personal significance of the natural world and the priority of nature conservation: an above-average number of respondents from the pro-nature (conservation) milieus (Socio-ecological, Liberal Intellectual) support the policy of a sustainable use of natural resources. The level of support is significantly lower amongst the Precarious, Escapist and High Achiever milieus.

Concerning the statement "We should not exploit natural resources at the expense of people in poorer countries", the Socio-ecological (77 %), Liberal Intellectual (64 %) and Adaptive Pragmatist ("strongly agree": 64 %, total: 52 %) milieus are overrepresented.

5 The challenge: to preserve biological diversity

Over the course of millions of years, nature has spawned an astounding variety of plant and animal life, fungi, micro-organisms, biocenoses, and habitats. The diversity of biological species and habitats and their genetic adaptability has allowed even the lightless deep seas, loftiest mountain tops, hot subtropical desert zones, and the icy wastelands of the polar regions to breed biocenoses and ecosystems perfectly adapted to their respective environment. In turn, the variety of these ecosystems and changing living conditions favour the evolution of new species. All of this - the interspecific, intraspecific and habitat diversity - is encompassed by the term "biological diversity".

Being dependent on the services provided by the ecosystems, man has been exploiting the biological diversity in a number of ways. Plants, animals, fungi and micro-organisms are part of any materials cycle that is vital to the sustenance of human life, furnishing clean water, fertile soil, food and raw materials for pharmaceutical products, and building materials. Also, biological diversity, with its richness of forms, has given rise to many adaptations and specialisations serving as blueprints for today's technical innovations.

Over the past century, it has primarily been human activities that led to a sharp decline or even complete loss of many species. With more and more land consumed and fragmented during the development of residential/commercial areas and traffic infrastructure, wetlands drained and bodies of water canalized, pollutants and nutrients released (e.g. by intensive farming), and forests and fish stocks overexploited, living environments of natural or cultural-historical value were lost.

It is not least out of concern for the very basis of human life that biodiversity preservation has evolved into a politically significant field of activity both at the national and international level. In Germany, a National Strategy on Biological Diversity (NBS, Nationale Strategie zur biologischen Vielfalt) was passed by the Federal Government in 2007 (BMU 2007), which aims to implement the international Convention on Biological Diversity (CBD) at the national level. The National Strategy is intended to be instrumental in activating social forces to safeguard the biological diversity (and its regional character) in Germany and help it recover. As a mainstay of their agenda, both the CBD and NBS are designed to integrate the protection and sustainable use of the biological diversity, and to secure a fair balance between advantages and disadvantages when exploiting it.

Similar to 2009, the present study sought to investigate the level of backing that the objective "preservation of biological diversity" has in the general population, as measured by the indicator "significance of eco-political objectives and tasks", in short: "Societal Indicator". The results are discussed in chapter 5.1. A more in-depth presentation of the results regarding the indicator's three dimensions (i.e., general awareness of the term "biological diversity", attitudes, and willingness to act on behalf of biodiversity protection) is given in the chapters 5.2 to 5.4, which also contrast the recent findings with the data from the 2009 study.

5.1 "Biological diversity" as a societal indicator

Among other respects, the National Strategy on Biological Diversity aims to sensitize the general population to the necessity of protecting the biological diversity. In this regard, the chapter "Social awareness" in the Strategy (BMU 2007: 60f) specifically states that:

"In the year 2015, at least 75 % of the population will rate the conservation of biological diversity as one of the top priorities for society. The significance of biological diversity is firmly anchored in the social consciousness. Human activity is increasingly tailored to this realisation, leading to a significant decline in the pressures on biological diversity."

Advances made toward this objective are regularly evaluated with the aid of the Societal Indicator,[9] which is designed to map the level of social awareness (in the population over 18 years of age) of the biological diversity. It is part of the set of indicators outlined in the National Strategy on Biological Diversity which is used to regularly monitor the level of achievement of the strategy's goals.

9 For more information on the Societal Indicator see www.biologischevielfalt.de/ind_bewusstsein.html.

The Societal Indicator is made up of three sub-indicators:

The **sub-indicator "knowledge"**, which is used to measure comprehension of the term "biological diversity" (and its meaning) based on answers to the following questions:

- Are you familiar with the term "biological diversity"?
- Could you please tell me what the term "biological diversity" means to you?

The questions regarding the **"attitude" sub-indicator** are designed to explore the level of appreciation for biological diversity:

- To which extent are you convinced that the biological diversity on earth is declining?
- The Federal Republic of Germany has undertaken to preserve the biological diversity within the framework of international conventions. In your opinion, to what extent is the preservation of biological diversity a social task of overriding importance?
- I will now read to you a few statements on biodiversity. Please indicate the extent to which you personally agree with the respective statement:
  - I feel a personal responsibility to preserve the biological diversity.
  - To preserve the biological diversity, the consumption of land for the development of residential/commercial areas and traffic infrastructure should be reduced.
  - The biological diversity I find in nature is conducive to my wellbeing and quality of life.
  - Poorer countries should be granted financial support by the wealthier ones for the protection of their biological diversity.
  - I feel personally affected if the biological diversity declines.

The **sub-indicator "behaviour"** is used to survey the willingness, for different fields of action, to make an individual contribution to the preservation of biological diversity, with answers to the following questions being included in the evaluation:

- I will now read out some possibilities of getting personally involved in the protection of biological diversity. To what extent are you personally willing to ...
  - to switch to other cosmetic brands or drugstore products if you learn that their manufacture is detrimental to biodiversity,
  - donate money to maintain and preserve a conservation area,
  - get actively involved in a nature conservation organisation to protect the biological diversity,
  - when shopping, use a buyers guide to read up on endangered fish species for instance,
  - call your friends' and acquaintances' attention to the protection of biological diversity,
  - catch up on current biodiversity trends.

After having their knowledge tested about the term "biological diversity", respondents were explained the meaning of the term "biological diversity" before continuing with questions regarding the "attitude" and "behaviour" sub-indicators.

A three-level scale was devised for the three sub-indicators:

- Level 0: no knowledge / negative or impartial attitude / no or little behavioural willingness
- Level 1: medium level of knowledge / positive attitude / medium level of behavioural willingness
- Level 2: extensive knowledge / very positive attitude / high behavioural willingness

For each sub-indicator, the percentages of respondents giving the respective level in their answers are calculated. The overall indicator level corresponds to the percentage of respondents giving a minimum level of 1 for each of the three sub-indicators.

Social awareness of biological diversity has barely changed

In 2011, the requirements pertaining to the "knowledge" indicator (see table 9) were met by nearly as many respondents as in 2009. On the other hand, percentages of the indicators "attitude" and "behaviour" have decreased to some degree. With 23 %, the overall indicator has held steady (2009: 22 %),

in other words: a comparable number of respondents know the meaning of the term "biological diversity" and are both concerned about biodiversity preservation and willing to contribute to that end. All things considered, the value of the Societal Indicator calculated for the 2011 survey is still far from the target percentage of 75 % derived from the NBS objective (see above).

Table 9: Development of the Societal Indicator in time

	2009	2011
sub-indicator "knowledge"	42 %	41 %
sub-indicator "attitude"	54 %	51 %
sub-indicator "behaviour"	50 %	46 %
overall indicator	22 %	23 %

5.2 Comprehension of the term "biological diversity"

Many have heard about the term "biological diversity" even though they might not know its meaning

While about three quarters of the German population have heard about the term "biological diversity" at least once in their lives (see figure 26), its exact meaning is far less familiar. Especially well-educated persons and high earners claim to know what the term means. On the whole, the comprehension of its conceptual meaning increases with education and income. In the low education achievement and low income segments, 30 % have an idea of the term, contrasted by 60 % and 63 % in the group of well-educated persons and high earners. A below-average number of low earners and respondents with little formal education ever heard of the term (35 and 34 %, total: 25 %). The situation is similar with older respondents (31 %).

Compared to 2009, public awareness of the term hasn't changed much, remaining largely stable (2009: 44 %, 2011: 42 %). Surprisingly, the level of awareness among highly educated persons has dropped significantly (from 70 % to 60 %). Also, male respondents in the middle-age, middle-education achievement and middle-income groups were found to be less familiar with the term than two years ago. In contrast, the percentage of those being familiar with the term and having some idea of its meaning has increased especially in the high earner segment (54 % to 63 %).

