

# North Rhine-Westphalia 2015

Putting our resources to work  
Strengthening our regions

Report by the Future Council NRW

State of North Rhine-Westphalia

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## Foreword

In late 2001, North Rhine-Westphalia Minister President Clement asked a group of citizens from all walks of life to make recommendations to the government of North Rhine-Westphalia that would allow “future economic reforms to be implemented under acceptable social and ecological conditions.” The present report by Future Council NRW constitutes the fulfillment of that mission.

The Council took “future” to mean the year 2015 and beyond. However, North Rhine-Westphalia needs to initiate a number of measures now in order to ensure that it will enjoy growth and prosperity in 2015. In this report, the Council has mapped out new policymaking paths that will equip North Rhine-Westphalia to face challenges down the road – even in times of budgetary constraint.

This report describes a number of policy options and opportunities such as the creation of a million future oriented jobs in the state of North Rhine-Westphalia; the restructuring of our fiscal system; more efficient use of natural resources; convening a Davos-style conference on scientific and technological development; more effective family development policies and better integration programs for foreigners who settle in North Rhine-Westphalia; the institution of citizen customer service; the creation of effective job training programs that can be completed relatively quickly; greater involvement of seniors in the life of the community; sports activities for all of North Rhine-Westphalia’s citizens; and the establishment of North Rhine-Westphalia as a cultural magnet in Europe.

Although this report has been submitted to the North Rhine-Westphalian government as requested, the Council would be very grateful to Minister President Steinbrück if he would see to it that the report is widely disseminated and that a lively public debate ensues regarding the future of North Rhine-Westphalia. Only if the state’s citizens take an active role in shaping that future will North Rhine-Westphalia be able to successfully meet the attendant challenges.

### **F. Schmidt-Bleek**

Chairman, Future Council NRW  
Dusseldorf, March 1, 2004

## Introduction

North Rhine-Westphalia is already a wonderful place to live and work. But this German heartland needs to achieve an even higher quality of life by 2015, by providing outstanding educational opportunities, future oriented jobs, unspoiled natural areas, and world-class cultural and leisure time offerings.

With a view to achieving these goals, the Future Council NRW has put forward a number of proposals. The Council, which held its first meeting in autumn 2001, was composed of individuals from the scientific, business, political, religious, cultural, media, sports, trade union, and environmental protection communities and had an equal number of male and female members.

Inasmuch as it will take upwards of two decades to achieve sustainable development, the Council trained its sights beyond day to day policymaking and decided to focus on the period extending from 2015 to 2030, with the emphasis on the former. Our mandate was to devise strategies that will ensure robust future development in North Rhine-Westphalia and promote fulfillment of the goals and concepts of the Agenda 21 process. The Council focused on four subject areas: work, resource efficiency and scientific and technological development; job training and education; the significance of specific demographic trends for North Rhine-Westphalia; and enhancement of the quality of life in our state.

Although the Council's main focus was North Rhine-Westphalia, its members were fully aware of the fact that many scenarios do not lie within the purview or power of a state government. Thus, this report puts forward proposals that are aimed at the federal and EU levels in the belief that as Germany's most populous state, North Rhine-Westphalia's views will be attended to in these circles.

The Council favors win-win solutions, which means that wherever possible benefits should accrue concurrently in the following realms: economic, ecological, and social policy; business and the economy; and nature and society. Thus, the key issues that will be facing North Rhine-Westphalia over the next several decades have been addressed, although others will undoubtedly come into play as well.

In fulfilling its mission, the Council has complied with the North Rhine-Westphalian government's request to make extremely concrete proposals. However, the scope of the Council's report is not confined to the realm of policy alone: it also addresses issues of everyday concern to the citizens of North Rhine-Westphalia, for only if all concerned work together will the state's future prosperity and well being be assured. The Council is confident that the North Rhine-Westphalian government will

see to it that the issues raised in this report become prominent items on the public agenda so as to bring into play the maximum number of competencies and marshal the multifarious resources the state has at its disposal.

We are at a crossroads and stand at the threshold of far reaching change. Some things will simply have to fall by the wayside, and this will not always be easy. But the vacuum is bound to be filled by new developments that will be of great benefit to our state and will be cause for celebration. It is crucial that we set our sails for this new course and renew our commitment to progress – and that we do so in a spirit of cooperation.

## Executive summary

North Rhine-Westphalia is a state with countless resources, both manifest and potential: the innovative ideas of its populace and the diversity of that populace's cultural origins; the multifarious talents of our children – talents which could potentially be developed to the full by the state's educational system; the outstanding achievements of the scientific, business, cultural and media communities; and the glories of nature that surround us. In short, North Rhine-Westphalia should be one of Europe's most sought after urban regions by virtue of its robust economy and the beauty of its landscape. The Council's main goal was to find ways to deploy these resources wisely and effectively and promote synergy amongst them wherever possible.

Man is the measure of all things. And when the social arrangements that govern our lives begin to change, it is only natural that the populace expects their government (in this case the government of their state) to intervene. In other words, it behooves the state's political, economic and social policy decision makers and institutions to help the populace weather these changes. Like people everywhere, the citizens of North Rhine-Westphalia want secure, future oriented jobs, good schools, an appealing range of cultural and leisure time activities, safe cities, clean streets, and a thriving natural environment that allows for enriching experiences.

It is not only the citizens of North Rhine-Westphalia that should benefit from the state's numerous amenities: the region should also become a magnet for tourists, new enterprises, and new residents. In short, North Rhine-Westphalia should become a cosmopolitan European land of opportunity for all its citizens and enterprises.

It is with these goals in mind that the Council has advanced its proposals.

Innovative proposals and programs are all well and good, but it is also necessary to take into account harsh budgetary and financial realities. The 2004 North Rhine-Westphalia budget totaled €48.6 billion and registered a deficit of €5.2 billion. The state's debt burden is currently €98.8 billion, which represents two full years of budgetary expenditures – and the deficit is widening.

However, North Rhine-Westphalia cannot lay the groundwork for future security and stability without at least some financial leeway. How else can job training programs and cutting-edge research and technological development be promoted successfully? The consolidation efforts made thus far by the North Rhine-Westphalian government are steps in the right direction but do not go nearly far enough. The Council feels that in order for the state to undertake the requisite new initiatives, current expenditures must be trimmed by 15 percent. It goes without saying that cutbacks of this magnitude will be painful for many and cannot be undertaken overnight. But this is the only way the state will successfully regain the latitude to break new ground.

In view of the bleak state of North Rhine-Westphalia's finances, the Council decided that its own package of proposals should be strictly cost-neutral. In other words, some proposals would require additional expenditures while others would reduce current outlays. The Council regards expenditures on job training, education, research, technological and other forms of innovation as investments in the future rather than costs. However, even in this sphere, there is no getting around the fact that any additional costs incurred will simply have to be offset by cutbacks elsewhere.

We did not feel that recommending specific budget cutbacks lay within our purview, nor did we have at our disposal the time or resources to make such recommendations. However, we have recommended that cutback proposals be elaborated.

The precarious state of North Rhine-Westphalia's finances demonstrates all too graphically that the state has to trim its financial sails by limiting the scope of its programs and that any attempt to do otherwise is doomed to failure. The first step toward rational and efficient government spending is to eliminate the current labyrinth of regulations and bureaucratic red tape. The North Rhine-Westphalian government has gone a long way toward accomplishing this, and it goes without saying that no matter what happens, the state must take care of the disadvantaged. What is needed above all is a state government that provides leadership, that gets the ball rolling, that communicates, and that creates conditions that are conducive to private sector and individual initiatives. The Council therefore feels that extensive public debate is needed between policymakers and all socioeconomic groups and social actors regarding the state government's role and the possibility that private sector actors will take up where state government must inevitably leave off. The government of North Rhine-Westphalia should take steps to foster such debate.

In order to achieve sustainability, we must face up to today's economic, social policy and ecological challenges now, rather than allowing them to become a burden for future generations. It has thus far proven impossible to devise uniform and well coordinated policies that promote sustainability and this is a situation that urgently needs changing. It is hoped that the Council's work will help to resolve priority conflicts in the economic, environmental and social policy spheres. But there is no getting around the fact that economic growth and increased productivity are indispensable drivers of prosperity. However, if in achieving prosperity, technology does not become cleaner, and oil, land and water use are not reduced, then nothing has really been gained. Income taxes should be reduced and natural resource taxes should be raised. This in turn will stimulate economic growth, create jobs and generate additional tax revenue.

Another key consideration in the Council's mind was the status of North Rhine-Westphalia's children and young adults of all ethnic origins, for it is they who will inherit – and create – the future of our state.

With these goals in mind, the Council elaborated its proposals in the following spheres:

### **Draw upon the multifarious strengths and resources of the state's cities, towns and regions**

In future years, the creative and innovative ideas and initiatives that sustain North Rhine-Westphalia's greatness will come from the bottom up – from individual citizens, families, enterprises and communities. In other words, from the region itself. Many initiatives and projects that the Council finds genuinely worthwhile fall into this category, whether they be in the

spheres of business, job training, family welfare or migrant integration. North Rhine-Westphalia should sponsor a program of competitive “bidding” between the state’s various urban and rural regions with a view to generating the most promising concepts for economic development, training, technological innovation and social policy. This type of constructive competition would also afford the state’s cities and towns an opportunity to define themselves more clearly, since their ideas, capabilities and infrastructures are each unique and the people who live in a particular city, town or region know its strengths best.

### **Economic growth, efficient resource use, job creation**

The challenge is clear: over the next decade (by 2015), the state of North Rhine-Westphalia will need to create one million new jobs, achieve an annual 3 to 3.5 percent economic growth rate, and improve the state’s resource efficiency by 100 percent.

To this end, the cluster concept,<sup>1</sup> which has been successfully and extensively piloted in North Rhine-Westphalia and internationally, should form the basis for a sustainable regional economic development model whereby each of the state’s regions would develop their own customized development model comprising high tech, manufacturing and service sector enterprises. For its part, the North Rhine-Westphalian government would provide the various actors with consulting and management services, and would promote synergy among them. The state would also provide the requisite know-how.

### **Restructuring North Rhine-Westphalia’s fiscal system**

We must face the fact that in every realm of daily life, whether it be housing, clothing, mobility, information or entertainment, the same level of comfort is achievable with reduced natural resource use. This means that enterprises must find ways to create value using less energy and fewer resources.

To achieve this goal, it will be necessary for North Rhine-Westphalia to revamp its fiscal system. This will involve the elaboration of revenue, expenditure and subsidy policies that aim to promote more efficient natural resource use. The long term goal at the federal level would be the balanced and economically viable deployment of labor, capital, energy and energy resources.

### **Intensified technological and scientific research**

Research is the make or break factor in the successful creation of new – and competitive – service and manufacturing sector enterprises, and the jobs that such enterprises create. Research is also the lifeblood of innovation and innovation, which in turn helps to harmonize conflicting priorities – for example by reducing resource and land use while at the same time increasing affluence through job creation.

North Rhine-Westphalia should strive to become one of the leading research centers in Germany and Europe. The first step toward doing this would be to increase research expenditures from the current level of 2.1 percent of GDP to a level that is

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<sup>1</sup> For further information on the cluster concept see <http://phoenix.gov/BERTELSM/concept.html>.



consistent with our present economic infrastructure, viz. to 3.5 to 5 percent of GDP. This level would help to achieve the European Commission's Barcelona objectives and would make up for the current shortfall in research activities.

It is essential that Germany successfully attract top notch research talent from abroad to carry out cutting edge work here. It is equally essential that by 2015, North Rhine-Westphalia be part of this evolution, which means having outstanding institutions of higher education and the attendant academic departments in all disciplines. North Rhine-Westphalia should become such a sought-after region for foreign researchers and subject area specialists that they flock to our state, bringing with them their ideas and experiences.

North Rhine-Westphalia needs to undertake projects that raise the state's profile as a center of scientific research. Toward this end, a major international conference on research and technological development should be held each year at the German government's Petersberg guesthouse complex. This event would hopefully evolve into the research and technological development counterpart of the Davos World Economic Forum.

### **Instituting citizen customer service**

The commitment of the government and its employees to providing public *service* needs a top to bottom makeover via the elimination of unnecessary bureaucratic regulations and greater emphasis on results. Only in this way can government employees be motivated to provide citizens and enterprises with the helpful and friendly service they have the right to expect. Toward this end, remuneration for government employees should comprise a base salary plus a significant performance pay component.

The institution of citizen customer service is crucial for the overall competitiveness and productivity of North Rhine-Westphalia's economy. The state's current raft of services is no longer affordable and the ground rules simply have to be changed. This process should take as its starting point a crucial question: How efficiently are government funds being used? Lower and more strategically deployed expenditures are often equally effective. The watchword for the North Rhine-Westphalian government should be: efficient management, not bureaucratic administration.

### **Preschool programs: promoting curiosity, the desire to learn and enthusiasm**

Children are endowed with the natural capacity and the desire to learn – and they enjoy learning as well. Indeed, children mainly educate themselves. The goal of preschool programs should be to help each child develop his desire to explore, find out what his needs are and how he can best fulfill them.

Preschool children learn foreign languages more easily than do any other age group. The kind of enthusiasm and desire to learn that is observed in three to five year old children is a once in a lifetime phenomenon. Children who are insufficiently challenged and stimulated at this age are robbed of their developmental potential for life.

North Rhine-Westphalia should upgrade its state-run preschool daycare facilities, but without turning them into kindergartens per se. Instead, the child should be approached holistically: children should learn by playing games, making music

and having a lot of uproarious fun. Preschool daycare facilities should also be open all day and the state should support them in such a way that they are affordable for all parents.

Preschool facilities for children under the age of three need to be expanded, particularly in the realm of language skills programs.

### **A new approach to education: all-day schooling – and one type of school for all<sup>2</sup>**

Numerous programs in other EU countries are making it increasingly clear that children who attend all-day schools reach higher levels of achievement. The current system should be replaced by a single type of school for all children through the tenth grade.<sup>3</sup>

Schools should regard each child as an individual and develop each child's potential to the full, irrespective of how well educated the child's parents are, how gifted the child is, or whether the child is from an immigrant or a refugee family. Only in this way can children from all socioeconomic levels have a truly enriching and supportive educational experience in which each child pursues an educational program that is tailored to his needs.