Biological diversity is mainly understood to be synonymous with diversity of species

For a majority of respondents familiar with the term "biological diversity" (42 % of all respondents), it is synonymous with diversity in flora and fauna (96 %, see figure 28). But having said this, no less than two

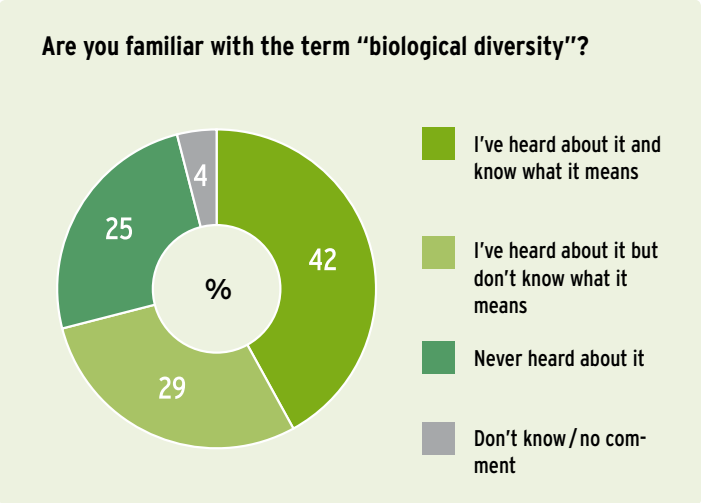

Figure 26: Awareness of the term "biological diversity"

Comprehension of the term "biological diversity" and knowledge of its meaning are more commonplace in the higher social milieus than in other groups (see figure 27). An exception to this are the High Achievers, who were not found to be particularly concerned about nature and its conservation in other respects either. The education-oriented und nature-loving Socio-ecological and Liberal Intellectual milieus are the most familiar with the concept.

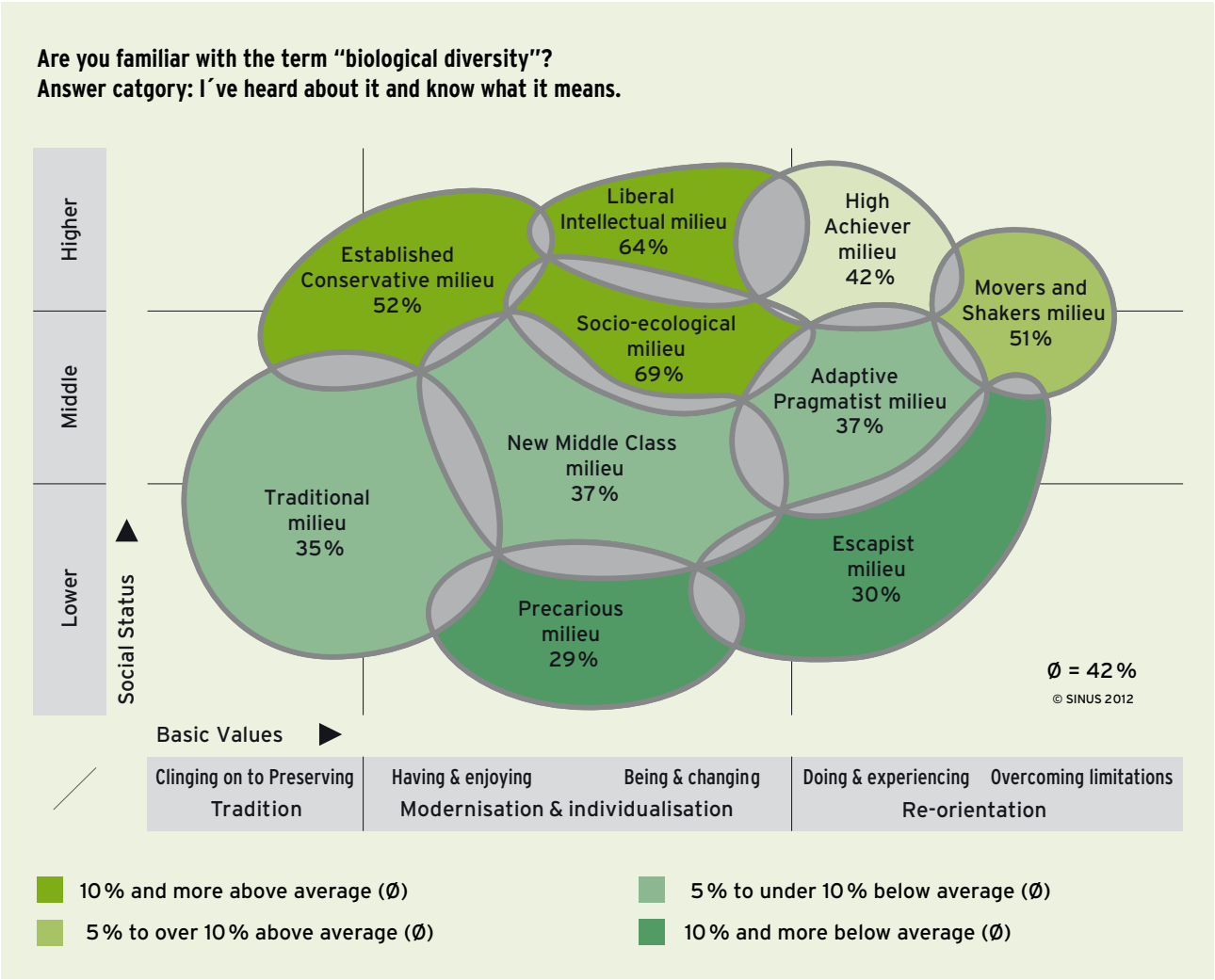

Figure 27: Awareness of the term "biological diversity" according to social milieu

third also associate it with ecosystem and habitat diversity. A substantially lower portion, i. e. slightly more than one third, also make it out to mean "genetic diversity".

Whilst the diversity in flora and fauna is mentioned across the entire socio-demographic spectrum at similar rates, there is a level of inconsistency as to the other meanings. Male respondents are more likely than females to refer to the definition "diversity of ecosystems and habitats" (71 % vs. 65 %); respondents with a high level of formal education and high income are more familiar with this meaning than the population average (79 % vs. 73 %, total: 68 %). Interestingly, the diversity of genes, genetic information and genetic makeup is mentioned more frequently by low earners (45 %, total: 37 %). This meaning is more familiar in West than East Germany (40 % vs. 28 %).

Compared to the 2009 study, a much greater percentage of respondents familiar with the term refer to both the diversity of species, the diversity of ecosystems and habitats, and the diversity of genetics as being integral parts of the global biodiversity concept (see table 10): As to habitat and ecosystem diversity, the percentage of respondents addressing these conceptual dimensions has almost doubled since 2009, and even quadrupled with regard to genetic diversity. People have developed a more complex understanding of the meaning of the term "biological diversity", which could be a consequence of the more in-depth media coverage the topic has been receiving.

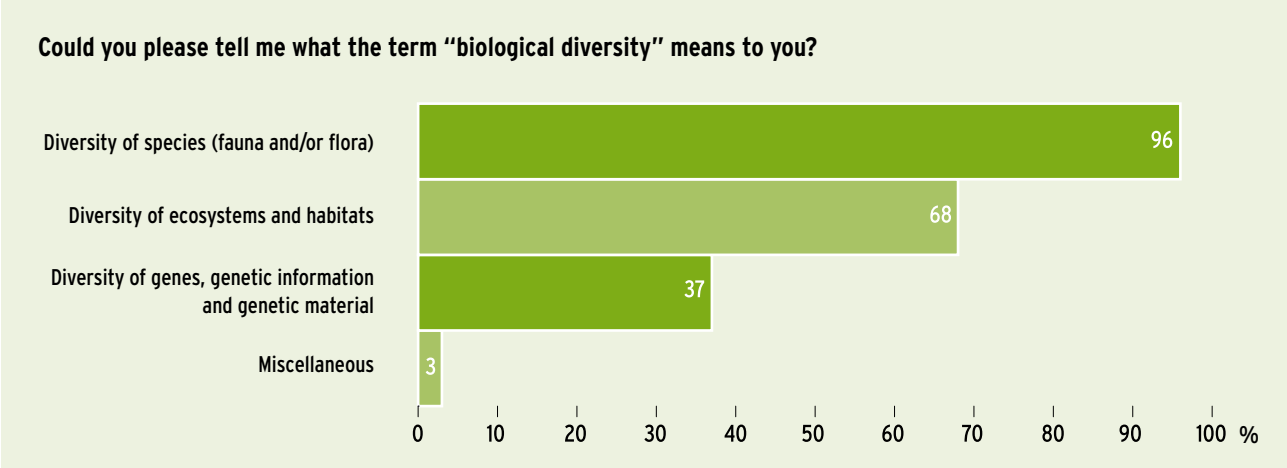

Figure 28: Understanding of the term "biological diversity"

Open query, multiple answers possible (respondents who state being familiar with the meaning of the term)

Basis: 850 cases

While in the current survey the percentage of well-educated persons who know about the term "biological diversity" has declined since 2009 (see above), those who are still familiar with it are more likely to refer to the conceptual dimensions of "diversity of ecosystems and habitats" than before (2009: 36 %, 2001: 79 %). Similar increases are observed in the group of high earners and those aged between 30 and 49 years.

Compared to the 2009 study, the percentage of respondents familiar with the conceptual dimension of "diversity of ecosystems and habitats" have taken an appreciable increase in West Germany, which is more in line with the results for East Germany: in 2011, 70 % of the East German (2009: 57 %) and 68 % of the West German respondents (2009: 30 %) understand the term "biological diversity" as associated with diversity in ecosystems and habitats. Awareness of the "genetic diversity" concept has sharply increased among West Germans, (40 %, 2009: 10 %) but also East Germans (28 %, 2009: 29 %). Growth rates of 30 % and more are found in the population aged 30-49 years as well as in the highest and lowest income segments.

5.3 Attitudes towards biodiversity preservation

Biological diversity is perceived as being threatened

Approximately two third of the population believe that the biological diversity on earth is dwindling (see figure 29), with an above-average number of

Table 10: Understanding of the term "biological diversity" 2009 vs. 2011

Could you please tell me what the term "biological diversity" means to you?

	2009	2011
Diversity of species (animals and / or plants)	92 %	96 %
Diversity of ecosystems and habitats	36 %	68 %
Diversity of genes, genetic information and genetic makeup	12 %	37 %

Biological diversity is largely seen as synonymous with the diversity of species, irrespective of milieu affiliation. It is a well known fact in the Socio-ecological (77 %) and Liberal Intellection (73 %) milieus that the term also encompasses the diversity of ecosystems and habitats (total: 68 %). Interestingly, the diversity of genes, genetic information and genetic makeup is referred to by an

above-average number of respondents not only from the environmental avant-garde Socio-ecological (46 %) but also the High Achiever (45 %) milieu (total: 37 %). It would stand to reason that this meaning has stuck in the memory of the more economy-oriented and progressive High Achievers, since it is associated with economic potential, e. g. in the field of medicine or food engineering. Meanings of the term "biological diversity" that go beyond the notion of species diversity are mentioned less often by members of the Precarious and Escapist milieus, who generally show little interest in nature.

well-educated persons and high earners (39 and 38 %, total: 29 %) being strongly convinced of this. West Germans are more likely to agree with this answer than East Germans (31 vs. 22 %). About one fifth of the respondents are unsure as to whether or not biological diversity is declining. Accounts of a decline in global biodiversity are seen as exaggerated by only 20 % (see figure 30, both negative answer levels combined). Awareness of the problem has remained virtually unchanged in comparison to the 2009 survey.

To which extent are you convinced that biological diversity on earth is declining? Are you ...

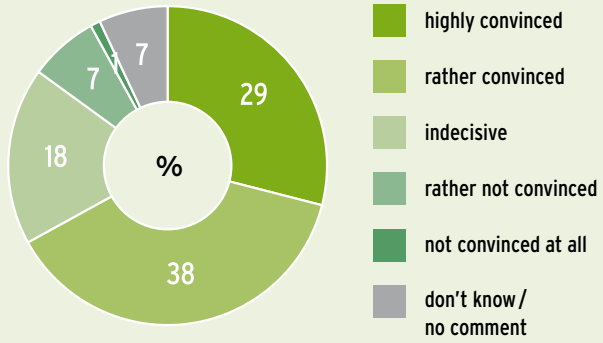

Figure 29: Perceived decline in biodiversity

For a majority, preserving biological diversity is a crucial social objective

Three fourth of the German population believe that the biological diversity has a positive influence on their wellbeing. Many fear that a decline in biodiversity will entail the loss of individual quality of life (see figure 30). Therefore, it is little surprise that a majority considers the preservation of biodiversity a social task of overriding importance (see figure 31): 71 % agree with the corresponding statement either strongly or by tendency, which includes an above-average portion of well-educated individuals (78 %). While another 20 % feel indecisive, only a small part of the respondents believe that the preservation of biodiversity is not a high-priority task. Another important argument in favour of biodiversity protection, alongside the repercussions the loss of biodiversity might have on one's own life, is that biological diversity should be preserved for future generations. Some 90 % of the respondents believe this to be the case (see figure 30), which is thoroughly consistent with the answers given to similar questions regarding the conservation and sustainable use of nature (see chapters 3.3 and 4.3).

The protection of biological diversity, however, is not just seen as an abstract social task: no less than 50 % of

In the post-material Socio-ecological (54 %) and Liberal Intellectual (47 %) milieus, awareness of the decline in biological diversity is more common than in the population mean (29 %). Having a general interest in the subject matter, members of these milieus will recall documentaries and articles outlining the threat that is inherent in the loss of biodiversity. With 37 %, even the relatively youthful Movers and Shakers milieu shows a considerable degree of awareness of the decline in biodiversity. In contrast, the less education and information-oriented Precarious (17 %) and Escapist (21 %) milieus are also less aware of the problem of declining biodiversity.

the German population (see figure 30) recognise the personal responsibility that comes with it. Strikingly, an even higher percentage of citizens (almost 70 %) state a sense of personal responsibility when the question is about the protection of nature (see chapter 3.3). This is no wonder, though: for virtually all Germans, nature has concrete connotations, as was determined in the 2009 Nature Awareness Survey (BMU and BfN 2010: 25ff). Prior to the present study, over 50 % of the respondents were completely ignorant of the term "biological diversity" or, having heard about it, didn't know what to make of it. In fact, a definition of the term "biological diversity" was given during the survey, but this is no substitute for an individual understanding, to be sure. This should be kept in mind when discussing the willingness to get actively involved in the protection of the biological diversity.

In order to preserve biodiversity, the vast majority believes it is important to support poorer countries in their effort to protect their biological diversity, and to impose restrictions on the consumption of unused land for residential/commercial areas and traffic infrastructure (see figure 30). Relatively few respondents support a reduction of spendings on biodiversity research.

The value attached to biological diversity and the commitment to its preservation is found increasing in line with the level of education and income (see table 11). In addition, agreement with statements that stress the value of biological diversity becomes more likely with age.