Formal instruction and extracurricular activities should be spread across the entire school day, generally from 8 am to 4 pm. Homework per se should be abolished: all such tasks should be performed at school. The task of educating children should no longer be entrusted to classroom teachers alone. Instead, a host of other actors such as child development specialists, sports clubs, enterprises, libraries, and ecclesiastical institutions should play an active role in child development and education. Thus children would no longer be sequestered in school but would instead play an active role in society.

Schools themselves should be given a substantial degree of decision making latitude within a school system that performs quality audits on a regular basis, thus ensuring that students and their teachers adhere to fixed standards.

By 2015, children in North Rhine-Westphalia should enter school early enough to graduate high school at age 17 and college at around age 23. People in general should also enter the workforce at an earlier age than is now the case.<sup>4</sup>

Adult education and lifelong job qualifications programs open up new career opportunities; the state's educational institutions, including its universities, should make efforts to meet those needs.

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<sup>2</sup> In Germany, hard decisions about a pupil's academic future are made at approximately age 10. Youngsters at this age are channeled to vocational schools, non-academic high schools or to college preparatory secondary schools. Only the latter pupils are eligible to apply to college.

<sup>3</sup> Germans are required by law to remain in school until the tenth grade.

<sup>4</sup> It is common in Germany for graduate students to complete a PhD or other advanced training at age 28-32 and only then get their first full time job. Gymnasium students graduate at age 19, undergraduate training takes five years and graduate training can take six or more years, depending on the discipline.

**Promote family development in North Rhine-Westphalia**

It is crucial that raising children and living in a family setting once again become givens of adult life. But in order for this to happen, attitudes need to change – which is why family development and family-oriented services should be vigorously promoted in North Rhine-Westphalia. Elementary schools and preschool daycare facilities should be gradually converted into family agencies that offer a full range of services including preschool daycare, all-day schooling, child development counseling, medical advice, shopping services, and bussing for the children of working parents. The goal here is not to take children away from their parents but rather to provide effective and flexible services that enable parents concurrently to pursue a career and raise children.

Efforts should be made to increase the state's current birth rate of 1.4 children per female to 1.9 by 2030, which is presently the level in France. This would greatly contribute to slowing the population decline, as would immigration policies aimed at stabilizing North Rhine-Westphalia's population.

**Immigration is good for North Rhine-Westphalia**

Immigrants pay taxes, support our social insurance system, and are good for North Rhine-Westphalia's demographics in that they make the population as a whole younger. Successful integration of immigrants can help give North Rhine-Westphalia a decisive advantage in the competition amongst German states to attract businesses. The key indicators of successful immigrant integration are mastery of German and continual improvement in job qualification levels.

North Rhine-Westphalia should establish an urban development competition that prioritizes the most problematic neighborhoods, i.e. those with a high proportion of immigrants. This initiative would aim to establish and promote a completely different kind of program – one that is strategically planned, well coordinated, and implemented by a single organization. The success of this concept would mainly depend on the capabilities of elementary schools and preschool daycare facilities. Regional implementation teams would bear primary responsibility for carrying out the project. Good cooperation between the federal and state governments would also be a key success factor.

**Put seniors' life experience to good use**

Seniors should be given greater opportunities to share their individual capacities, talents and life experiences with others.

There are two ways in which this can be achieved. The first is through mutual assistance programs within the community that promote transgenerational exchanges (e.g. German lessons in exchange for help with daily chores, cooking, advice and so on). This would constitute a rebirth of neighborliness that could to some extent replace family connections.

The second approach is to enable pensioners to participate fully in the life of the community. But this requires the right kind of organizational structure, and this could be provided by an extensive in-kind services program organized by specialists that would put the experience of the elderly to good use – for their own good and for the good of society. We all know from our everyday experience that people who have defined goals and a purpose in life stay healthy and remain active longer. Whatever

form senior's involvement with the community takes, it should be consistent with their needs and abilities. Some elderly people enjoy spending their time in social settings, while others are more project oriented. Community organizers would coordinate seniors' involvement in community life.

### **North Rhine-Westphalia's natural riches**

The skies over the Ruhr region were cleansed of industrial pollution decades ago, and now North Rhine-Westphalia needs to build upon the natural riches of the region, expand their possibilities, and beautify them to the utmost so that those residing in the region as well as those who visit it can enjoy these splendors to the full.

North Rhine-Westphalia should embark on a program aimed at developing the state's nature reserves and nature parks (e.g. the Eifel park area and the planned Senne park) into cornerstones of economic development, particularly for tourism. By 2015, the state's rivers should once again be havens for bathers in the summer months and an increased proportion of the state's agricultural activities should be based on natural and ecological methods.

Children should learn at a very early age about health maintenance and the importance of eating a variety of foods. A first step in this direction would be for the state government to institute a program whereby all pupils in elementary schools eat breakfast and/or lunch together in the school cafeteria.

### **Athletic activities bring people together**

Sports are all about health and enjoyment – but they also promote a virtue that will be much needed in future years: a strong sense of commitment to the common good. Already today, 200,000 people who serve as volunteers in North Rhine-Westphalia's sports clubs and associations enable young people to gain first-hand experience of values such as fair play, tolerance and loyalty. One out of every two youths in North Rhine-Westphalia is a member of a sports club and it behooves us to leverage off this resource. This could be done, for example, by having the state's public and private sectors jointly sponsor athletics organizations either with gym and aerobics classes in schools or by promoting the development of, and participation in, these organizations.

Every society needs role models, and the enthusiasm and high skill level of top athletes fits the bill perfectly in this regard. This is why it makes good sense for both the public and private sector to support top-level sports.

**North Rhine-Westphalia as a cultural magnet**

North Rhine-Westphalia should strive to become a cultural nexus in both Germany and Europe. The preconditions for such a development are already in place: the state's multi-ethnic populace, its healthy mix of socioeconomic classes and the robustness of the region's economy all constitute invaluable resources in this regard. North Rhine-Westphalia should become a major player in the world of avant-garde art, and our region should be one in which high culture and provocative experimental work rub shoulders and generate fruitful synergies. The state's infrastructure of theatres, museums and cultural centers should also be strengthened.

Against this backdrop, all social actors concerned with culture and the arts (the general public, the entertainment industry, artists, the federal government and the business community) should forge a cultural policy alliance which would elaborate sound overall concepts for all dimensions of cultural activities including coordination, networking, elimination of red tape, sustainable financing, community involvement, cultural education, events that promote cultural identity, regional development programs, and cultural activities with a leisure time or tourism orientation. Cultural activities are an endangered species without public subsidies for their primary financial needs. But it is essential that systematic efforts also be made to increase the proportion of private sector financing models in this realm. Apart from foundations and patronage, the most promising approaches would appear to be market based investment funds, risk capital models, social sponsoring and public private partnerships.

It is essential that citizens have access to cultural amenities that are comprehensible and with which they can identify. At the same time citizens must also do their share to promote cultural activities and shape the cultural life of their communities.

North Rhine-Westphalia needs high profile cultural events such as Christo wrappings, the MOMA exhibit in Berlin and Paris's Pompidou Center. Such events and venues generate tremendous excitement and reach audiences that ordinarily would not seek out fine art. Classical music events in addition to the Ruhr and Cologne music triennials should also be developed.

# 1. Jobs and resources – the keys to growth and progress

## **Strengthening the state's economy**

North Rhine-Westphalia has the largest economic output of all the German states, making it one of the world's largest economies. Although the population of North Rhine-Westphalia is larger than all of Scandinavia, the state's economic performance is lagging increasingly far behind that of other countries and German states. If this trend continues, over the next decade the gross domestic product of North Rhine-Westphalia and its 18 million inhabitants will fall behind that of numerous countries, including ones such as the Netherlands whose populations are smaller than North Rhine-Westphalia's.

Per capita income in North Rhine-Westphalia is €25,690, 18 percent less than that of Hessen, which has the highest per capita income of all German states. This difference was only 8 percent two decades ago, and the gap is widening.

## **Jobs and economic growth**

Weak economies inevitably spawn high levels of unemployment. North Rhine-Westphalia's 10 percent unemployment rate in 2003 was well over 60 percent higher than that of Baden-Wuerttemberg, which has the lowest unemployment rate of all German states.

Many new jobs have been created in North Rhine-Westphalia – but not nearly enough. And even if the current job situation stabilizes in the near future, the state's unemployment rate will remain at or near current levels. Many jobs have fallen victim to the inexorable process of economic restructuring, and new jobs are urgently needed, particularly ones with high value creation potential.

North Rhine-Westphalia should set itself the goal of decreasing unemployment to around 5 percent, which would reduce the number of unemployed to approximately 30,000. This is of course an ambitious goal, but it can be achieved, as developments in other countries and German federal states have shown – among them Baden-Wuerttemberg, Bavaria, the Netherlands and Austria.

The challenge we face is to create a minimum of one million new jobs in North Rhine-Westphalia by 2015. Although North Rhine-Westphalia has “only” 300,000 persons on its unemployment rolls, a far larger number of jobs is needed to bring this figure down because many unemployed persons lack the qualifications for highly specialized jobs, with the result that newly created jobs often go to individuals from other regions. In order for North Rhine-Westphalia to create one million new jobs over the next decade, its economy will have to grow at a rate of 3 to 3.5 per year, although a lower growth rate would be sufficient if growth is achieved in sectors that are more labor intensive and require less resource use. A revamped taxation system that reduces wage costs would constitute an important first step toward reducing unemployment. Moreover, increasing the number of employed persons could bring about innovative flextime arrangements and a more flexible labor market.

### **Energy efficiency and resource productivity**

North Rhine-Westphalia has a longstanding tradition of industries that consume substantial amounts of energy and natural resources. For example, electricity generated by North Rhine-Westphalia’s coal fired power plants is exported outside the region, but the effects of the consequent pollution and land development are felt here at home. As a result, North Rhine-Westphalia generates a disproportionately large amount of carbon dioxide compared with other German states, and we also consume unduly large amounts of energy and natural resources.

Nevertheless, more efficient building insulation, car engines and technologies have greatly improved energy efficiency in recent years, and a critical mass has been reached that promises even greater improvement in the coming years. Insofar as reduced energy use entails cutting back on coal, oil and gas consumption, achieving this goal will also involve the optimization of resource efficiency, viz. dematerialization of the economy.

The same holds true when it comes to the strategic use of raw materials in all economic sectors. More than adequate levels of comfort and convenience are perfectly compatible with reduced resource consumption, whether this be in the realm of clothing, mobility, information or leisure time activities. In order to achieve this goal, economic actors should create greater value using a defined amount of energy or resources. Success in this endeavor would engender a favorable economic *and* ecological outcome – a mechanism whose validity has already been demonstrated in numerous spheres.

One example of this can be found in the papermaking industry, which has seen resource efficiency increase exponentially over the past few decades to the point where today’s papermaking machines are as large and costly as a jumbo jet, but each sheet of paper requires only a fraction of the wood, water, and energy that was needed in the past. In other words, the papermaking process has been dematerialized. However, improved resource efficiency is sometimes undermined by countervailing trends, one example of this being the purportedly “paperless” office in which paper waste has reached profligate levels – a prime example of the boomerang effect.

Dematerialization is a natural process that must be strengthened and accelerated.

### **Progress is about more than just technology**

For many of us, progress is synonymous with technological gadgetry such as DVD burners or wireless Internet – or with technological innovations such as hydrogen powered vehicles. But progress is about much more than just new products or technologies: innovative manufacturing and business processes, as well as social policy innovations, also count as progress. However, in order for any progress to occur, the individuals and teams that bring it about must all have a high level of expertise and must have received thorough and competent training.

This means that if an enterprise or region wants to promote innovation and progress, it must attract top people by offering them excellent remuneration and quality facilities. This holds true for all forms of research and development in both the public and private sectors.

### **The federal government's role: reform the fiscal and public administration systems**

Today's citizens, and the economy, are weighed down by excessive taxes, while at the same time pension, unemployment and medical insurance entitlements are placing untenable pressure on the federal budget. Current demographic trends are also exacerbating this problem (see chapter 3).

This is the backdrop for the current debate regarding the future role of the federal government, the nature of a modern fiscal system and the characteristics of citizen customer service. Inasmuch as these issues are closely interconnected, any proposed solutions in their regard should factor in all three dimensions.

## **1.1. Increased employment and resource efficiency through sustainable regional development**

### **Increasing resource productivity**

Sustained (and sustainable) economic growth does not have to come at the price of greater resource use. From 1994-2001, resource productivity in Germany improved by 21.8 percent, while growth during this same period was 11.9 percent. If economic growth increased by 3 to 3.5 percent annually, resource productivity would have to increase accordingly, from 3 percent to around 6 to 7 percent annually. If this trend continued for a decade, resource efficiency would double.

Resource intensive and dematerialized manufacturing processes can reduce packaging use in numerous ways, and can also extend product life cycles, generate new leasing modalities, and can avoid the use of resource intensive materials, or render their use unnecessary, by optimizing transport logistics. Toward this end, design to cost processes can be instituted that allow for management of the design process to meet specific cost reduction as well as energy and material efficiency targets.



Future-oriented design processes always begin with a very simple question: To what use will the product be put? Only after this question has been answered can technical solutions be elaborated that create value, perform reliably and use resources efficiently. This holds true for all processes, from classic manufacturing to high tech. It of course goes without saying that hazardous materials should be avoided wherever possible.

Future oriented design cannot be achieved without systems thinking, the decisive factor here being the usefulness of the end product itself or the viability of the process as a whole. It is sometimes necessary to use more resources for a particular component if doing so optimizes the end product. All of the various options can be calculated using the material input per service unit (MIPS) method, which ascertains the amount of natural resources consumed by a product unit during its entire life cycle.

North Rhine-Westphalia needs more and better data of the type currently gathered by the federal government so that analyses that factor in both the ecological and economic dimensions can be carried out. Such models should include not only the raw materials that are used in the product itself but also the so called "ecological backpack" – the resources that are used before the product ever appears on the market, such as excavated material, manufacturing waste, upstream components, and energy used for transport.

According to preliminary estimates, even with current technologies and under the conditions obtaining today, resource productivity could be greatly improved without reducing our quality of life. Such measures could potentially save up to €10 billion annually in the private sector and could trim €2 billion from North Rhine-Westphalia's annual budget.

### **Job creation**

Our primary goal should be to leverage off social, technological and political progress with a view to creating more secure, rewarding and well paid jobs, while at the same time optimizing resource efficiency.

Many potential new jobs are awaiting "discovery" at the interface between enterprise innovation and resource productivity. Successful creation of such jobs would spur growth in the North Rhine-Westphalian economy, which in turn would improve the state's competitive position relative to other German states and create new export opportunities for North Rhine-Westphalian enterprises.

North Rhine-Westphalia should institute a regional sustainable development program. Value creation in the region is on the rise, but this trend can only continue if new jobs are created in mature industry segments that are in the process of modernizing, as well as in growth segments that are opening up new markets. Particularly promising in this regard are segments in which money can be saved and competitiveness optimized through resource efficiency.

In order for us to break new ground, we will have to change our thinking, and this is a factor that should be taken into account by human resources managers, whether they are hiring top managers, office managers or unemployed persons.

And last but not least, highly qualified individuals expect to live and work in pleasant and healthy surroundings. Only if such conditions obtain, will talented people settle in North Rhine-Westphalia and stay here. Thus our region needs to offer a

high quality of life – which means streets that are kept clean, trains that run on time, schools that provide a good education, satisfying and enriching leisure time and cultural offerings and a thriving natural environment (see chapter 4).

### **Sustainable regional development**

No state – North Rhine-Westphalia included – is an island. To the contrary: every aspect of life in North Rhine-Westphalia is governed to one degree or another by the federal tax system and labor market regulations as well as by international treaties that have been concluded by the federal or EU governments or that affect countries all around the globe. As Germany's most populous state, North Rhine-Westphalia's views are taken seriously at the highest policymaking levels, and the North Rhine-Westphalian government itself has considerable policymaking latitude. This potential can best be tapped if the North Rhine-Westphalian government and its citizens get down to the business of communicating with each other, making well founded plans, and then implementing them systematically.

However, there are no off-the-shelf answers. Each region needs to elaborate its own development model, particularly when unemployment rates vary greatly from one region to the other as is the case in Germany today. Such models can be devised by forging so called cluster alliances, which are alliances of people, ideas, resources and the attendant infrastructure that form a complex productivity network whose components interact in a highly dynamic fashion. Clusters can be formed on a regional level, or they can be segment-specific networks. In either case, they can greatly help North Rhine-Westphalia to pool its resources and thus set new standards internationally.

Cluster alliances have been deployed successfully in German cities such as Dortmund and Wolfsburg, and abroad as well, and the experience gained in these projects can be applied to the formation of new cluster alliances. Such projects should always be undertaken on the basis of clearly formulated concepts, goals and visions, with support and participation from prominent North Rhine-Westphalians, and with the right mix of trendsetting growth industries, basic industries such as machine construction and logistics, as well as enterprises from the service and retail distribution sectors. Experienced private or public sector managers should oversee the entire process, and if, for example, market conditions change two or three years into the project, changes should be made accordingly.

It is crucial that North Rhine-Westphalia build on its existing strengths and that clearly defined projects be undertaken. The success of these projects would then provide further impetus for economic development, particularly in high growth industries, but also in well established area of activities.

### **From words to action**

The key to successful implementation of the aforementioned proposals lies in North Rhine-Westphalia's various regions and their business segments. North Rhine-Westphalia should begin implementing a regional development program by the end of 2004 at the latest, as follows:

- Learn from and build on cluster alliance experiences in other countries that are particularly relevant to conditions in North Rhine-Westphalia.
- Conduct a detailed analysis of the current situation in all regions of North Rhine-Westphalia and compile a list of each region's professional and trade organizations. Goals should be elaborated for each region by comparing current and target values and the state's existing industry segments should be factored into this analysis as well.
- The state government's role in such projects should be to coordinate and support the activities in the various regions. One way of doing this is to invite the state's various regions to submit cluster alliance proposals and then select the best ones. The key to the success of such activities is active and widespread support on the part of the business community.
- North Rhine-Westphalia should institute a program that defines specific goals for the year 2015. The mission of this program would be to enlist the aid of subject experts in laying the groundwork for sustainable regional development, ensuring that the defined objectives are achieved throughout the state, and hiring professionals in the relevant fields to coordinate such projects and monitor their progress.
- As for North Rhine-Westphalia's various regions, their task would be to develop and flesh out future oriented regional concepts for the aforementioned competition, and to implement these concepts in cooperation with other German states.
- At the same time, public and private sector funding for research and development activities should be doubled and preferably tripled, from the current level of 1.8 percent of GDP to 3.5 to 5 percent of GDP.

It goes without saying that none of this will be realized overnight: Rome was not built in a day. But whether the goals are short term or long term, it is never too soon to begin. It generally takes five to ten years for the desired effects of regional development programs to take hold. If North Rhine-Westphalia is to emerge as one of Europe's most desirable places to live and work by 2015, we must act now.

## 1.2. Creating conditions more conducive to scientific research and innovation

### **Why innovative projects are so crucial**

Germany is not blessed with an abundance of natural resources. However, there is one “natural resource” that has become increasingly pivotal in recent years and that will continue playing a major role for the foreseeable future: expertise, which is the driver of innovation. Innovative projects and initiatives help to harmonize conflicting priorities – for example by reducing resource and land use while at the same time increasing economic well-being through job creation. Expertise and innovation can strengthen sustainability and promote economic well-being by increasing productivity. Expertise should be leveraged in North Rhine-Westphalia in such a way as to make existing industrial and service sector enterprises more competitive and establish new enterprises. Only in this way can future oriented jobs be created.

### **Put North Rhine-Westphalia’s creative potential to more productive use**

One of North Rhine-Westphalia’s main problems is a dearth of cutting-edge research and development activities. This is surprising, because a welter of scientific institutions operate in North Rhine-Westphalia, including 58 universities and 88 prestigious research institutes such as the Max Planck Institute, several Fraunhofer Institutes, the Helmholtz Association and numerous others.

But unfortunately, the full potential of these resources has yet to be tapped. Only Cologne, Dusseldorf and Aachen are among Germany’s top 20 technology regions. The states of Bavaria, Baden Wurttemberg and Hessen are the leaders in this sphere.

New businesses have a more positive effect on unemployment statistics than any other factor since each new enterprise creates an average of nine new jobs. Startups are far more prevalent in the service sector. High tech and other “new economy” startups are the drivers of regional economic growth in that they help to create jobs in local service and manufacturing sectors. However, North Rhine-Westphalia is lagging behind other German states in this sphere. For example in Bavaria, an average of 4.8 new businesses are founded each year for each 10,000 potential members of the labor force, whereas in North Rhine-Westphalia the figure currently stands at 3.5.

Another problem in this regard is that North Rhine-Westphalia does not invest nearly enough in research and development. To achieve the average level of R&D investment for Germany as a whole, North Rhine-Westphalia would have to commit 2.1 percent of its GDP to this area of endeavor. However, the state currently spends only 1.8 percent of its GDP on R&D, which is substantially less than the German states who lead in this area, i.e. Bavaria, which spends 2.98 percent and Baden-Wuerttemberg, which invests 3.8 percent.

In short, the potential indisputably exists – but so do obstacles and mediocrity galore. For example, North Rhine-Westphalia's universities generate woefully inadequate amounts of outstanding research, with the result that enterprises take their research activities elsewhere – and government subsidies have not managed to create a climate that is conducive to innovative research and business start-ups.

However, another precondition for top notch research results is having enough researchers to produce them and here too North Rhine-Westphalia is lagging behind. Simply put, the state needs more college graduates – but without sacrificing quality on the altar of quantity. In many European countries, the proportion of 25 to 34 year olds with college degrees or equivalent qualifications has increased in recent years, while in Germany the number has stagnated. In 1991, 21 percent of all Germans in this age group had college degrees, while in France the figure was 20 percent and in Great Britain 19 percent. The 2001 figure for Germany was 22 percent, for Great Britain 29 percent and for France 34 percent. In order for North Rhine-Westphalia to catch up with Britain or France in this sphere, we would have to produce, respectively, about 140,000 or 240,000 more college graduates over the next ten years.

### **More cutting edge research and development in North Rhine-Westphalia**

North Rhine-Westphalia should strive to achieve the ambitious but wholly realistic goal of becoming one of the leading research centers in Germany and Europe. The first step toward doing this would be to increase R&D expenditures from the current 2.1 percent of GDP to a level that would be concomitant with our present economic infrastructure. Inasmuch as this move alone would involve additional expenditures totaling some €1 billion, two thirds of the funds should be raised by means of extensive cutting-edge research and development on the part of the business community, and the state of North Rhine-Westphalia should pay for the rest. This financing structure is consistent with the average structure applied in Germany as a whole.

Even greater efforts will be required in order for North Rhine-Westphalia to occupy a leading position in Germany and in Europe as a whole. The European Commission's 2002 Barcelona objectives call for EU Member States to increase their research and development expenditures to 3.0 percent of GDP by 2010. North Rhine-Westphalia will therefore need to increase its R&D expenditures to at least 3.5 to 5 percent of GDP in order to compensate for the current shortfall in research activities.

### **Projects that raise North Rhine-Westphalia's profile**

Projects that arouse a great deal of interest amongst the general public can help improve our present situation. Such projects can focus either on specific themes or on institutional change.

### **A putative Petersberg Forum and center for advanced studies**

The North Rhine-Westphalian government, regional enterprises, and the scientific and technological development communities should sponsor a yearly international conference on scientific and technological development at the German government's guest house complex in Bonn. This "Petersberg Forum" could become the world scientific community's answer to the World Economic Forum in Davos. The Forum would address issues such as visions and strategies for the future or could feature presentations on research findings that have international repercussions. Additional themes could include the interdisciplinary discourse amongst scientific researchers, and between scientific, social, economic and political actors. The North Rhine-Westphalian government and the state's business community would finance the Forum and its center for advanced studies until they become self-supporting.

The Forum should also become an international center for advanced studies at which prominent scientific researchers and expert practitioners would spend one year as Fellows carrying out research and teaching the institute's junior fellows. The institute Fellows would also act as scientific chairpersons for the annual conference on scientific and technological development. Outstanding scientific talent from North Rhine-Westphalia's research institutions would be invited to work at this center.

Junior Fellows at the Petersberg forum/center for advanced studies would pursue a two-year graduate program in their chosen discipline under the aegis of a top North Rhine-Westphalia institution of higher education. This program would afford the Junior Fellows the opportunity to prepare themselves for a management level position in the sciences, business, politics or public administration. The theses submitted at the conclusion of the program would become part of a groundbreaking worldwide scientific discourse. The forum's international advisory board would select the Fellows and Junior Fellows and would coordinate the scientific program. Each year the panel would also select a highly future-oriented topic in the field of scientific and technological development. The Forum's board of trustees would be made up of prominent individuals from public life.

### **Cutting edge research in NRW**

It is essential that Germany successfully attract top notch research talent from abroad to carry out cutting edge research here, and that by 2015, North Rhine-Westphalia's research institutions be involved in cutting edge scientific and technological development. In the field of engineering, this could be accomplished by the technical university in Aachen, RWTH, which consistently receives top ranking among universities, is the beneficiary of a large number of private sector research grants, and has an outstanding international reputation. Moreover, RWTH is involved in 26 collaborative foreign projects and has over 5,000 foreign students, which means the school has excellent foreign connections. The school's proportion of foreign students (17 percent) is considerably higher than the average in North Rhine-Westphalia (12 percent).

### **Promote thematic projects**

North Rhine-Westphalia can help to promote scientific and technological development by sponsoring projects on specific subject areas. The state should make the most of this type of opportunity.

North Rhine-Westphalia has considerably influence in many realms as a customer that makes large purchases of products and services. The state should exploit this role so as to become a pioneering advocate of specific research goals.

The significance of thematic projects can be more readily communicated to the general public than can institutional change, which for most citizens is a rather abstract concept. Such projects can be linked more easily with goals and visions, and thus are more likely to create public support for North Rhine-Westphalia's technological and scientific research programs.

Virtually any aspect of state government policy can form the basis for a thematic project. Particularly promising in this regard are activities in which the state government plays a major role such as mobility, energy, and, water utilities. One possible theme for such a project could be the vision of a sustainably mobile North Rhine-Westphalia. Other initiatives could also be implemented that would further the cause of sustainability and resource efficiency in our state. The contracts for such projects should be awarded through separate competitions at the state and regional levels. One of the key priorities of state policy should be to establish and maintain an effective, reliable and optimally resource-efficient transportation infrastructure.

Another possible project theme could be, "Sustainable mobility in a densely populated region," which is bound to arouse great interest amongst the general public. This would be the best way to promote acceptance of technological and scientific research programs that impact many different areas of everyday life, e.g. telematics applications that regulate traffic flow, cutting-edge safety technologies that prevent traffic accidents and so on. Another promising area in this regard is road construction, which should be carried out using more lightweight and easier to handle materials. This would reduce the number of road construction projects and the attendant traffic jams. Another issue is the key role played by well coordinated bus, train and light rail schedules in achieving an effective mass transit system. It might also be possible to stagger working hours so that urban mass transit systems are not overloaded during morning and evening rush hour. More teleworking would also be helpful in this regard. Optimized mobility in North Rhine-Westphalia would improve the state's quality of life, cut down on energy waste, and increase productivity.

### **From words to action**

- The state needs to establish suitable conditions for investments in research and development. Our political leaders should establish an environment that fosters creativity and in which planners feel secure in the knowledge that their innovative ideas can and will be supported. The North Rhine-Westphalian government should elaborate goals and visions that further these ends.