Compared to 2009, the level of agreement with some statements that reflect a positive stance on biodiversity has somewhat decreased, especially with regard to statements about the significance biological diversity has for the individual. "Nature's biological diversity is beneficial to my wellbeing and quality of life" and "I feel personally affected if biological diversity declines". In 2011, these statements were upheld by 75 % and 60 % (agreement with the two upper answer cat-

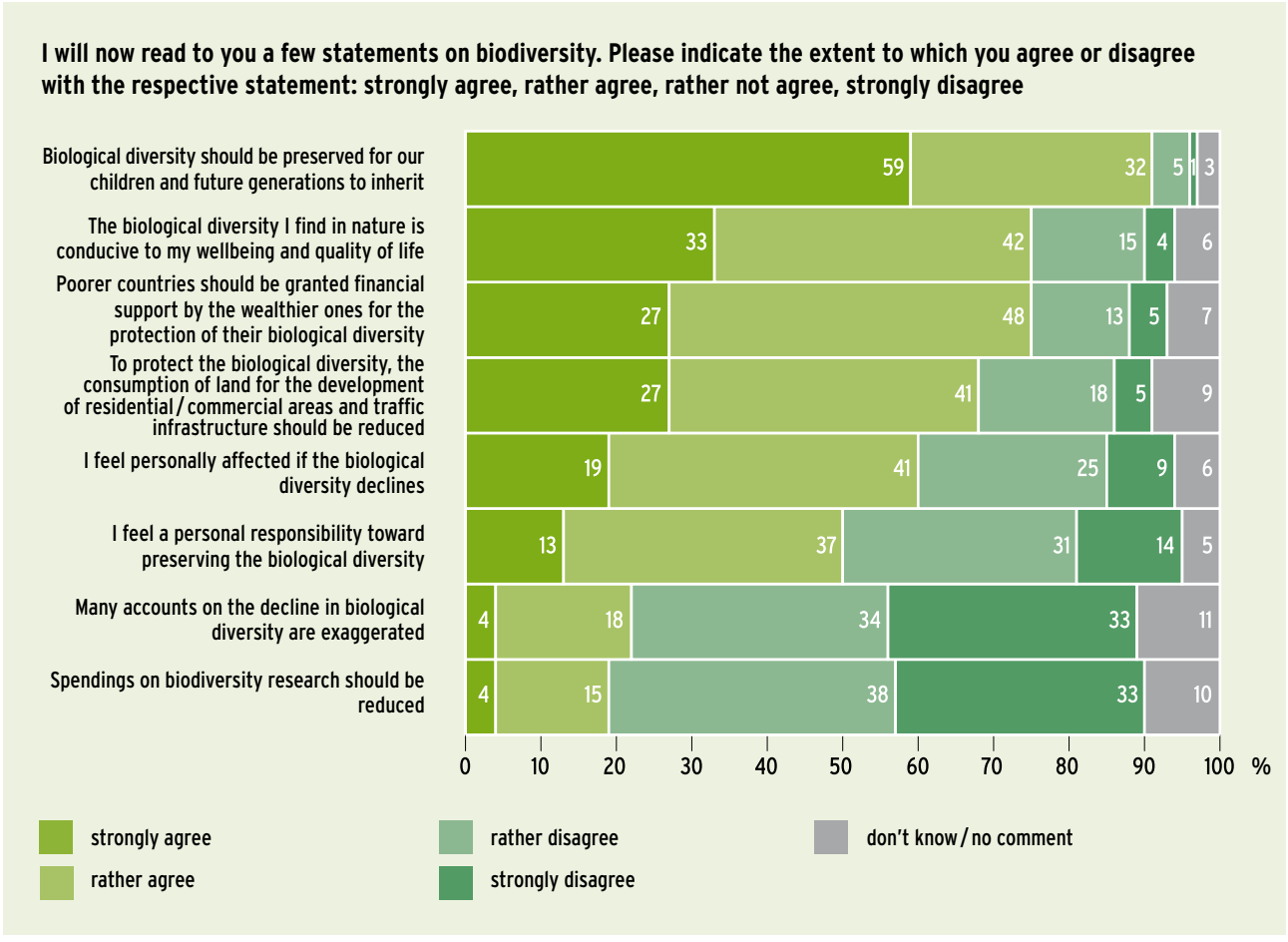

Figure 30: Personal significance attached to biological diversity

egories), which means a decrease of 8% and 6% compared to 2009. While this decline is found across the entire socio-demographic spectrum, it becomes most obvious in the function that biological diversity has for the wellbeing and quality of life in the highly educated segment (decrease from 47% to 38%, total: 33% at the highest agreement level). Especially the financially better-off tend to disagree with this statement (decrease from 34% to 26%, total: 19% at the highest agreement level) when asked about the personal impact the decline in biodiversity has on them.

5.4 Willingness to act on behalf of biodiversity preservation

Many show a willingness to contribute to the protection of biological diversity

The data presented in the previous paragraph with respect to the attitudes among Germans toward biological diversity show that the vast majority considers the preservation of biological diversity as an important social task. Approximately one half feels that they are personally responsible. Therefore, it is hardly surprising that the willingness expressed by the respondents to personally contribute to the protection of biological diversity is significant. Almost

The Federal Republic of Germany has undertaken commitments to preserve biological diversity within the framework of international conventions. In your opinion, to what extent is the preser-vation of biological diversity a social task of overriding importance? Would you say that ...

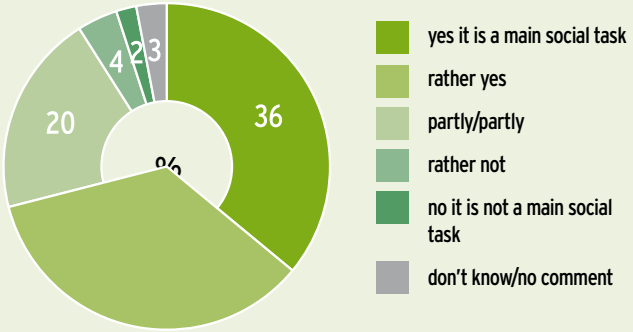

Figure 31: Social priority of biodiversity preservation

all proposed possibilities of individual involvement find favour with a majority of the German population (see figure 32). This extends to considerate behaviour both in the outdoors and at the consum-

Clearly, appreciation of biological diversity is more pronounced in milieus with a high degree of problem awareness than in the population average. Many respondents from the Socio-ecological and Liberal Intellectual milieus see biological diversity as an important prerequisite to secure a high quality of life and wellbeing (Socio-ecological: 57%, Liberal Intellectual: 50%, total: 33%). They are more inclined to regard the preservation of biological diversity as a social task of high priority (both: 56%, total: 36%), and to support the statement that biodiversity should be protected as a heritage both to their own children and coming generations (Socio-ecological: 85%, Liberal Intellectual: 76%, total: 59%). While the attitude of being personally responsible for the protection of biodiversity is far more commonplace in these two milieus than in the population mean, only a minority would accept personal responsibility without reservations even in the pioneering Socio-ecological milieu (29%, total: 13%). A rather high degree of appreciation for biological diversity is also observed in the Established Conservative milieu. An above-average number of respondents speak about quality of life and wellbeing in the same breath with biological diversity (41%), pointing out that it is mandatory to preserve biodiversity for the generations to come (64%). In their conservative concept of life, the idea of preserving plays an important part. The same is true for the other group making up the segment of traditional values: the Traditional milieu, which turns out to be just as committed to providing for future generations (65%). On the other hand, their relatively strong appreciation of biological diversity does not necessarily lead Established Conservatives to see biodiversity preservation as a relevant social responsibility (31%). Lacking affinity with nature in general, it is particularly the Precarious and Escapist milieus that fail to perceive the value of biological diversity as clearly.

Table 11: Personal significance attached to biological diversity according to socio-demographic segments

I will now read to you a few statements on biodiversity. Please indicate the extent to which you agree or disagree with the respective statement: strongly agree, rather agree, rather not agree, strongly disagree

Answer category "strongly agree" data in %	Ø	Sex		Age [years]				Education			Net household income [€]			
		M	F	-29	30 - 49	50 - 65	65+	low	me-dium	high	-999	1,000 - 1,999	2,000 - 3,499	3,500+
Biological diversity should be preserved for our children and future generations to inherit	59	58	60	53	61	60	63	55	61	63	52	54	61	65
The biological diversity I find in nature is conducive to my wellbeing and quality of life	33	31	34	24	32	35	39	28	35	38	25	30	33	39
Poorer countries should be granted financial support by the wealthier ones for the protection of their biological diversity	27	26	28	26	29	27	28	23	27	33	23	26	27	35
To protect the biological diversity, the consumption of land for the development of residential / commercial areas and traffic infrastructure should be reduced	27	25	29	25	25	28	31	23	28	31	27	27	26	30
I feel personally affected if the biological diversity declines	19	18	19	18	19	19	19	14	19	25	16	16	18	26
I feel a personal responsibility toward preserving the biological diversity	13	13	13	9	15	15	13	10	15	17	9	12	13	19