- North Rhine-Westphalia should develop, in collaboration with the relevant actors within the state, a viable concept for an international conference and scientific and technological development at the German government's Petersberg guesthouse complex. In addition to defining topic areas and goals, this would also involve establishment of a sound organizational and financial basis for the event as well as elaboration of an international public relations campaign.
- North Rhine-Westphalia should exploit its status as a customer to become a pioneering advocate of specific research goals. This would in turn position the state to promote scientific and technological development in all of its own areas of endeavor. The best project ideas in this regard can be generated by holding a competition.
- North Rhine-Westphalia should conduct a detailed survey of the resources available at the state's research institutions. This would involve identifying the institutions that carry out cutting edge research and integrating them into a North Rhine-Westphalia "scientific and technological development map" in accordance with the criteria of EU research policy. The results of this project would be published and would become benchmarks for the state's top research institutions.
- Cutting edge research results can only be achieved if research grants target specific goals and if grants from various sources are grouped into a single award and are administered centrally. Such grants should focus on competitively positioned industry segments that use resources efficiently, offer future oriented jobs and are involved in cutting edge basic research. Government research funding and private sector seed money should be awarded as single grants. Competitions are the most effective modality for deciding which projects merit support, and professional results management and auditing are indispensable for the grant decision process. Strategic support for cutting edge research and for Silicon Valley-style research regions in close cooperation with public sector research institutions and enterprise R&D departments (the University of Dortmund, for example, could be the lynchpin of such a region) would ensure that research grants are put to optimally efficient use. Strategic integration with the European research community would also be part of this process.
- **Strengthening the region's international research orientation: brain gain not brain drain** North Rhine-Westphalia should become such a sought after region for foreign researchers and subject area specialists that they flock to our state, bringing with them their ideas and experiences. In order to attract them, we need to create an open and friendly international environment with excellent working conditions. Information sharing on the international level is crucial in the sphere of high tech research, particularly for academics. In order for North Rhine-Westphalia's institutions of higher education to measure up to the standards set by top institutions such as MIT and Oxford, the proportion of foreign students at our universities (currently just under 12 percent) should be increased by a factor of two or three. For



purposes of comparison, it should be noted that 24 percent of students entering the RWTH technical university in Aachen are from outside Germany. But an international orientation is not a one way street. Both the target countries and the countries of origin of foreign scientists and subject specialists benefit from international exchanges and the activities of their nationals studying and doing research abroad. The same holds true for highly developed countries such as the US, which is still making up for lost time in this sphere. The overarching goal here is to foster creative information sharing rather than to exploit knowledge resources.

- **Laying the groundwork for enterprise startups at universities** The transformation of research findings into commercially saleable products requires careful preparation and thorough training. The reverse process – i.e. applying practical findings to research – can be equally as useful in that it promotes synergy between researchers, enterprises, policymakers and the general public. University syllabuses should offer more business management courses for science and engineering students. Companies could finance such programs alone or with partners and use them as a recruiting platform.

Creating an environment that promotes cutting edge research will require increased investment in professional training and our educational system as a whole, including enhancement of the quality and variety of preschool education programs. Schools need fewer rigid rules and more latitude. A single set of standards for the measurement and validation of educational quality should apply from elementary school right through to college.

Our universities are short on financial resources owing to the current dearth of private sector funding. Universities would have to charge tuition ranging from €2000 to €4000 to generate the resources needed to provide quality education and ensure that students complete their degrees as expeditiously as possible. This financing structure should of course also guarantee that the universities themselves do not incur a deficit.

Moreover, no talent should go to waste. In order to ensure that financial need does not prevent any applicant from entering college, we need to institute a new scholarship system that eliminates parental income as a criterion for financial aid, provides low interest loans and institutes other similar measures. Under such a system, the amount of financial aid granted would be linked to achievement, and graduates would only begin repaying their loans, with their income taxes, when they begin working.

North Rhine-Westphalia cannot hope to promote quality technological and scientific research unless students receive top notch training. The Council therefore wishes to emphasize how crucial it is that the aforementioned recommendations be considered and implemented against the backdrop of our recommendations in chapter 2 on the future of education in North Rhine-Westphalia.

The measures we have recommended are complex and in some instances are only amenable to implementation by the federal government over the long term. On the other hand, individual programs and projects that raise North Rhine-Westphalia's

profile in the sphere of education and research can be implemented relatively quickly and require little expenditure of public funds.

### 1.3 A modernized fiscal system would set the tone

#### **Roll back taxes and subsidies and increase future oriented investments**

North Rhine-Westphalia needs to reduce taxes and subsidies to a level that enables the state to carry out its key tasks efficiently. The financial resources freed up by these cutbacks should mainly be spent on scientific and technological development, as well as strengthening of the state's infrastructure.

North Rhine-Westphalia should aim to restructure its fiscal system as much as possible by 2015. Human, capital and energy resources should be taxed in proportion to the value they actually create with a view to achieving a sustainable factor input structure. This would be done through a system of tax brackets that would strengthen the competitive position of North Rhine-Westphalia's enterprises.

#### **Today's tax system is efficient and unsustainable**

Our taxation system is leading us in the wrong direction because it distributes the tax burden inefficiently and unfairly.

The current operational cost structure in enterprises is determined by the following tax structure: 70 percent for labor costs, 25 percent for investment and only 5 percent for energy. However, an entirely different picture emerges when the following question is asked: What is the *real* taxation cost of the end product that creates value? Studies in the USA, Japan and Germany have shown that a one percent change in energy expenditures has as great an effect on value creation as a one percent change in the total amount spent on human resources and capital investments. In other words human resources cost more than they should relative to their contribution to output, whereas energy makes a relatively large contribution to output and is relatively inexpensive.

Under these circumstances business downsizing inevitably leads to job cutbacks, primarily because the health of today's social insurance system is mainly determined by the size of the work force, which is shrinking as the economy grows. The result: a smaller tax base and reduced social insurance revenues. This vicious circle is becoming ever narrower for the federal government in terms of social insurance and sustainability expenditures, but only the federal government has the power to extricate us from it. Doing this will require a readjustment of budgetary priorities that ensures that resources are spent optimally. Human, capital, material and energy resources must be deployed in such a way that more jobs are created while energy and material consumption are reduced. Efficient management of the fiscal system's various mechanisms would significantly contribute to the achievement of this goal.

### **From words to action**

Solutions to these problems are readily available. First and foremost, North Rhine-Westphalia needs to seize the initiative on this issue in the German parliament and introduce legislation aimed at restructuring Germany's fiscal system. In the longer term, the state should tax human, capital and energy resources in accordance with the amount of value they generate. This would reduce both personal and corporate income tax and social insurance costs.

North Rhine-Westphalia should leverage off the fact that German states have relatively little leeway when it comes to social insurance legislation, but do have a great deal of say when it comes to tax laws. When new taxes are imposed, the resulting revenues should not go into a large pot but should instead be spent in ways that citizens are sure to notice. At the end of the year, each North Rhine-Westphalian would receive a check in the amount of the state's average per-capita sustainability revenue. Citizens that meet defined environmental stewardship standards would receive twice the standard amount, would pay low taxes, and would receive a bonus that would be drawn from the supplementary amounts others had paid in.

The state of North Rhine-Westphalia needs to restructure not only the income modalities of its fiscal system, but also its expenditure practices. Toward this end, a fiscal system task force acting on behalf of a putative Project 2015 would go over all of the state's expenditures and subsidies with a fine tooth comb with a view to instituting strategic and efficient disbursement practices. The task force would be required to issue a report on the government's activities and finances in this realm.

The restructuring process would unfold as follows:

1. Cutting back subsidies and focusing on priority tasks and more efficient use of public funds would reduce the need for taxes and social insurance payments.
2. This would free up more resources for education, training, and support for cutting edge research.
3. The goal of these measures would be to achieve a net reduction in taxes and social insurance payments.
4. The remaining taxes and social insurance payments would be restructured in such a way that human, capital and energy resources would be taxed in accordance with the value they actually create. In order to ensure that this restructuring is understood and widely supported by the general public, any new or increased taxes would be accompanied by a tax reduction in an amount equivalent to that of the increase. The North Rhine-Westphalian government should determine to what extent it would be feasible to effect direct refunds to taxpayers.

## 1.4. Instituting citizen customer service

### **Making government a regional asset**

Government agencies should treat citizens and enterprises like customers, not like numbers. Steps should be taken to ensure that government employees do their jobs professionally, provide genuine citizen customer service, and that their remuneration depends at least to some degree on the extent to which they fulfill citizen customer service criteria.

Effective government management practices are of crucial importance because states and regions are involved in global competition just as much as enterprises are. Thus, government management practices are a key success factor in virtually every sphere of everyday life. The quality of research, health and education depends on government agencies, which are also responsible for public safety, transport and traffic logistics, and environmental stewardship. The government also has a major effect on leisure time (e.g. through the management of recreational facilities) and citizens' quality of life, and it also administers the legal and taxation systems. Thus, in order for North Rhine-Westphalia to become one of Europe's most sought after regions, it must institute top quality citizens' customer service.

### **The outlook for North Rhine-Westphalia's civil service**

North Rhine-Westphalia should make strenuous efforts to streamline its bureaucracy, which in many spheres is weighed down by too many rules and is insufficiently results oriented. The absence of competition for job promotion in many areas robs civil servants of any incentive to improve their performance. For citizens, this often translates into an unfriendly and unhelpful attitude on the part of government employees, while potential investors are horrified by the bureaucratic hoops they have to jump through, to the point where the cost benefit ratio begins to seem untenable. One of the most significant problems in this regard is that authorizations pertaining to objectives, investment decisions, material supply and quality control are insufficiently interconnected. It is crucial that this be changed. Supervisory personnel in German government offices often lack managerial skills. Remuneration modalities are neither coherent nor performance oriented and no long term solution has been found to the problem of civil service pensions. Moreover, civil servants take an inordinately large number of sick days and large numbers of civil servants take early retirement.

Many of these deficiencies are attributable to the rights granted civil servants under current laws. The yawning gap that exists between civil servants' rights and those granted to private sector employees is a source of discontent that generates friction between coworkers and hence inefficiency. The current jungle of bureaucratic regulations has rendered standards unnecessarily complex and hinders efficient administration of the law. The concept of incentive pay is notable mainly for its absence in collective bargaining and civil service law. Many top notch employees of government agencies feel that their jobs do not enable them to perform to their full potential. The German civil service itself would appear to have little or no chance of attracting individuals with substantial experience in other disciplines and therefore desperately needs to become far more accessible and receptive to people, their ideas and their expertise.

### **From words to action**

- The panoply of government services currently available is bound to become untenable in the coming years, which means that both state and municipal governments will need to focus on priority tasks. It will also become necessary to privatize some vital government services, or perform them within the framework of public-private partnerships or contract management programs. Specific targets and quality standards should be defined for all such work.
- In the future, resource efficiency should join the ranks of cost and quality as a key criterion for state government procurement and investment decisions. Since the government purchases 15 to 20 percent of all products and services, it should make every effort to set an example when it comes to resource efficiency, thus clearly indicating to the private sector the need to follow suit.
- Legislation need not regulate minutia. Laws enacted in future years should promulgate general provisions and concrete objectives rather than complex and detailed regulations. It is crucial that legislators and government officials find ways to insulate themselves from special interest group pressure. The elimination of red tape and bureaucracy should begin where the most good will be done, viz. in the realm of tax law, government subsidies and social insurance.
- Efficient management, not bureaucratic administration should be the watchword of government. The organizational structure of governmental agencies and the qualifications of civil servants should be subordinate to the tasks at hand, rather than the reverse. Toward this end, government agencies need to provide genuine customer service, think and act more like enterprises and enhance their managerial skills. This will require far reaching decentralization and subdivision of job responsibilities and work assignments. North Rhine-Westphalia needs civil service reform at the state and municipal (but not the municipal district) level. Versatile structures such as advocacy groups and fixed-term cooperative

agreements should be interposed between these levels and would be funded jointly by regional and municipal governments.

- Trade and other organizations that are legitimate representatives of various groups should be given discretionary lump sum grants for which general disbursement guidelines are established.
- The administrative procedures governing funding for both public and private sector projects (e.g. transportation and healthcare) should be streamlined. Grant recipients should also be held far more accountable for the outcomes of their projects and should be required to document them. Project success should be the main focus.
- Civil service laws should be reformed in such a way that they are internally consistent, and in harmony with the provisions of general labor law. The new legislation should also govern labor conflicts and protection against dismissal. Civil servants' salaries should consist of base pay plus a significant incentive pay component. North Rhine-Westphalia also needs to make its governmental processes more open and transparent, not only from the outside in, but from the inside out so that personnel, knowledge and expertise can flow more freely into the civil service. A human resources agency should be established for this express purpose.

The proposals outlined above far exceed the scope of reforming the civil service, for they entail a thoroughgoing reform of current public administration practices that would entail numerous advantages in terms of environmental protection, the economy and social policy. These reforms would also pave the way for similar and much needed reforms throughout Germany. North Rhine-Westphalia should be in the vanguard of this evolution.

## 2. Education:

an indispensable investment in the future

### **A top to bottom reform of North Rhine-Westphalia's education system**

The OECD's Pisa report conclusively demonstrated that Germany's educational system lags far behind that of other European countries. Moreover, North Rhine-Westphalia's educational performance is mediocre compared with that of other German states. This situation simply must be changed, for if it is not, the challenges that are already facing the younger generation will become insurmountable.

If, as is universally acknowledged, expertise will be the key resource in the coming years and expertise is only gained through education, then North Rhine-Westphalia has no choice but to break new ground in this realm. Although solutions are in the pipeline, it is crucial that they be applied rigorously and systematically in the future.

Our urban areas have traditionally been made up of affluent and poor neighborhoods, a situation that has led to unequal educational opportunity. But the gap between the urban rich and poor is far wider now than it was in the 1950s and 1960s. This phenomenon is particularly noticeable in large cities, where many low income and immigrant families live with their children in what amount to ethnic ghettos. On the other hand, more affluent parents for whom education is a priority send their children to carefully selected public or private schools.

The socioeconomic class into which a child is born has traditionally been the determining academic success factor, and this holds true as well today. Moreover, schools are even less able than they were in the past to compensate for these inequalities. Vocationally oriented secondary schools are turning into all purpose institutions for students whose poor performance disqualifies them from entering college preparatory secondary schools. Our school system in general is turning out large numbers of young adults who are disenchanted with the entire educational process.

But North Rhine-Westphalia needs its children and their talents, if only because the state's birthrate is so low. It is now virtually certain that the population of North Rhine-Westphalia will have a lower proportion of children and young people in the future (see chapter 3) and that people will become even more mobile than is currently the case. In the face of this mobility, North Rhine-Westphalia will have to come to terms with the unavoidable fact that enterprises as well as states and regions compete to attract the top people.

Research institutions are moving ahead with their work, and technological advances are being made at an ever more rapid pace. Human knowledge is expanding as never before. Credentials are the key to a successful career and a lack of them leads directly to the unemployment line.

By 2015, 60 percent of young people living in large urban areas will be the children or grandchildren of immigrants. And the state of North Rhine-Westphalia needs their creativity, their enthusiasm and their cultural experience regardless of whether they speak German, Turkish or Polish at home. Steps should be taken to ensure that first and second generation Germans do not end up unemployed, for these young people are abounding in talent that should not go to waste. They too should have the opportunity to contribute to the economic well being of our state.