10 % and more above average (Ø)
5 % to over 10 % above average (Ø)
5 % to under 10 % below average (Ø)
10 % and more below average (Ø)

er level. About 90 % of the respondents are willing to stay clear of protected areas, and a similar percentage can imagine focusing on regional products (agreement levels "very willing" and "rather willing"). Switching to ecologically friendly cosmetic products or signing pro-biodiversity signature lists is seen as a possible option by roughly three fourth of the respondents. In addition, a majority is willing to catch up on current trends in the field of biological diversity, to use a buyer's guide on endangered fish species when shopping, or to call the attention of friends and acquaintances to the protection of the biological diversity. These are all possible courses of action that take little effort. More demanding activities that take a higher level of initiative are much less popular. As few as one third of the respondents can imagine writing a letter to the government to point out the necessity of protecting biodiversity or

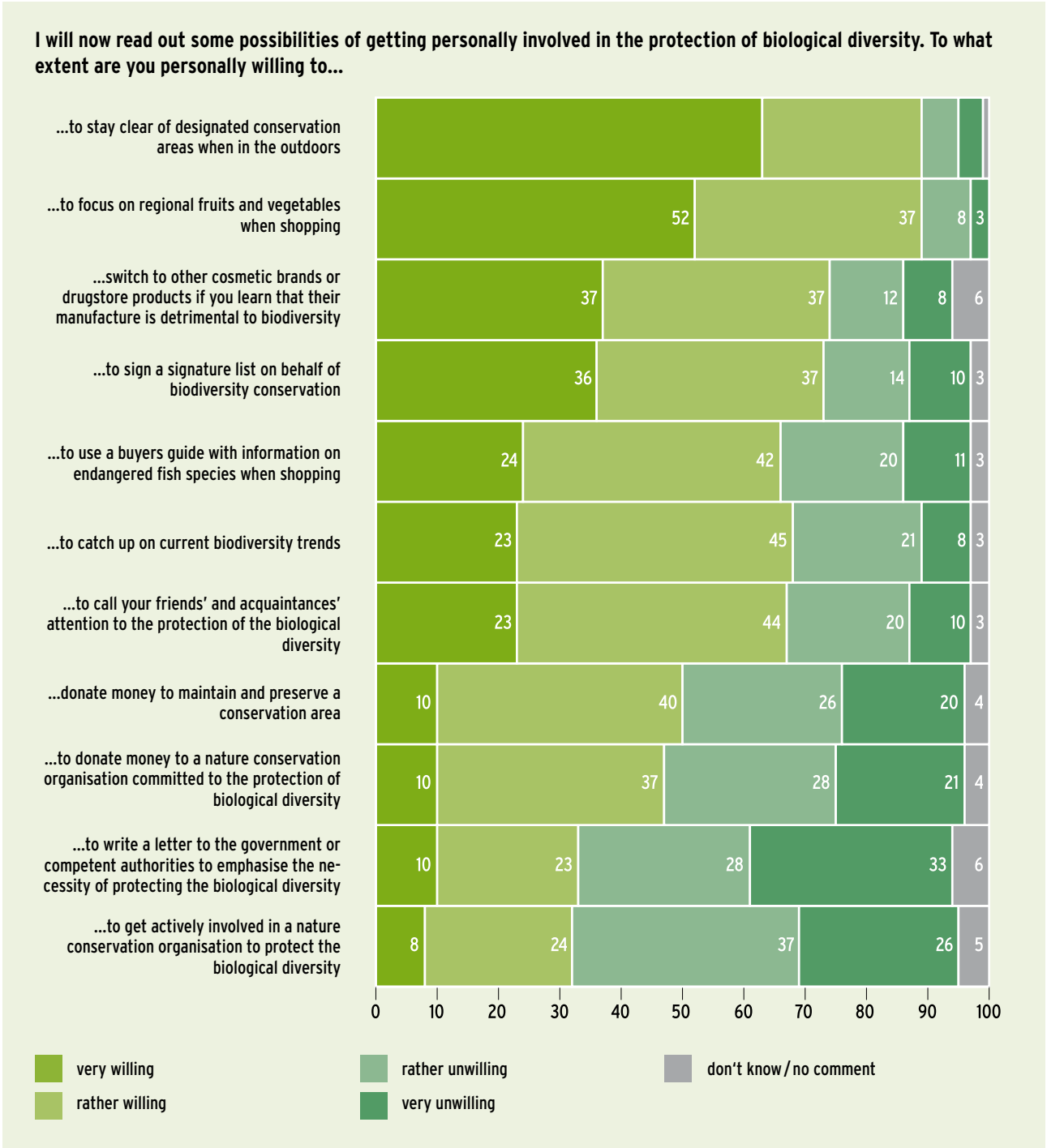

Figure 32: Willingness to get actively involved in the preservation of biological diversity

joining a nature conservation organisation. On the other hand, 50 % of the respondents are willing to donate money on behalf of biodiversity preservation. These figures are not directly comparable with the results regarding the willingness to act on behalf of nature conservation (see chapter 2.3), as the latter were obtained from persons with a general willingness to contribute to nature conservation who were asked about their willingness to embark on various specific activities.

Compared to the data from the 2009 survey, the willingness to adopt specific courses of action and behaviour patterns was found to be almost unchanged for most offerings, except: not using cosmetic products the manufacture of which puts biological diversity at risk (decrease between 2009 and 2011: 82 % to 74 %), calling the attention of friends and acquaintances to the protection of the biological diversity (decrease from 73 % to 67 %), writing a letter to the government (decrease from 40 % to 33 %), and actively working in a nature conservation organisation (decrease from 38 % to 32 %). A slight increase was only observed in the willingness to use a buyer's guide on endangered fish species when shopping (2009: 62 %, 2011: 66 %).

To be sure, this willingness to act should not necessarily be seen as tantamount to actual activity, as the purpose is to measure willingness rather than intention, let alone actual behaviour. The path from a positive attitude through activity or behaviour options and the preparedness to bring them to fruition right up to actual hands-on activities is littered with potential obstacles. More often than not, environmentally friendly behaviour is at odds with alternatives that are perhaps more attractive in specific contexts, like buying fresh or exotic products imported from other countries of the world, picking a "hipper" but less eco-friendly brand of cosmetics, or taking a fun trip into the untouched countryside off the permitted routes. Behaviour patterns demanding a higher expenditure of time and/or funds are even more difficult to implement. It is quite possible in this context that some respondents answered in line with a perceived social standard, without feeling a genuine willingness to adopt the corresponding behaviour. It's for these reasons that answers at the agreement level "very willing" are probably closer to the true potential.

The willingness to adopt concrete activity and behaviour patterns is more commonplace amongst high earners and well-educated individuals, as measured by their percentage in the general population, than in other segments (see table 12). Then again, representatives of the former group are considerably more likely to be familiar with the term "biological diversity" in the first place. Activity patterns that are easily integrated into everyday life and take little effort, e. g. using a buyer's guide or seeking out for regional products are more readily adopted by women than men. The lowest level of willingness was determined in the youngest segment, amongst respondents with little formal education, and low earners. This comes as little surprise as these results are consistent with the answers given to other questions: Affinity with nature and orientation toward nature conservation is somewhat lower in the population of younger and less affluent respondents (see chapter 4.1, 3.3), who also tend to feel less obliged to take action and believe there is not much they can do to protect nature anyway (see chapter 3.3).

In the period from 2009 to 2011, the unreserved behavioural willingness in the high-earner segment has increased or at least remained stable almost across the board. A similar phenomenon was found in the segment of respondents with a high level of formal education. In contrast, the willingness to take action has largely decreased in the youngest segment. Only the willingness to use a buyer's guide on endangered fish species has increased, as is the case in almost all population segments.

As to the entirety of surveyed activity and behaviour patterns, the willingness to align one's (day-to-day) activities with the objective of preserving the biological diversity is most common amongst the Socio-ecological and Liberal Intellectual milieus. Given the widespread pertinent knowledge and high value attached to biological diversity in these milieus, this is hardly surprising (see chapter 5.2, 5.3). Conversely, a lack of interest and problem awareness is accompanied by little willingness to act and behave in favour of biodiversity preservation, which is especially prominent in the Escapist and Precarious milieus.

Table 12: Willingness to get actively involved in the preservation of biological diversity according to socio-demographic segments

To what extent are you personally willing to...

Answer category "strongly agree" data in %	Ø	Sex		Age [years]				Education			Net household income [€]			
		M	F	-29	30 - 49	50 - 65	65+	low	me-dium	high	-999	1,000 - 1,999	2,000 - 3,499	3,500+
...to stay clear of designated conservation areas when in the outdoors	63	61	65	54	66	61	71	62	61	69	54	57	66	68
...to focus on regional fruits and vegetables when shopping	52	49	54	35	50	57	64	51	51	54	39	53	50	57
...switch to other cosmetic brands or drugstore products if you learn that their manufacture is detrimental to biodiversity	37	33	41	28	40	39	40	32	38	45	34	34	39	42
...to sign a signature list on behalf of biodiversity conservation	36	34	38	31	40	35	34	28	37	47	26	33	38	42
...to use a buyers guide with information on endangered fish species when shopping	24	21	27	22	25	25	25	20	24	31	19	23	23	31
...to catch up on current biodiversity trends	23	23	24	17	24	26	25	18	22	33	22	20	23	36
...to call your friends' and acquaintances' attention to the protection of the biological diversity	23	21	24	18	24	24	24	16	27	30	16	19	24	32
...to donate money to a nature conservation organisation committed to the protection of biological diversity	10	10	11	3	12	11	12	9	8	15	4	8	9	19
...donate money to maintain and preserve a conservation area	10	10	10	4	11	11	11	7	10	14	4	8	9	17
...to write a letter to the government or competent authorities to emphasise the necessity of protecting the biological diversity	10	9	10	8	11	10	8	7	10	14	8	8	9	19
...to get actively involved in a nature conservation organisation to protect the biological diversity	8	9	8	7	10	8	8	6	8	12	6	6	7	16

- 10 % and more above average (Ø)
- 5 % to over 10 % above average (Ø)
- 5 % to under 10 % below average (Ø)
- 10 % and more below average (Ø)

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Chapter 2: Society in transformation...

A2.1 Intensifying our use of renewable energy in the future will impact our landscapes. What is your opinion about the potential increase in ... (Figure 2, Table 2)

data in %	I think it's good	I would accept it	I wouldn't like it	I'm against it	Don't know / no comment
1. ...on-shore / land-based wind energy plants	28	51	14	5	2
2. ...off-shore or North / Baltic Sea coast wind energy plants	47	40	7	3	3
3. ...logging in the forests	4	31	37	23	5
4. ...the land used for the cultivation of maize	15	48	21	10	6
5. ...the land used for the cultivation of rape-seed	16	51	19	7	7
6. ...the number of overhead power lines	4	38	39	15	4
7. ...the number of biogas facilities	18	50	19	6	7
8. ...land consumed for solar installations (photovoltaics) outside of residential areas	32	45	15	3	5

A2.2 How far are you interested in information on how to render your consumer behaviour more ecologically and environmentally friendly? Please tell me for each of the following categories. (Figure 3)

data in %	I already know enough about it	This is interesting to me	This is not interesting to me	It doesn't concern me	Don't know / no comment
1. Origin and cultivation of medicinal herbs, tea, and spices	8	58	27	5	2
2. Ecological compatibility of textile products	8	61	27	3	1
3. Origin and growing conditions of fruits and vegetables	22	63	13	1	1
4. Origin and manufacturing conditions of meat and meat products	17	66	14	2	1
5. Origin of fish and fisheries conditions	11	61	23	4	1
6. Products from the region	33	58	8	1	0
7. Origin of wood and type of silviculture	10	53	28	6	3
8. Ecological compatibility of tourist offerings	7	51	30	9	3

A2.3 Can you imagine getting actively involved in the protection of nature? (Figure 4)

data in %	
1. I am already active	18
2. Yes, I can imagine it	38
3. No, I cannot imagine it	33
4. Don't know / no comment	11

Only respondents who state that they are already actively committed to or can imagine getting involved in the protection of nature:

A2.4 Which of the following nature conservation activities could be an option for you? (Figure 6)

data in %	yes, I do that already	yes, I can imagine that	no, I cannot imagine that	don't know / no comment
1. Mapping the local flora and fauna	7	57	34	2
2. Hosting special outdoor events for children and young people	7	56	34	3
3. Constructing ponds and growing hedgerows	19	52	26	3
4. Making nesting boxes for birds and setting them up	37	45	16	2
5. Manning information desks	6	41	50	3
6. Getting involved in guided nature tours for adults	5	47	45	3
7. Planting trees	31	52	16	1
8. Supporting political nature conservation campaigns	10	48	38	4
9. Working actively in a local citizens' initiative for the protection of nature	9	59	28	4
10. Working actively in an environmental or nature conservation organisation	9	53	34	4
11. Working actively in a specific temporary project	9	61	28	2

Basis: 1,123 cases (respondents already involved or considering getting involved in nature conservation)

Only respondents who state that they are already actively committed to the protection of nature:

A2.5 What are your expectations about your voluntary nature conservation work? How important is it to you that ... (Figure 7)

data in %	very important	rather important	less important	not important at all	don't know / no comment
1. ... it allows you to contribute to the common good?	45	48	5	1	1
2. ... it allows you to help nature?	80	16	3	1	0
3. ... you fulfil the expectations of your fellow men?	10	23	35	32	0
4. ... you pursue your own interests?	30	42	20	7	1
5. ... the work is fun?	51	44	4	1	0
6. ... it puts you in touch with people that you find likeable?	28	53	14	4	1
7. ... it allows you to expand your skills and experience?	45	44	8	3	0
8. ... you can calm your guilty conscience?	5	18	38	37	2
9. ... it gives you a sense of doing something important?	47	44	7	1	1
10. ... you have personal responsibility and decision options?	26	49	19	5	1
11. ... the work makes you feel good?	48	42	9	1	0
12. ... your activities are acknowledged?	12	35	38	15	0
13. ... your activities will drive your present and future career opportunities?	13	25	30	32	0
14. ... it allows you to contribute your skills and experience?	38	45	14	3	0

data in %	very important	rather important	less important	not important at all	don't know / no comment
15. ... you be politically successful?	25	29	28	16	2
16. ... you can do practical work?	21	50	23	6	0
17. ... you can make new social contacts?	15	48	28	9	0
18. ... it affords you the opportunity to spend your free time in a meaningful manner?	26	51	15	8	0
19. ... it allows you to set an example to - possibly your own - children?	51	34	11	4	0
20. ... you find some distraction after work?	18	33	27	21	1
Basis: 359 cases (already active respondents)					

Only respondents who state that they are not yet actively committed to nature conservation but would be willing to do so:

A2.6 What do you think would be especially important about your possible voluntary work? How important would it be to you that ... (Figure 8)

data in %	very important	rather important	less important	not important at all	don't know / no comment
1. ... it allows you to contribute to the common good?	31	55	12	1	1
2. ... it allows you to help nature ?	58	35	6	1	0
3. ... you fulfil the expectations of your fellow men?	7	33	30	29	1
4. ... you pursue your own interests?	19	53	21	6	1
5. ... the work is fun?	46	46	7	1	0
6. ... it puts you in touch with people that you find likeable?	22	55	19	3	1
7. ...it allows you to expand your skills and experience?	27	58	12	2	1
8. ... you can calm your guilty conscience?	6	24	34	34	2
9. ... it gives you a sense of doing something important?	34	53	9	3	1
10. ... you have personal responsibility and decision options?	20	53	20	5	2
11. ... the work makes you feel good?	35	54	9	1	1
12. ... your activities are acknowledged?	10	45	32	12	1
13. ... your activities will drive your present and future career opportunities?	14	36	26	22	2
14. ... it allows you to contribute your skills and experience?	20	54	18	5	3
15. ... you be politically successful?	13	38	31	16	2
16. ... you can do practical work?	15	51	24	8	2
17. ... you can make new social contacts?	13	48	30	8	1
18. ... it affords you the opportunity to spend your free time in a meaningful manner?	19	52	20	8	1
19. ... it allows you to set an example to - possibly your own - children?	36	45	11	6	2
20. ... you find some distraction after work?	14	41	25	18	2
Basis: 763 cases (respondents who can imagine getting actively involved in nature conservation)					