Thus, North Rhine-Westphalia needs an educational system that provides all students with equal opportunity, regardless of their sociocultural or socioeconomic background – because knowledge and expertise will be the cornerstones of the future. North Rhine-Westphalia should set itself the goal of instituting a new approach to education by 2015 – one that is based on all day schooling. This means that learning, homework and extracurricular activities would be spread out across the entire day and that each student would follow their own individual course of study. Children would begin to learn essential skills in preschool daycare facilities through playful pedagogic activities.

Schools would also become far more regionally oriented than is now the case, viz. an integral and lively component of society at large rather than mere institutional islands. Schools would also acquire the right to self-determination, which means they should do their own hiring and define their own goals. However, this would occur within the framework of statewide quality control and quality standards that would apply to all students and schools.

Money spent on education should not be regarded as an expenditure but rather as an investment in young people and their future, which is the best kind of sustainability there is. North Rhine-Westphalia must find ways to get better results from expenditures on education, research and development. But this cannot take the place of a thoroughgoing reform of the state's educational system. And there is no time to lose. The requisite funds should be raised by reshaping the current financing structure for education (e.g. by increasing fees for universities (see chapter 1.2) and adult education centers) as well as by generating revenue from other sectors.

North Rhine-Westphalia should set its sights on receiving top ranking among German states in the followup Pisa study that is to be conducted in 2015.



## 2.1. Educating our youth for the society of tomorrow

### **Education doesn't only happen in school**

Our world is growing increasingly complex. What students learn in school today is likely to be of little or no use tomorrow. Technology is advancing at a dizzying pace and in all likelihood will continue to do so for the foreseeable future. When people from different cultures, religions and mindsets live together in the same society, situations that are not amenable to clear-cut solutions are bound to arise – situations that nonetheless require that a decision be made one way or the other. This means that people skills will be increasingly in demand – the ability to engage with others, communicate, negotiate, compromise, and at some point say, yes I agree, let's proceed, or no, that's not what I want.

In the future, people will need to know how to make moral, policy and other distinctions in the gray area between the socially just and unjust. This is why we need a new philosophy of education for the future, one that approaches education as an all encompassing process in which young people develop their skills and talents. This of course mainly involves cognitive learning – but there is more to it than that. Young people need to develop their hidden potential and their ability to take responsibility for their own actions in many spheres. They need to learn that skill and competency are the bricks and mortar of problem solving and indeed of human relationships.

All of this should be imparted in a clearly structured educational system that differs from today's. The primary, secondary and tertiary sectors must be reformed in such a way that the educational system as a whole produces individuals with defined skills that are readily amenable to lifelong development. The decisive factor is that all actors in the educational process regard themselves as members of a team. The learner should of course come first, then the family and last (but not least) social service agencies, athletic clubs (see chapter 4.2) and other youth services organizations and educational institutions. The main mission of all educational institutions should be to anchor their praxis in a specific and concrete reality.

The educational landscape of the future should also draw upon the rich potential of Germany's cities, towns and regions. Students, parents, teachers, and educationalists all have a vested interest, each in their own way, whether as individuals or a group, in education. It therefore follows that each community should take responsibility for its own preschool daycare facilities and schools. This would take the form of oversight groups made up of educationalists from the relevant educational institutions, as well as other regional actors such as small business owners, sports clubs and religious organizations.

Individual regions could develop such community oversight groups (a fact demonstrated by North Rhine-Westphalia's model project on school self-determination) in which all concerned work together to improve educational quality. But in order to do this, schools need to acquire the right to define their own path. They also need professional consulting services and qualification measures aimed at optimizing the quality of classroom teaching, school management and intra-regional cooperation. The results of this entire process would be publicized on a regular basis.

Future oriented education also means reducing the inequality that now afflicts the realm of adult education. Auditors in college classes or students in adult education courses tend to be from more education-oriented socioeconomic groups, while housewives, factory workers and immigrants are vastly underrepresented. Adult education should be readily available to everyone because it enriches people's lives and opens up new career vistas. The state's educational institutions, including its institutions of higher education, should make efforts to meet these needs.

### **Objectives**

The mission of all schools should be to give every child the chance to develop his potential and in so doing acquire skills that enable the child to make a positive contribution to society. This applies to every member of our society, whether they are male or female, of German or foreign extraction, from a well educated or less educated family, or from an urban or a rural area. All educational institutions should enable each individual to acquire social competencies and to develop his talents and abilities until such time as the individual is ready to offer these skills on the job market in a fashion that is also personally enriching. Learning should be a lifelong process and individuals should have the opportunity to pursue knowledge or acquire new skills at any stage in life.

The working world will undergo substantial change in the years to come. Instead of the kind of linear career paths that were common a decade or so ago, many people will have more ramified and flexible careers that will require them to make a conscious decision to improve their lives – a decision that will also open up new horizons.

Globalization and the growing interdependence of the EU Member States constitute a challenge that is also opening up new career opportunities. Thus, education should also prepare young people to engage with the new global and European realities that await them.

### **Core competencies**

- **Learning to learn** means acquiring the ability to set one's own educational goals and achieve them. Learning should be enjoyable, although such learning is not necessarily successful in every instance because sometimes frustration is simply

unavoidable. But learning to surmount obstacles is a prerequisite for the mastery of core subjects such as reading, writing, spelling, and math.

- **Systems thinking.** Since the world is bound to become a far more complex and multifaceted place in the coming years, it is extremely important that learners acquire the ability to identify complex interrelationships, temporal processes and the limits of human action – including their own.
- **Bilingualism for all.** It is a widely accepted fact that children who acquire more than one language at a young age have a much easier time acquiring additional languages as adults. Bilingualism is of course an everyday reality for the children of immigrant families who must master German in addition to their mother tongue. English will continue to be the most important foreign language in an increasingly globalized world.
- **Learning to compromise rather than attack.** In the coming years, as people have contact with greater numbers of languages, more information and more viewpoints, it will become increasingly difficult to discern the connections between these things. At the same time, it will become increasingly important for people to find and communicate their own point of view, and to make decisions that go directly to the heart of a problem. It is therefore crucially important that children are exposed at a very early age to situations in which amicable solutions are found to problems arising from cultural differences. Related to this is the importance of developing the social skills that enable individuals to live successfully in a pluralistic society.
- **Acquisition of media skills.** Computer technology is omnipresent in today's society: at home, in school and at work. And there can be little doubt that this trend will only intensify in the coming years. This may result in a gap between the computer haves and have-nots, which is why it is essential that all schools teach children to work with new and emerging media.

## 2.2. Lifelong learning

### **Problems and solutions**

Numerous programs in other EU countries are making it increasingly clear that children who spend the entire day in school reach higher levels of achievement.

This should not to be confused with the kind of daycare whose main purpose is to enable parents to hold down jobs. A school that operates all day has more time to devote to children and to the establishment of productive interplay between classroom instruction, work (for young adults) and participation in government subsidized educational programs. Nor should such schools divide up the day such that, for example, the morning is devoted to classroom instruction and recreational and extracurricular activities become a kind of appendage in the afternoon. This would constitute a mere extension of the conventional half day approach, whereas what is needed is an entirely new paradigm. Daylong schools would be best equipped to deal with the complex challenges of future oriented education. They would also be better at leveling the educational playing field in that they would have more time to devote to children from less well educated families, children who are less gifted, and the children of immigrants and refugees. They would possess the requisite flexibility and competency because not only professional teachers would work in them, but also persons from more child services oriented professions, and other disciplines as well. This means that all day schools, in addition to leveling the playing field for their pupils, would also integrate parents as well as seniors into the educational process. Schooling would be the responsibility not only of professional teachers but also of partners from the working world, sports and other realms such as factories, libraries, adult education centers, and the church. Such schools would become integral and lively components of society as a whole rather than mere institutional islands and would contribute to the development of an extensive regional educational network made up of highly individualized, grass roots-based resources. Family agencies associated with these schools would offer medical advice, bussing and other forms of support that would help these all day schools become an integral part of their local communities.

All day schooling should become the norm for elementary and secondary education – although of course readymade implementation concepts for such programs do not grow on trees. This new approach to schooling would require piloting and experimentation, which would unfold in diverse ways according to the conditions in the field. This is why it is so important that some form of national educational standards be instituted so that Germany's various regions enhance educational quality at roughly the same pace – and so that no one is left behind.

### **From words to action**

- In future years, formal instruction and other activities should be spread across the entire school day, generally from 8 am to 4 pm. Homework per se should be abolished: all such tasks should be performed in school, except for a few tasks such as vocabulary learning. Thus, children's time at home would be their own.
- Another hallmark of tomorrow's educational system should be an infusion of different types of instructors from other vocational and child development disciplines. In Germany, teachers, child development specialists and professional child minders basically till the same field and the most skilled among them would be ready and willing to devote themselves to this kind of school reform. This would of course have to occur under new laws whereby the aforementioned professionals did not have civil servant status. Child development specialists who are not up to the task should be transferred to other positions, which is a completely standard procedure. It should be possible for learners at all levels to enter and leave the educational system freely, and outstanding job training and adult education programs should be readily available.
- Parents should be partners in their children's education, which means regular meetings between parents, teachers and learners to discuss progress and grades. Teachers should also visit their students' homes and each school should have an office set aside for parents – because parents are also a partner in the educational process, not an albatross around the school's neck.

## **2.3. Abolish the distinction between academically and non-academically oriented schools**

The system in Germany whereby children are channeled into vocational, non-academic or college preparatory schools in the fourth grade is a bad thing. This means that as early as age ten, a decision has been made whose consequences the child will have to live with for the rest of his or her life. Many doors remain closed for children who draw the short straw and end up in a school for less "gifted" or "intelligent" children. This summary action cuts short a developmental process that has barely even begun.

There is also a great deal of room for improvement in the college preparatory schools as well. Many children are pressured into attending such a school although they feel that they do not really belong in it, which is frustrating for the child and drains her energy. Thus, the current multilevel system is failing on all fronts. The existence of college preparatory schools in effect shuffles the less gifted pupils to the bottom of the educational deck but does not even successfully train an elite. At the other end of the spectrum, the good students in the non-academically oriented schools languish in unchallenging classes while the weaker students are permanently turned off to education and begin a downward spiral of failure that persists until graduation.

Changing this situation will require a completely new way of thinking and the creation of new educational culture.

### **See the learner as an individual**

International studies have shown that German pupils all perform at roughly the same level – a direct consequence of the tracked system.

A comprehensive school, on the other hand, would serve the interests of each individual student rather than aiming to satisfy a hypothetical average learner. Teachers would have to acquire skills that enable them to educate learners with varying capacities and talents. This does not mean, however, that standards should simply be lowered. Instead, North Rhine-Westphalia needs schools that enable children of all ability levels to develop their own potential to the full.

Aptitude levels are not written in stone. Cognitive abilities and social skills respond and develop in response to new challenges and in any group of learners, some will progress more quickly than others. For example, learning to do sums with two digit numbers is a major learning milestone that girls generally reach before boys for a number of reasons including varying aptitudes, socioeconomic backgrounds and motivational levels. Teachers must realize that each and every student is good at some things, and not good at others – and in the teacher's mind, the good things should take center stage. Here too it is important to build on existing strengths.

Each learner should pursue her own individual course of study. Aptitudes should be first determined, and then an individual curriculum should be elaborated that defines how and in what sequence of learning steps the individual learner can best achieve her goals. Teachers and administrators should be prepared to explain why a particular student failed to do this.

Schools should of course adhere to certain minimum standards based on the core curriculum that all students are required to learn. Individualized curricula would help tap the potential of all learners.

### **From words to action**

- The idea of abolishing the system of three-tier secondary schools represents a radical departure from current practice and would therefore necessitate a different approach not only to education but also to the entire educational infrastructure. The current system should be replaced by a new type of school for the entire mandatory school period, i.e. grades one through ten. This type of reform cannot be instituted piecemeal and would require total commitment on the part of decision makers. Halfway measures are bound to fail. North Rhine-Westphalia should be in the vanguard of this reform and should be among the first German states to institute a truly egalitarian school system.
- Individual schools need to become more autonomous. They should have the power to hire and fire teachers, select their course materials, and decide which teaching methodologies they wish to use in order to reach their goals. This independence notwithstanding, each school should also be subject to quality audits that compare its performance with that of other schools so as to ensure that minimum levels of achievement are reached. An outside observer would assess each school's performance in terms of their stated goals, how they pursued them and the extent to which each learners' achievement is indicative of success at reaching them.

## 2.4. Equality for preschool children

### **Eliminate inequality and foster individual development**

Children in the year 2015 will undoubtedly be very different from today's children and their daily life will also have changed by that time, if only because of the new working world the children's parents will be part of. Today's young people, and even more so tomorrow's, will have no choice but to seek out and grow accustomed to new kinds of jobs and career paths. At school, they will also need to learn how to make their own choices.

Europe is becoming increasingly integrated, the EU has expanded to the east, and the pace of cultural exchange is quickening. By 2015, the majority of young people living in Germany's major conurbations will be the children or grandchildren of immigrants and will speak different languages, come from a range of cultures and have varying religious beliefs.

Our educational system will have to adapt to this mammoth melting pot, particularly if the educational system is to become a truly inclusive one.

Many immigrant families are reluctant to send their children to preschool or daycare facilities either because they cannot afford to do so or because they prefer to raise their children in accordance with the tenets of their own culture. But when children with widely differing German competencies and diverse customs and traditions are thrown together in a classroom, it becomes next to impossible to build a cohesive classroom group.

As now constituted, our educational system cannot possibly cope with rising social and ethnic inequality, which is one of the major challenges schools will be facing in the coming years. Teachers will need to develop the ability to deal with this problem. But at the same time, each child's potential should be developed, irrespective of whether the child has "average" or extremely high aptitude – or has a learning disability or is from a privileged family. It is for this reason that children should begin school at an early age.

### **A preschool daycare model, not a kindergarten**

Germany's current kindergartens are not even remotely future oriented and the preschool daycare facilities of the future should adopt an entirely different approach from the current one. First, unlike kindergartens, they should be open all day, which would go a long way toward making up for a regrettable deficiency in our current educational system. These facilities would mainly let the children play, make music and have a lot of uproarious fun – but there would also be some formal learning, e.g. science or language. But these facilities would not try to create a school-like experience for the children, nor would they be academically oriented.

On the other hand, these facilities would be more than just conventional daycare centers, for genuine learning would also take place in them. Children have the capacity and the desire to learn – and they enjoy learning as well. Indeed, children mainly educate themselves. The children in these facilities should acquire school-related skills such as German, motor skills and negotiating. The essence of preschool learning is to help each child develop his desire to explore, to find out what his needs are and how he can best fulfill them. This is an enormous challenge for which the educators that have these children in their care must be adequately trained. They should teach the children to empathize with other people's situations, and the children should acquire experience in making their own decisions and standing on their own two feet. In the future, parents should not bear sole responsibility for educating and rearing their children during their preschool years, particularly when developmental problems arise.

Skills acquisition and formal learning begin at a rather late stage in the German educational system, usually in primary school. This practice robs children of the opportunity to develop their full potential. For example, it is never easier to learn a second language than at the age of three or four. For immigrant children, the second language is usually German, which makes it all the more important that they start acquiring this important skill at a young age. But they can only do this if they are fluent in their mother tongue.



**From words to action**

- In view of the fundamentally new type of approach that would be required of educationalists working in the proposed preschool daycare facilities, they would have to be trained at institutions of higher education.
- Preschool daycare facilities for children who are three or older should if at all possible be open all day. These facilities should be affordable for all parents, a goal that will require the institution of financial support programs. A great many more preschool daycare facilities should also be opened for children under the age of three, and the focus of these centers should be language development.
- Bilingualism or trilingualism should become the norm (i.e. German plus one or two other languages) in child development and education. Moreover, a primary school curriculum should be developed that systematically imparts information and promotes skills acquisition – of course on the basis of existing preschool learning theories and with a view to the furtherance of holistic learning.

### 3. Stemming the demographic tide

#### **The times they are a-changing**

Demographic studies can provide us with a relatively precise picture of how many people will be living in particular regions over the next decade. But demographers cannot predict with any degree of certainty the quality of life these people will have and how they will get along with each other.

The average German woman gives birth to less than 1.4 children. This means that with each passing generation, the German population decreases by one third. In order for population numbers to stabilize, each woman would have to give birth to upwards of 2.0 children.

We have not yet begun to feel the full brunt of the fundamental change that await us, which can be compared to an avalanche that starts off with a few pebbles only to sweep everything before it in a flume of falling rock and debris. By 2020 at the latest, the effects of the declining birth rate on the job market, the housing market, cities and healthcare will be unmistakable.

Over the next four decades, lacking any mass population influx, Germany's population will decline from its current level of 82 million to 62.5 million and the average age of that population will rise from 40 to 55. Hence, the age pyramid is slowly and inexorably being stood on its head. On one end of the pyramid is a growing number of retired persons, and on the other a declining number of wage earners. This is the main challenge facing us – a challenge that is far more pressing than the decline in population.

We are seeing the emergence of an unprecedented economic, financial, and cultural scenario that will shape our entire attitude toward life. In order for pension insurance funds to make payments at today's level in 2040, they will have to generate twice their current level of revenue. At the same time, we are in the midst of a general decline in economic productivity and efficiency. In future years, the work force will shrink, which in turn means that there will be less creativity and fewer ideas to go around. If these trends continue, the ratio of government expenditures to GDP will rise from its current level of 48 percent to 60 percent in 2030. Moreover, declining tax revenue and higher pension payments will put so much strain on the federal budget that subsidies and grants will have to be drastically cut back and the government will have to resort to self help-oriented solutions.

North Rhine-Westphalia will feel the effects of these budgetary pressures just as much as the rest of Germany, and some regions may feel them even more strongly, e.g. the Ruhr, whose demographic age is considerably higher relative to the German average.

But there is good news too: we still have time to mend our ways. It is imperative that we do this: something has to give somewhere – and soon. The longer we wait, the more painful the changes will be.

There can be no doubt about what the future holds. The children who will begin school six years from now and will be doing their professional or university training 15 or 20 years from now have already been born and statutory restrictions on immigration will limit the extent to which immigration can improve the demographic picture. Therefore, it behooves us to act now – but we must also plan for the long term. We must get our budgetary house in order, reinvigorate the job market, and institute coherent family, immigration and educational policies. This will not entirely alleviate the problem, but it is far preferable to taking no action at all and will certainly have a positive effect.

In making these recommendations, the Council has assumed the following: (1) An increase in North Rhine-Westphalia's birth rate would make the state more **socioculturally and socioeconomically dynamic** (2) Doing a better job of integrating foreigners into the fabric of society would enhance our **diversity** as a state. (3) We need to tap the now largely hidden potential of seniors' talents and abilities so that we can learn from their **experience**.

### 3.1 Increasing North Rhine-Westphalia's birthrate: the key to regional dynamism

#### **Children count for a lot**

Having children changes a couple's life completely, because everything appears in a different light: their home, their everyday tasks, their job and their relationship. And often they ask themselves: How will I manage this? Shouldn't I finish my education first? Is there even such a thing as a "right" time to have a child? After the birth of my first child, I had a lot of trouble finding a new job. And if I have a second one, it's surely going to be a lot more difficult. This isn't doing my socioeconomic status any good. Should I really weigh myself down with this burden?

The reluctance on the part of today's young couples to have children is attributable to, on one hand, the circumstances that obtain in today's society, and on the other, societal attitudes toward parenthood. Therefore, our society needs to become far more child-friendly than is currently the case – because after all, young couples generally want to have children.

Parents should not be forced to choose between family and a career. Instead, reliable daycare and other support services should be available, although mothers should have a positive attitude toward this solution and not feel guilty for being

“neglectful” mothers who don’t spend enough time with their children. This line of reasoning has in any case long since been discredited scientifically.

Families are an indispensable social institution. They play a key educational role (Where else can children learn about giving and receiving love?), an economic role (Who else would buy diapers, baby carriages and children’s furnishings?), and are sources of new ideas (Where else would new ideas come from if not from our children?).

Raising children and living in a family setting should once again become a matter of course both for individuals and for society at large. The decision to have children is more than just a personal one, because children are our future, pure and simple. Thus, certain attitudes and conditions will have to change.

### **Objectives**

On the average, the average German woman gives birth to less than 1.4 children (the figure for native born German women is only 1.2). Efforts should be made to increase this figure to 1.9 by 2030, which is presently the level in France.

Family policies can be quite effective in this realm. The example of France clearly shows that encouraging parents to have children does in fact increase the birth rate. Doing likewise in North Rhine-Westphalia would slow the current population decline, as would immigration policies aimed at stabilizing the state’s population.

Society should value all types of families, whether small, large, extended or patchwork, and should provide them with the requisite financial, legal and logistical support. Most important of all, the working world should become far more parent friendly than is now the case.

The female employment rate in Germany is lower than in Holland and the Scandinavian countries. If, in 2020, the same proportion of the female population in Germany were employed as is now the case in Sweden, two million more women would have joined the workforce.

### **Career versus children**

Women who graduate from a college preparatory high school at age 19 (as is standard in Germany), earn their degree by the age of 26, and are well launched in their career by the age of 30 are inevitably faced with the difficult question as to whether or not to have a child, and if so, when.

But the situation would be different if college-bound women graduated from high school at age 17 instead of age 19, completed their degree at age 23 instead of age 26, and then got a job. This would make it much easier for people in their 20s to have both a career and a family and resolve the conflict that often arises between the two.

A great deal needs to be changed in various spheres, including our educational system, in order to achieve parent friendly social conditions. Shortening the time it takes to earn a graduate degree in Germany would greatly increase the likelihood that members of this population would decide to become parents.

When parents have to work part time jobs in order to look after their children, they often lose out on career advancement opportunities. This situation should be remedied by making part time jobs a standard modality and working hours parent (and particularly father) friendly.

This of course cannot be accomplished unless companies, municipalities and educational institutions create conditions that make it easier and quicker for people to enter the job market and take parental leave.

### **Family agencies**

North Rhine-Westphalia needs family services agencies that help parents deal with all types of child related scenarios. This would help eliminate the problem of parents being left alone with their worries and needs.

These agencies would offer a range of services, including all day schools, kindergartens, child minding services, an information center that offers birthing classes, an office for the school physician who would see patients every afternoon and a cafeteria that serves lunch.

These family agencies would take a great deal of the strain off parents by taking care of children when they are sick, or doing the shopping for parents that are housebound due to illness. The great strength of these agencies would be that they would tailor their services in an effective and flexible manner to the needs of parents and their children. These agencies should mainly be housed in existing public buildings that are as close as possible to the parents' neighborhoods.

### **Families should be subsidized**

Families are for the most part placed at a disadvantage by our financial system and social policies. This is a situation that simply must be changed.

Large amounts of public funds are already spent on families. For example, in 2000 €60 billion was budgeted for family programs in Germany. But this money could be spent more effectively and in a more parent friendly fashion.

For example, there is sufficient daycare center space for nearly all children in North Rhine-Westphalia that are three years of age and older, but there is only space for 2.4 percent of all children under the age of three. By contrast, in Denmark the figure is 64 percent and in Sweden 48 percent. Thus, daycare is mainly provided in our state for post-toddler age children, which creates problems for employed women for whom a daycare solution should be found.

German women tend to remain unemployed for relatively long periods for two institutional reasons: (1) the relatively high child benefit entitlement and (2) the legally mandated practice whereby the income of both spouses is assessed jointly for

purposes of taxation. This situation could be altered if, for example, some of the funds allocated for the child benefit entitlement were channeled to daycare centers. This would also be of help to women who wish to work. North Rhine-Westphalia should harness these women's creativity and enthusiasm by implementing and financing family friendly policies in an optimally effective fashion.

### **From words to action**

- If the birth rate in our state is to be successfully increased, conditions conducive to this evolution will have to be created in schools, businesses and communities. But such steps will only be effective if young couples begin to feel that having children is a routine part of their lives. The North Rhine-Westphalian government and leading regional personalities should forcefully advocate policies that create such conditions.
- The state government, local communities and the business community should all join in an effort to make the family agencies proposed here a reality. And there is no time to lose. Demographics are all too instructive in this regard – and they indicate that this is a long term undertaking.
- It is the Council's hope that by 2015, children will enter school at age five, which would allow for graduation from high school at age 17 and graduation from college at age 23. Institution of this proposal would have a direct and positive impact on young couples' career and family planning. As a general rule, people should enter the workforce at a younger age than is currently the case.
- The state of North Rhine-Westphalia should go to bat for family friendly allocation of federal and state family support entitlements by passing legislation at the state level and introducing it at the federal level.
- Parent friendly communities and businesses in North Rhine-Westphalia would set new standards for Germany.

## 3.2. The virtues of diversity: integrating immigrants

### **North Rhine-Westphalia: an open society**

As everyone in the Ruhr coal mining regions knows, immigrants from Poland, Silesia and in a later era, Italy and Turkey, made the coal mines the productive and thriving facilities they became in their heyday.

There are currently approximately two million foreigners living in North Rhine-Westphalia who are not holders of a German passport and over half of whom have been residing in Germany for over two decades. There are also 700,000 resettled emigrants living in the state. The effects of this evolution are palpable in hospital delivery rooms: the parents of 35 to 40 percent of all newborns in our state are foreigners.

North Rhine-Westphalia has traditionally been a melting pot, and is likely to remain one for the foreseeable future. The question is not whether or not we should have immigrants in our midst, but rather how can we best deal with them? How can immigrants be integrated into the fabric of our society humanely and successfully?

On balance, immigration is good for North Rhine-Westphalia since it can help strengthen the state's competitive position in Europe.

### **Objectives**

In order for immigrants to be integrated into Germany society, they must accept the principles laid down in the German constitution, learn German, and go through our educational system. However, this does not mean that they should give up their own cultural identity and traditions. Successful integration of immigrants makes North Rhine-Westphalia a more culturally diverse and thus more interesting and harmonious place to live. German society as a whole must be prepared to support immigrants' efforts to integrate by providing facilities such as German courses in the communities where they are needed. And above all, Germans need to display a tolerant and welcoming attitude toward immigrants and accept the fact that they are different.

Immigrants pay taxes, support our social insurance system, and are good for North Rhine-Westphalia's demographics in that they make the population as a whole younger. In the early 1990s, approximately 12 percent of North Rhine-Westphalia's population between the ages of 20 and 40 consisted of immigrants. By 2010 this figure is expected to climb to nearly 32 percent and in urban areas, nearly one out of every two young persons will be an immigrant.

If it weren't for the over 12 million immigrants that currently live in Germany, our population would have decreased drastically by now. The most revealing statistic in this regard is the ratio of immigrants who come to Germany versus those who decide to leave. Currently, for every five immigrants who come to Germany, four, or 80 percent, choose to leave and 20 percent stay on. A far higher percentage (75 percent) of immigrants choose to stay in the US. North Rhine-Westphalia should aim for 50 percent by 2030.

North Rhine-Westphalia should take steps to ensure that all future immigrants acquire viable job qualifications and communicative competence in German. Daycare centers and schools will need the relevant resources and tools if this goal is to be achieved (see chapter 2.4).

### **Ethnic ghettos in urban areas**

Many immigrants to North Rhine-Westphalia are not fully integrated into the fabric of our society, particularly those immigrants residing in districts with large immigrant populations. There are positive and negative aspects to this. On the positive side is the fact that new arrivals initially have contact with relatives or compatriots whose language and culture is a known quantity. This provides a measure of stability and security, which can be of tremendous importance.

On the other hand, these ethnic ghettos make it difficult for immigrants to integrate. If, for example, 80 percent of the children in a daycare center speak a language other than German, the latter language is likely to remain alien forever. This situation presents schools with an insurmountable challenge since such children are often reluctant to learn German. In large urban areas such as Cologne, approximately 8 percent of German youth have no job qualifications whatsoever, and the figure for Turks, Germany's largest ethnic group, is 40 percent. This does not augur well for their future. Moreover, these are exactly the young people that tomorrow's job market will need most of all (see chapter 1.1.1).

Many ethnic districts have minority enclaves of native Germans, a situation that engenders distrust and alienation that is heightened by the media. The rising unemployment rate promotes competitive attitudes that pit Germans against foreigners, while at the same time immigrants become increasingly fearful of losing their jobs, being socially marginalized, discriminated against or even attacked.

We simply must learn to live with the fact that urban districts with high concentrations of immigrants are here to stay, which is why it so important that we improve the living conditions in such districts.

### **Neighborhood development**

North Rhine-Westphalia was one of the first German states to institute policies aimed at defusing incipient conflicts between immigrants and native Germans. In view of what the future holds in store for us, such initiatives will have to be coordinated, originate from a single source and above all be strategically conceived, planned and implemented. Such programs should focus on those neighborhoods most sorely in need of development.