Only respondents who state that they are not yet actively committed to nature conservation:

A2.7a What keeps you from getting actively committed to nature conservation? Please tell me for each statement whether you strongly agree, rather agree, rather disagree or strongly disagree.

data in %	strongly agree	rather agree	rather disagree	strongly disagree	don't know / no comment
1. I don't care about nature conservation (Filter: Terminate group of questions if statement is answered in the affirmative (strongly agree))	4	15	33	47	1

Basis: 1,434 cases (respondents who state that they are not yet actively committed to nature conservation)

Only respondents who state that they are not yet actively committed to nature conservation:

A2.7b What keeps you from getting actively committed to nature conservation? (Figure 9)

data in %	strongly agree	rather agree	rather disagree	strongly disagree	don't know / no comment
1. At present I don't have the time	36	30	21	12	1
2. I don't know where or how to pick up an activity	17	40	30	11	2
3. The financial burden (e.g. member fees and travel costs) is too high	18	30	32	14	6
4. I'm not sure if I have the know-how to work in a nature conservation group	22	41	24	10	3
5. I'm not comfortable with the way nature conservation organisations work	8	26	30	15	21
6. The internal makeup of most organisations put me off	15	35	25	13	12
7. At present I'm lacking mobility	17	22	28	33	0
8. I feel that I don't fit in well with the circle of active conservationists	24	34	24	12	6
9. I'm not interested in taking on a long-term commitment	31	37	21	9	2
11. The nature conservation offerings I'm aware of are not enough fun	6	23	35	22	14
12. My commitment would find little recognition among my circle of acquaintances	5	18	36	34	7
13. There are more important areas of voluntary activity than nature conservation	13	31	34	16	6
14. I think the level of social recognition of voluntary nature conservation work is too low	5	18	36	36	5
15. I have difficulties taking action on my own, without my friends	9	28	32	29	2
16. The prospects of achieving something meaningful are low	13	30	35	17	5

Basis: 1,383 cases (respondents not yet actively committed to nature conservation but showing at least some interest)

Chapter 3: ... Changing landscapes – endangerment and conservation of nature

A3.1 Do you think that the state of nature and landscapes in your surroundings has generally improved, remained the same or deteriorated in the past twenty years? (Figure 10, Table 3)

data in %	
1. It has mainly improved	13
2. It has remained the same	49
3. It has mainly deteriorated	27
4. don't know / no comment	11

Only respondents who state an improved condition:

A3.2 What exactly has improved? (Figure 11)

data in %	
1. Reduced air pollution and increased air quality	40
2. Improved protection and state of rivers and lakes	37
3. Increased awareness and commitment to nature conservation	27
4. Improved protection and state of forests	20
5. Improved protection and state of nature in general	10
6. General reduction of environmental pollution	9
7. Establishing of reserves (national parks, nature parks, nature reserves)	9
8. Environmentally friendly agriculture	8
9. Development of nature conservation areas and green areas as compensation measure	7
10. Reduction of industry	6
11. Design and development of green areas and recreational areas	6
12. Improved cycle paths and hiking routes	5
13. Development and maintenance of biotopes and renaturation	5
14. Protection of species	4
15. Less noise pollution	2
16. Improved soil quality	2
17. Improved quality of life in general	1
18. Improved traffic infrastructure (bypasses / public transport systems)	1
19. Improved protection and condition of the seas	1
20. Others	1
21. don't know / no comment	4

Basis: 267 cases (respondents who state that the situation improved)

Only respondents who state a deteriorated condition:

A3.3 What exactly has deteriorated? (Figure 12)

data in %	
1. Consumption of areas for settlements, including decreasing nature and green areas as well as arable land	38
2. Air pollution, including high ozone concentration at ground level	21
3. Global warming (climate change)	18
4. Deteriorated state of forests (Waldsterben)	16
5. Extinction of species	16
6. Logging of forests in Germany, ruthless forest management	12
7. Increased traffic	10
8. Decreasing water quality of rivers, lakes, groundwater	10
9. Disfigurement of the landscape by monocultures for energy crops	8
10. Increasing environmental pollution / destruction	7
11. Ozone hole	6
12. Industrial agriculture (except factory farming and monocultures)	5
13. Amount of waste	4
14. Poorer quality of foodstuff	3
15. Factory farming and environmental pollution	3
16. Diminishing quality of life in general	3
17. Risks caused by nuclear power	2
18. Insufficient awareness of and commitment to environmental protection	2
19. Exploitation and waste of resources	2
20. Destruction of tropical forests, rain forests and virgin forests	1
21. Disfigurement of landscapes by technical plants used for renewable energies	
22. Overpopulation	1
23. Overfishing of the seas	1
24. Soil acidification	1
25. Others	2
26. don't know / no comment	8

Open question, multiple answers possible
Basis: 557 cases (respondents who stated that the situation deteriorated

A3.4 Here are some statements on the protection and use of nature. Please tell me for each statement whether you strongly agree, rather agree, rather disagree or strongly disagree. (Figure 13, Figure 14, Figure 15, Table 4)

data in %	strongly agree	rather agree	rather disagree	strongly disagree	don't know / no comment
1. People think too much about the destruction of nature	4	13	33	47	3
2. I'm getting annoyed about the reckless attitude of many people towards nature	43	40	12	4	1
3. I fear that there will hardly be an intact nature left to our children and grandchildren	21	44	26	6	3
4. I feel threatened by the destruction of nature in our country	9	29	43	16	3
5. It is the duty of man to protect nature	59	36	3	0	2
6. Nature must not hinder the way of economic development	7	25	37	24	7
7. I feel personally responsible for the preservation of nature	17	45	26	9	3
8. I as an individual cannot make a great difference with regard to the protection of nature	18	36	30	15	1

A3.5 And what is your opinion on the following statements? Please tell me for each statement whether you strongly agree, rather agree, rather disagree or strongly disagree. (Figure 14)

data in %	strongly agree	rather agree	rather disagree	strongly disagree	don't know / no comment
1. In times of economic crisis nature conservation also has to manage with less money	15	44	26	11	4
2. Enough is being done in Germany for the protection of nature	11	32	38	14	5
3. Nature conservation is an important political task in Germany	42	44	10	2	2

A3.6 Here are some possible reasons for protecting nature. Please tell me for each statement whether you strongly agree, rather agree, rather disagree or strongly disagree. Protecting nature is very important to me ... (Figure 16, Table 5)

data in %	strongly agree	rather agree	rather disagree	strongly disagree	don't know / no comment
1. ... because future generations have a right to an intact nature	67	29	3	1	0
2. ... because we have to assume responsibility for the global consequences of our acting	50	40	6	1	3
3. ... because animals and plants have an own right of existence	63	29	5	1	2
4. ... because it is an important source of raw material for the industry and the economy	41	43	11	3	2
5. ... because it offers unprecedented possibilities that can be used by man in the future	41	45	7	2	5
6. ... because it is important for the health and recreation of people	71	24	4	0	1
7. ... because we can experience beauty, individuality and diversity in nature	59	34	5	1	1
8. ... because it is part of a fulfilled life	54	35	7	2	2
9. ... because it makes you feel that there is something larger than man	45	33	14	4	4

A3.7 The protection of nature is a task many people can contribute to. Please tell me how you rate the commitment of the following: overdone, just right, insufficient? (Figure 18)

data in %	overdone	just right	insufficient	don't know / no comment
1. Companies and the industry	1	14	76	9
2. Agriculture	1	42	45	12
3. Forest management	2	55	28	15
4. Federal government	4	28	58	10
5. Your state government	3	31	52	14
6. Your city and municipality	1	41	43	15
7. Environmental and nature conservation associations (e. g. Greenpeace, NABU, BUND)	18	60	14	8
8. Citizens	2	32	57	9

A3.8 Which of the following measures for the protection of nature should be preferably used? Please tell me for each measure whether you consider it very important, rather important, less important or not important at all. (Figure 19)

data in %	very important	rather important	less important	not important at all	don't know / no comment
1. The government provides more money for the funding of nature conservation and the preservation of animal and plant species	36	43	14	2	5
2. Subsidies are paid to farmers only if they contribute actively to nature conservation	46	36	11	2	5
3. Projects on the use of renewable energies are funded by the government only if they are not harmful to nature	53	35	7	1	4
4. The import of rare animal and plant species is subject to stricter controls	52	34	9	1	4
5. The population is better informed about what everybody can do to protect nature	45	42	10	1	2
6. Products which are manufactured in an environmentally compatible way receive a trustworthy certificate	43	37	12	3	5
7. Nature and environmental education at schools is enhanced	50	38	9	2	1
8. Overfishing is prevented by stricter regulations	59	29	7	1	4
9. Perpetrators have to pay appropriately for any harmful interference with nature	63	29	4	1	3

Chapter 4: Good life in harmony with nature

A4.1 What is nature to you? What are its attributes? Please substantiate the feelings you have about nature using a five-level scale (1-5). (Figure 20, Table 6)

data in %	1	2	3	4	5	
tranquil	33	35	25	5	2	restless
strange	1	6	22	36	35	familiar
vulnerable	23	29	31	12	5	robust
beautiful	66	25	8	1	0	ugly
thrilling	10	17	27	25	21	calming
exciting	30	41	23	5	1	boring
threatening	2	11	44	26	17	harmless
well-known	40	34	19	5	2	unknown
repulsive	1	2	13	35	49	attractive
valuable	76	17	5	1	1	worthless
useful	71	20	6	2	1	useless

A4.2 This is to assess the role that nature plays in your life. To this end, I ask you to consider the following set of statements. Please specify, for each of these statements, if you agree strongly, rather, rather not, or if you disagree strongly. (Figure 21, Figure 22, Table 7)

data in %	strongly agree	rather agree	rather disagree	strongly disagree	don't know / no comment
1. I try to spend as much time outdoors as possible	33	42	20	4	1
2. Nature is part of a good life	58	35	6	1	0
3. Nature is something alien to me	2	7	25	65	1
4. I think it is important to give my children an understanding of nature	50	39	7	2	2
5. Diversity is what I like about nature	50	41	6	1	2
6. I am not interested in the subject of nature	7	16	24	52	1
7. I feel uncomfortable in the outdoors	5	6	18	70	1
8. Being in the outdoors makes me happy	41	45	11	1	2
9. I feel a strong attachment to the local nature and landscape	38	43	17	2	0
10. Nature means wellness and leisure	58	35	6	1	0
11. To me it is important to be familiar with the native flora and fauna	25	45	23	6	1
12. Nowadays it's not important anymore to be knowledgeable about nature	6	14	23	55	2
13. I would like to know more about our native nature	20	50	24	4	2
14. I am especially interested in the nature of foreign countries	10	33	38	18	1
15. I would like to know more about the economic significance of nature, e. g. for energy production, food production or the pharmaceutical industry	13	43	33	9	2
16. To me it is important to understand interrelationships in nature	29	50	17	3	1

A4.3 Nature has manifold functions for man. What do you think are nature's most important services benefiting mankind? (Figure 24))

data in %	
1. Air to breathe	37
2. Food	28
3. Relaxation and recreation	26
4. Nature as a general basis of living	20
5. Water and rain	15
6. Raw materials (in general)	11
7. Health	11
8. Sun	8
9. Diversity of flora and fauna	7
10. Beauty of nature	6
11. Possibilities of experiencing and recreation	6
12. Quality of life and wellbeing	5
13. Space to live for people and animals	5
14. Energy (in general)	5
15. Climate and weather	5
16. tranquillity	4
17. ecological balance	3
18. renewable raw materials (wood), without renewable energies	3
19. joy (happiness)	2
20.renewable energies	2
21. strength	1
22. jobs	1
23. nature as a source of inspiration to science and technology (e. g. bionics)	0
24. miscellaneous	0
25. don't know / no comment	13

Open question, multiple answers possible

A4.4 What is your opinion on the below statements? Please specify, for each of these statements, if you agree strongly, rather, rather not or if you disagree strongly. (Figure 25, Table 8)

data in %	strongly agree	rather agree	rather disagree	strongly disagree	don't know / no comment
1. We have to limit the utilisation of nature so that its resources will be available to future generations to the same extent	58	35	5	1	1
2. The utilisation of nature should be limited so as to permanently safeguard the diversity of plants, animals and their habitats	55	38	4	1	2
3. Nature should be used in such a way that the beauty and the special character of the natural world and landscape are preserved	52	40	6	1	1
4. We should not exploit natural resources at the expense of people in less affluent countries	52	39	5	1	3

Chapter 5: The challenge: to preserve biological diversity

A5.1 Are you familiar with the term "biological diversity"? (Figure 26)

data in %	
1. I've heard about it and know what it means	42
2. I've heard about it but don't know what it means	29
3. Never heard about it	25
4. Don't know / no comment	4

A5.2 Could you please tell me what the term "biological diversity" means to you? (Figure 28, Table 10)

data in %	
1. Diversity of species (fauna and / or flora)	96
2. Diversity of ecosystems and habitats	68
3. Diversity of genes, genetic information and genetic material	37
4. Miscellaneous	3
5. don't know / no comment	0

Open query, multiple answers possible
Basis: 850 cases (Only respondents who state being familiar with the meaning of the term)

A5.3 To which extent are you convinced that biological diversity on earth is declining? Are you ... (Figure 29)

data in %	
1. highly convinced	29
2. rather convinced	38
3. indecisive	18
4. rather not convinced	7
5. not convinced at all	1
6. don't know / no comment	7

A5.4 The Federal Republic of Germany has undertaken commitments to preserve biological diversity within the framework of international conventions. In your opinion, to what extent is the preservation of biological diversity a social task of overriding importance? Would you say that ... (Figure 31)

data in %	
1. yes it is a main social task	36
2. rather yes	35
3. partly / partly	20
4. rather not	4
5. no it is not a main social task	2
6. don't know / no comment	3

A5.5 I will now read to you a few statements on biodiversity. Please indicate the extent to which you agree or disagree with the respective statement: strongly agree, rather agree, rather not agree, strongly disagree (Figure 30, Table 11)

data in %	strongly agree	rather agree	rather disagree	strongly disagree	don't know / no comment
1. I feel a personal responsibility toward preserving the biological diversity	13	37	31	14	5
2. To protect the biological diversity, the consumption of land for the development of residential / commercial areas and traffic infrastructure should be reduced	27	41	18	5	9
3. The biological diversity I find in nature is conducive to my wellbeing and quality of life	33	42	15	4	6
4. Spendings on biodiversity research should be reduced	4	15	38	33	10
5. Many accounts on the decline in biological diversity are exaggerated	4	18	34	33	11
6. Biological diversity should be preserved for our children and future generations to inherit	59	32	5	1	3
7. Poorer countries should be granted financial support by the wealthier ones for the protection of their biological diversity	27	48	13	5	7
8. I feel personally affected if the biological diversity declines	19	41	25	9	6

A5.6 I will now read out some possibilities of getting personally involved in the protection of biological diversity. To what extent are you personally willing to ... (Figure 32, Table 12)

data in %	very willing	rather willing	rather unwilling	very unwilling	don't know / no comment
1. ... switch to other cosmetic brands or drugstore products if you learn that their manufacture is detrimental to biodiversity	37	37	12	8	6
2. ... to stay clear of designated conservation areas when in the outdoors	63	26	6	4	1
3. ... to sign a signature list on behalf of biodiversity conservation	36	37	14	10	3
4. ... to write a letter to the government or competent authorities to emphasise the necessity of protecting the biological diversity	10	23	28	33	6
5. ...donate money to maintain and preserve a conservation area	10	40	26	20	4
6. ... to get actively involved in a nature conservation organisation to protect the biological diversity	8	24	37	26	5
7. ... to use a buyers guide with information on endangered fish species when shopping	24	42	20	11	3
8. ...to call your friends' and acquaintances' attention to the protection of the biological diversity	23	44	20	10	3
9. ...to focus on regional fruits and vegetables when shopping	52	37	8	3	0
10. ...to donate money to a nature conservation organisation committed to the protection of biological diversity	10	37	28	21	4
11. ...to catch up on current biodiversity trends	23	45	21	8	3

„Mindful also of its responsibility toward future generations,
the state shall protect the natural foundations of life . . .“

Basic law, art. 20a

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