But in order to this, it is first necessary to precisely define the baseline situation for each district and region. A clear picture of this situation can only emerge if diverse types of data are used, viz. the numbers of welfare recipients and unemployed, and the extent to which neighborhood residents feel safe. The relevant statistics for schools would be the number of high school dropouts, as well as those who reach high school. These statistics would then be used to elaborate an overarching index. Only in this way can effective and judicious assistance be provided.

The family agencies we have proposed would (in conjunction with schools) also play a crucial role here, as they would be the sole public institutions that have an ongoing relationship with numerous residents of a neighborhood that is being developed. Neighborhood schools (which should of course be all-day facilities) would work with athletic clubs and other organizations to find venues in which to hold their activities. Schools would also be used for adult education programs, and



informal counseling and hallway chats would become the norm. Schools could also become avenues of communication with businesses, as well as the ethnic groups concerned. Local development teams would have to lend their support to these efforts if any measure of success is to be achieved. But at the same time, schools also need greater numbers of subject experts from various disciplines. Moreover, school administrators should be empowered to do their own hiring and firing (see chapter 2.3).

Kindergartens and daycare centers should also play a crucial role in immigrant integration. Children should learn German at these facilities when they are still young enough to acquire it easily, and should also acquire greater competency in their mother tongue. In addition, parents of young children tend to be more open to learning and thus learn along with the child (see chapter 2.4).

### **From words to action**

- North Rhine-Westphalia should establish a neighborhood development competition whose purpose is to identify the most problematic neighborhoods. A state cabinet-level integration council headed by a high ranking integration official would elaborate the requisite performance criteria such as diplomas and communicative competency in German. In these competitions, the best five to ten year neighborhood development proposals submitted by the cities themselves would be selected and then subsidized, and documentation of such projects would help other cities to institute similar programs. Most decision making power would be vested in the local groups themselves, while state and local auditing teams would ascertain whether the defined benchmarks were being achieved.
- North Rhine-Westphalian integration officials would ask opinion leaders, and appoint specialized councils from various population groups, to oversee the integration process. The opinion leaders would also communicate with the general public about the integration process. Another goal would be to encourage immigrants to become involved in their communities through initiatives such as starting multicultural kindergartens.
- Germany needs federal immigrant legislation within whose framework North Rhine-Westphalia would itself be able to exercise influence over immigration modalities. The details in this regard would be covered by state legislation.
- Immigrants who settle in North Rhine-Westphalia should be granted the right to vote in municipal elections after residing in Germany for a minimum of five years and acquiring communicative competence in German so that they can also participate in the life of the community.
- The state and its municipalities should define their mission in such a way that immigrants feel welcome in North Rhine-Westphalia and are motivated to help solve problems and participate fully and responsibly in the life of the community. People's self esteem is generally improved by knowing that they are contributing to the common good and that this

contribution is needed, whereas being on the receiving end of help can have the opposite effect. Initiatives that immigrants could undertake for the benefit of their local communities include projects that aim to change attitudes in local neighborhoods; helping to implement municipal policies; setting up businesses that create jobs; participation in intercultural forums about basic societal values; undertaking intercultural conflict management; and cultural and linguistic mediation, which will be necessitated by the recent EU expansion.

### 3.3. Putting seniors' life experience and expertise to productive use

#### **Seniors should lead productive lives after retirement**

Germany's population is aging and this trend is likely to continue in future years as life expectancy rises. It is reasonably certain that in only one generation the world that today's seniors knew will have radically changed. The number of pensioners is on the increase, but on the average they are less affluent than in the past. Thus, in the coming years, it is highly probably that more seniors will perform some form of productive work than is the case today, although the most elderly among them, who will be legion, will require home or nursing home care.

In 2003, less than 45 percent of 55 to 65 year olds were employed, whereas in the US approximately 60 percent of this age group held a job. This difference is attributable to the high unemployment rate in this age group, combined with the generous pension payments doled out by the German social insurance system. Many Germans are forced into early retirement. Other have such good pension insurance that they can afford to retire at age 55 or 60, particularly if their children have left home and their mortgage has been paid off. In such cases, they are free to travel the world – and many do.

But this halcyon era is nearing its end. The inexorable march of demographics will sooner or later lead to a situation in which people either start working at an earlier age or retire later in life than is now the case. Or they may be required to do both – but only if the right incentives are proffered. The most important condition that persons who retire early will have to take into consideration is the reduction in their pension payment necessitated by the math of the pension plan.

The main issue here is the importance of making optimal use of existing resources. For the vast majority of pensioners, retirement marks the end of their active participation in the life of the community. But the desire to be productive and the skills and expertise acquired over a long career should not be summarily shelved at age 65. A far better approach would be to gradually begin putting these resources to productive use, insofar as each individual is able to do so. And this holds true even for seniors in their 70s or 80s, many of whom remain quite active.

In fact this is already a reality in North Rhine-Westphalia, where seniors have numerous opportunities to volunteer, and many of them avail themselves of these opportunities, working as child minders, handymen, or entering into peer care

arrangements with other seniors. Some might even obtain positions as consultants on seniors issues in the private and public sectors.

### **Involvement with the community**

Active involvement in their local communities could unlock a great deal of potential talent and energy in seniors. One thing is certain: our elderly citizens are ready and willing to play an active role in the life of the community and energetic pensioners should be encouraged to do so over an extended period, whether as staff members of dedicated projects or as regular employees of existing organizations.

Seniors could replace young men who are doing their alternative military service in the event these men are in short supply. Moreover, Germany's cities offer plentiful opportunities for seniors to serve the community – for example helping families with babysitting, shopping, and accompanying family members to their doctor's appointments. Another area of endeavor open to seniors is acting as caregivers for other seniors, either in the form of home visits or helping to organize social events. Environmental protection, maintenance and beautification of facilities such as playgrounds and parks would also be possible forms of employment for seniors. Our elderly citizens could also help to organize cultural events, provide self-help groups with support or work in organizations that coordinate seniors' activities.

This coordination would be carried out either by existing organizations or new ones that would be established on the basis of senior's experience as volunteers. The sphere of responsibility of these seniors' agencies would include screening prospective staff members, selecting and organizing projects and activities, matching up services offered and requested, and supervising subcontractor's work and staff training programs. Seniors who participated in such programs would receive token remuneration and would be reimbursed for their travel and other expenses. In addition, incentive and support mechanisms would help seniors to obtain vocational qualifications and earn public recognition for their work.

### **Mutual assistance programs**

Only about three percent of seniors in the 60 to 80 age group require nursing care, whereas one in three seniors over the age of 80 requires such care – and the vast majority of them live with their families. This is a situation that is bound to change, since there is a growing tendency for children to move farther away from home. Moreover, since families have diminished in size, the daughters and daughters-in-law who currently provide most of this care will be in increasingly short supply in the coming years. Thus other forms of community self-help programs will be needed.

One viable alternative would be the establishment of a volunteer corps that would organize ad hoc mutual assistance programs from which all concerned would benefit without the need for any money to change hands. For example a 65 year old senior in excellent health could assist an 85 year old who lives nearby.

A large number of such volunteer programs have already been instituted both in Germany and abroad. Such programs should be coordinated by professionals and should integrate mechanisms that allow for long term operation. This would enable the services rendered by, for example, a 65 year old in 2004 to be remunerated with services in kind when he or she reaches the age of 85 (e.g. shopping in exchange for reading aloud, washing and dressing in exchange for visits to government offices, wheelchair walks in exchange for cooking). Neighborhood organizations would coordinate these services and would recruit sufficient numbers of younger people to care for the elderly. Inasmuch as this type of program would be based on a reciprocally beneficial exchange of in-kind services rather than on volunteerism, it would only be successful insofar as younger people feel that participation will help them to meet their future goals within their local communities.

### **Seniors' living space**

Many seniors, particularly single ones, live in houses or apartments that are too large for one person, with the result that a great deal of unused space goes to waste.

Most seniors would very much like to move, but within the same neighborhood. However, such accommodations can only be found through communication networks within the community: the owner of the corner bakery or the local minister might know of a small apartment in the neighborhood that could solve the problem.

This type of measure requires no funding, although the owners of rental housing would have to modify their properties in such a way as to meet housing market needs and avoid vacancies. Toward this end, city planners, municipalities and building associations would first have to ascertain how best to modify existing housing. This could involve granny flat conversions, bathrooms equipped for the elderly, shopping and concierge services, or supervised group apartments for seniors with dementia, which would enable even these citizens to remain in the community and receive daily visits from home care nurses. Each house, apartment, street and neighborhood has different needs, and there are no readymade answers – only successful projects from which lessons can be learned. We recommend that information pertaining to such projects be compiled in order to obtain accurate remodeling cost projections.

### **From words to action**

- Pensioners should be given the opportunity to participate fully in the life of the community insofar as their capacities permit them to do so.
- A statewide organization should compile information pertaining to transgenerational mutual assistance programs, which would then be used to lay careful plans for the development and long-term stability of such organizations.

- Every large German city has elderly residents interested in purchasing, remodeling or constructing buildings and North Rhine-Westphalia should set up a foundation to support such projects. The foundation would be funded by savings banks, building societies, municipal governments and other groups. The first task of this foundation would be to compile relevant information from all existing groups of this type (e.g. contract modalities, names of experienced architects and builders).

## 4. North Rhine-Westphalia –

a great place to live and work

### **Quality of life factors**

The factors that make a region desirable include an economy with future-oriented jobs, affordable housing and good schools and colleges. However, so called soft factors are increasingly coming into play such as leisure time and cultural activities, as well as opportunities to spend quality time in a healthy, natural environment.

If North Rhine-Westphalia is to become one of Europe's top regions by 2015 – a region that has a great deal to offer visitors in the short term and international companies in the long term – it will need to deploy all of its creativity and enthusiasm and a raft of innovative ideas. It will also need steadfast commitment and dedication from all concerned.

The Council feels that making North Rhine-Westphalia a desirable place to live and work will mainly entail expanding the state's offerings in the spheres of athletics, the arts and the natural environment. We have elaborated a series of proposals for each of these arenas.

It is crucial that North Rhine-Westphalia's citizens have a healthy and multifaceted natural environment to live in. In this regard, the state is blessed with a wealth of beautiful natural areas that provide clean air, water and soil thanks to past cleanup programs.

Sports are one of the cornerstones of leisure time activities in North Rhine-Westphalia, a fact evidenced by the countless numbers of sports that are practiced in the state, as well as the thousands of sports clubs and associations whose members come from all age groups and walks of life. Everyone knows that sports are both healthy and enjoyable, which is why North Rhine-Westphalia should take concrete steps to ensure that sports continue to thrive in our state. The way we live now and the world we will bequeath to our children and grandchildren are all expressions of cultural activity. Culture builds awareness and forms the basis for individual self-determination. Culture is more than just art and literature: it is also about value systems and traditions. North Rhine-Westphalia should strive to become a cultural magnet in Germany and Europe by 2015.

## 4.1. A productive symbiosis between man and nature

### **North Rhine-Westphalia: a region for all seasons**

Former chancellor Willy Brandt's dream of blue skies over the Ruhr valley has long since been realized. Germany's post World War II "economic miracle" was followed by an "environmental miracle" in the Ruhr valley, which was once one of the world's most polluted regions and has been restored to ecological health over the past three decades: sulfur dioxide levels have been reduced by 90 percent and a more than acceptable level of water quality has been achieved in the region's lakes and rivers. And at the same time the Ruhr has become an attractive region for industrial companies, thus proving that it makes no sense to protect the environment by moving factories and the attendant pollution offshore. Instead, our region should apply its knowledge and expertise to the elaboration of environmental protection solutions that enable factories to operate here.

In the years to come we will have to face the music of our lifestyle and environmental practices. Each individual in central Europe consumes an average of 75 tons of natural resources each year, excluding water. Thus it is crucial that we find ways to use these resources more efficiently. Moreover, since global warming is still very much of an unresolved problem, we will have no choice but to reduce our carbon emissions. Cities are encroaching on the natural environment at an increasingly rapid rate, which means that we will have to make do with less space. The natural environment in North Rhine-Westphalia should be beautified and ramified even further.

Toward this end, the state's many disused industrial sites, abandoned coking plants and coal mines, and unused railway stations could be utilized for a host of recreational, sports, cultural and tourist industry purposes.

### **The wonders of nature in North Rhine-Westphalia**

Although North Rhine-Westphalia has been settled for millennia and virtually every square inch of the region has felt the effects of human activity, the state is blessed with a superb natural environment, magnificent landscapes and a host of natural wonders, including (to name but a few) the hundreds of thousands of wild geese that settle on the banks of the Rhine in winter, creating an unforgettable spectacle; the landscape of fields and hedgerows in the Monschau region; and the farmland punctuated by countless stands of trees in the Muenster area.

The Rhine and Ruhr river areas were once densely covered with beech forests. The opening of the Eifel National Park in 2004 constitutes an important step towards effective stewardship of this central European natural resource. The park, which is composed of the Kermeter forest and a former military training area, has established a peaceful and verdant haven for red deer

and other wildlife. Although it will probably take another century before the park reverts to its original natural state, today's visitors still derive great enjoyment from it.

The state's working forests should also be managed in a more natural fashion, and plain looking stands of spruce trees should be allowed to evolve into dynamic deciduous forests with lush leafy canopies.

Efforts to renature the state's watercourses should be pursued between now and 2015, which means that salmon would return to the Rhine and Sieg rivers. Tributaries should be made fit for swimming again, a goal that is wholly realizable along the Rhine, since its current is not dangerous for swimmers.

### **Agriculture and its discontents**

Productive and well tended farmland is an integral part of today's landscapes. But a new approach to agriculture is needed.

EU agricultural product subsidies are being gradually phased out. North Rhine-Westphalia should support this change by abolishing overproduction of dairy and other products. However, growers should be subsidized insofar as their products are beneficial to society and do not depress market prices. North Rhine-Westphalia should use its influence at both the federal and EU levels to ensure that this approach is embedded in future agricultural policy.

For example, when a dairy farmer uses an adequate amount of pastureland to produce milk, he is not only creating a healthy product but is also benefiting the land itself in a way that promotes tourism, recreation and biological diversity. No money spent in a globalized marketplace can buy dynamic landscapes, space that fosters the well-being of flora and fauna, and conditions conducive to the production of healthy food and clean drinking water.

North Rhine-Westphalia's rural areas and their six million inhabitants need an environment that promotes regional development. Only in this way can the state's growers produce quality food and at the same time maintain high environmental, social and animal protection standards.

### **Objective 1: Reduce pollution**

Environmental protection should remain a main focus of governmental concern in the future. Industrial, household and vehicle pollution should be decreased below present levels by 2015. Key pollutants include fine dust, nitrogen compounds, precursor substances of ground-level ozone, and hormonal residues in the environment.

The main challenge in this regard is the reduction of greenhouse gases. The German government has set a goal of a 40 percent reduction in greenhouse emissions by 2020, providing the other EU countries follow suit. North Rhine-Westphalia should play a significant role in this effort.



Efforts should be taken to ensure that by 2015 the state's rivers are once again be fit to swim in, that no pollutants in wells exceed authorized limits and that all of the state's groundwater is of outstanding quality.

### **Objective II: Cut back land development on greenfield sites**

Unbridled land development has catastrophic environmental consequences, as well as economic and social risks provoked by massive social and infrastructure costs and the aftermath of urban flight. The German government has instituted regulations requiring that North Rhine-Westphalian land development on greenfield sites be reduced from the current level of 15 hectares (37 acres) per day to three hectares (7.4 acres) per day by 2020. However, the Council urges the North Rhine-Westphalian government to achieve this goal by 2015 instead and to aim for zero net land development in the long term. To achieve this, urban environments would have to be enhanced.

### **Objective III: Strengthen environmental stewardship**

The list of endangered plant and animal species in North Rhine-Westphalia continues to lengthen. The North Rhine-Westphalian government should aim to reverse this trend by 2010 so as to promote the region's biological diversity. This would mean that the number of endangered species would decrease and the number of extant species would rise, which would in turn enhance the diversity and richness of the state's natural environment.

### **Objective IV: Restructure the agricultural sector**

The proportion of agricultural products grown and raised using organic and environmentally friendly methods should be greatly increased over current levels. This can be achieved through more effective consumer education and state subsidies for growers who shift to natural methods. The goal for 2015 should be to make consumers aware of the advantages of organic farming methods and change their purchasing behavior accordingly such that 20 percent of food purchased in North Rhine-Westphalia is organically grown.

### **Objective V: Enhance the overall quality of life in North Rhine-Westphalia**

Can North Rhine-Westphalia successfully enhance the appeal of its urban areas in such a way that those residing in them choose to stay there and thus stem the tide of urban flight? This is the "make or break" factor in the struggle for sustainable development in North Rhine-Westphalia.

Urban development that meets actual needs should be a top priority as this would prevent creeping urbanization. Commuter bonuses and homeowner allowances should be eliminated. The resources freed up by these cutbacks should be used for needs oriented urban development programs, particularly in those urban areas most severely impacted by urban flight.

Regional planning measures should be coordinated more effectively. The competition among municipalities for shares of income and business tax revenue inevitably leads to planning errors. Cities and towns that coordinate their planning efforts by forming joint planning councils should be granted a larger share of state tax revenue.

### **From words to action**

The Council regards the following proposals as the lynchpins of regional development.

The North Rhine-Westphalian government should embark on a program aimed at developing the state's nature reserves and nature parks into cornerstones of economic development, particularly for tourism. Even in our densely populated state, conditions are propitious for the success of such an initiative since there is widespread demand for recreational facilities in natural settings and the requisite environments are within easy reach. First, the state should continue developing the Eifel national park. This would enable the park to be integrated into a global network of 400 such facilities that aim to combine the preservation of unspoiled areas with sustainable economic and consumer activity. Second, the planned Senne national park should be developed. Third, North Rhine-Westphalia should leverage off the results of the 1998-1999 building design and construction event, Internationale Bauausstellung Emscher Park, in such a way as to transform the Emscher region into an urban and industrial region that offers a network of appealing recreational areas and greenfield sites.

- By 2010, forested areas in urban regions should meet the Forest Stewardship Council's (FSC) internationally recognized high standards for sustainable forest management and be granted FSC certification. Five percent of all working forests in North Rhine-Westphalia should be declared forest preserves and should constitute a network that extends through all of Germany's forests and is a constituent of its biotope. This regulation should be applied in particular to federally controlled forests, and on a volunteer basis, to privately held forests.
- Private citizens should have the opportunity to do volunteer work at biological stations. Volunteers and representatives from nature conservancy organizations should work on the practical and technical aspects of environmental stewardship and biotope and species preservation.
- The North Rhine-Westphalian government and agricultural, food processing industry, trade, consumer and environmental organizations should jointly implement a program aimed at marketing food grown in North Rhine-Westphalia more effectively.

- Children should receive instruction at a very early age about health maintenance and the importance of eating a variety of foods. A first step in this direction would be for the state government to institute a program whereby all pupils in elementary schools eat breakfast and/or lunch at the same time in the school cafeteria.
- North Rhine-Westphalia should take concrete steps to promote the development of urban green belts that would act as psychological barriers to the depredations of construction projects in the natural environment. Urban development should of course be possible, but overdevelopment should be halted.
- North Rhine-Westphalia cannot achieve sustainable urban development without instituting convenient and environmentally friendly mass transit systems. It behooves the North Rhine-Westphalian government to engage the general public in a far reaching dialogue on the subject of mobility, as this will likely be a source of heated controversy in the coming years. The business community, trade unions, environmental organizations, church organizations, freight forwarders, and all interested citizens should participate in a focused dialogue on this subject (see chapter 1.2).

## 4.2. Sports and other leisure time activities

### **Sports bring people together**

By 2015, North Rhine-Westphalia should have instituted an outstanding range of sports and leisure time activities via clubs and at parks, recreational areas, swimming pools, schools and other suitable public venues. Such sports programs are beneficial for society as a whole in that they are based on cooperation and shared experience in grassroots athletics organizations. Sports also build bridges between the generations by bringing together people of different ages as either players or spectators. Grassroots sports allow for an entirely different type of experience compared with that offered by fitness centers or the individualization and isolation that characterizes today's megatrends. In the future, our society will need more of the kind of grassroots sports activities that are already relatively widespread. It behooves the government to leverage off and promote this trend.

### **Sports are enjoyable**

Sports are enjoyable, particularly for younger people who of course engage in athletic activities not so much because they are obliged to, but because they derive great enjoyment from them. Half of North Rhine-Westphalia youth between the ages of 12 and 18 belong to a sports club, a membership figure that far outpaces other types of youth organizations.

The over two million members of Sportjugend NRW are distributed among approximately 20,000 youth sports clubs that are run by a volunteer corps numbering approximately 200,000. North Rhine-Westphalia's LandesSportBund, which has nearly five million members, counts as Europe's largest regional sports organization.

Sports enthusiasts are found amongst all socioeconomic, age and cultural groups, and the sports concerned are played as individual and team sports, in schools, in clubs, in tournaments or by top flight athletes. And of course sports are not only played within the context of organizations but also by individuals or with family, friends and acquaintances for purposes of relaxation.

Sports have three dimensions, the first being health and fitness. Sedentary existences have become the bane of modern life. It was not all that long ago, in historical terms, that for many people going shopping, to school or to work involved physical movement. But nowadays people get into their car or spend much of their time sitting in front of their computer, a situation that has resulted in a rise in so called "civilization diseases" as well as obesity, reduced motor skill capacity and poor physical fitness, particularly in children. Sports help to counteract these problems.

Sports also play a key role in child development and child rearing. Sports are highly effective teaching laboratories for social values and social behavior and thus spur personal, social and cognitive development. All games are governed by rules and learning to observe rules is a key social skill, one that encompasses awareness of one's opponent as well as positive manifestations of perseverance, pride and bravery. Virtues that are nurtured and experienced by athletic activities include fairness, tolerance, honesty, loyalty, integrity, and solidarity. The third key dimension of sports is that they satisfy a basic human need for play, movement and enjoyment in connection with a group activity.

### **Objective 1: School sports**

In the future, daycare centers and schools (and above all gym classes) should nurture in children an awareness of their own bodies and how they can "work" with them. This means, among other things, the development of motor skills, discovering the pleasure of games and group sports, and learning that movement and exercise are essential for a healthy life (see chapter 2). Sports also teach young people that team effort takes precedence over individual accomplishment and that each person's contribution is valuable, irrespective of its contribution to "winning." Sports are very good at imparting basic social values and their attendant behaviors. Schools should strive to instill in all children an enthusiasm for sports that they will carry with them throughout their lives – and school gym classes provide a golden opportunity for accomplishing this goal.

**Objective II: Sports venues**

By 2015, municipalities should have acquired the wherewithal to provide their citizens and sports associations with a greater number of functional and financable sports venues, including swimming pools, gyms and playing fields. Cities should elaborate intelligent and creative financing models and should seek sponsors, investors and/or public-private partnerships for this purpose. Such measures will greatly aid the cause of school sports.

Urban areas that were once ad hoc playing fields are now given over to parking lots. This is unfortunate, because young people need space to play in – and the proposed new sports venues would fulfill this need.

**Objective III: Strengthen sports clubs**

By 2015, the political, financial, logistic and human resource groundwork should have been laid that will enable sports clubs to realize their full potential and impart positive social values. To achieve this, a suitable sports club culture would have to be created, and North Rhine-Westphalia should establish conditions that are conducive to this evolution.

Sports clubs provide a golden opportunity to reach millions of our citizens of all ages and give them the opportunity to pursue both sports and non-sports activities that have a positive impact on all aspects of their lives including socialization, cognitive and personal development, and learning. Sports are the most efficient teaching medium and subsidy program we have at our disposal. Therefore, the state should strive to make sports clubs far more inclusive than is now the case, which means instituting outreach programs that target females, immigrants and other currently underrepresented groups.

As is the case with cognitive development, sports related expenditures should be regarded not as costs but rather as investments in our children's future. Sports clubs provide young people with the opportunity to experiment with various types of individually and collectively originated identity processes. Sports enable children to experience tolerance, courage, and social equality, and they teach children to be more open to foreigners. Sports clubs also foster international contacts and promote the development of intercultural skills.

**Objective IV: Promote top-flight athletic achievement**

If we want to be proud of our outstanding athletic achievements tomorrow, we will have to begin establishing today the conditions that will enable sufficient numbers of young people to develop into top flight athletes. By virtue of their dedication and discipline, top-flight athletes serve as role models that are much needed in today's society.

The development of young athletic talent in all sports begins with the kind of intensive training that is incompatible with a normal school schedule. The North Rhine-Westphalian government, the statewide sports association LandesSportsBund and various professional sports associations have in recent years taken a step toward remedying this problem by making 45 athletics

oriented schools in North Rhine-Westphalia available to promising young athletes. However, all schools should nurture the talents of potentially top flight athletes in an individualized and flexible manner.

Far greater efforts will have to be made if the goals that athletics policymakers have set are to be achieved. By 2015, North Rhine-Westphalia should have established a comprehensive network of schools and the attendant programs that serve to nurture the development of young athletic talent.

### **From words to action**

- In the coming years, daylong schools should work with sports and parents associations to provide pupils with daily aerobics and athletics sessions that will satisfy children's desire for physical movement and cognitive stimulation. Specific athletics classes such as swimming should be required. By 2015, cancelled gym classes, underqualified teachers and physically unfit students should be a thing of the past.
- State and local sports facilities should be modernized and new facilities for leisure time activities and sports should be built through innovative collaboration with sponsors, investors and sports organizations.
- Sports organizations should make greater use of volunteers, whose work should be remunerated with extra vacation leave whose cost is government subsidized.

The work of coaches in North Rhine-Westphalia's youth sports clubs should become a potent educational tool. Their impact on the educational development of youth should be greatly expanded through the establishment of a statewide network of volunteer contact persons at the local level who would publicize and implement the concepts devised by the corps of coaches. This would enable the state and its athletics organizations to create vastly improved and expanded programs in close cooperation with local communities and clubs.

- The alliance between schools and programs designed to promote athletic talent should become all encompassing and its programs and organizational structure should be refined. Scholarship programs should be established that enable students with talents in all spheres to attend elite private schools. Professional associations should also subsidize such programs.
- The success of the entire system of athletics education will depend on the number and quality of qualified teachers that are available. Thus, North Rhine-Westphalia should ensure that an adequate number of committed teachers and trained athletes are available to teach athletics-related courses, give students tasks to do at home, and foster the development of young athletic talent. The number of trainers in sports clubs, training centers and sports facilities should be greatly increased. Volunteers should work side by side with professional staff, who should be trained in newly established or revamped specialized institutions.

### 4.3. The many faces of culture

#### **North Rhine-Westphalia – a cultural magnet**

North Rhine-Westphalia should strive to become a cultural nexus in both Germany and Europe. The preconditions for such a development are already in place: the state's multi-ethnic populace, its healthy mix of socioeconomic classes and the robustness of the region's economy all constitute invaluable resources in this regard. North Rhine-Westphalia should become a major player in the world of avantgarde art, and our region should be one in which high culture and provocative experimental work co-exist and generate fruitful synergies. The state's infrastructure of theatres, museums and cultural centers should also be strengthened. Cultural endeavors should emerge from the mainstream of society and should generate exciting new ideas and initiatives. By 2015, North Rhine-Westphalia should have laid the political, economic and social groundwork that will allow for realization of these goals. Cultural endeavors play a key role in the economy and the labor market by creating future oriented jobs, and it is therefore crucial that North Rhine-Westphalia actively promote the development of young talent in this sphere as well.

Two millennia of immigrant integration in North Rhine-Westphalia have made our state one of Europe's most culturally diverse regions. The citizens of North Rhine-Westphalia have evolved and defined their identities against the backdrop of this diversity, which must be safeguarded for future generations.

#### **Foster synergy between cultural institutions and deregulate subsidies for the arts**

The public and private sectors should provide greater subsidies for, and play a greater role in coordinating, cultural and artistic activities, but without allowing creativity to devolve into bureaucracy and dirigism. The state of North Rhine-Westphalia should continue to support cultural and artistic endeavors, although the nature of this support will inevitably have to change. In the future, creative self-initiated programs and innovative production and financing models will take on far greater importance, as will financial support from private citizens. This trend is already fully in evidence in the US which had 650 registered community foundations in 2001 with assets totaling \$65 billion. Germany, however, has only about 60 such institutions, over half of which are located in North Rhine-Westphalia and whose assets total a relatively meager €18 million. New financing models will be needed for these institutions if they are to make a significant contribution to the cultural life of our state. Community foundations will also afford private citizens the opportunity to have a say in cultural and arts policy issues.

**Objective 1: A cultural policy alliance**

All social actors concerned with culture and the arts (the general public, the entertainment industry, artists, the federal government and the business community) should forge an arts and culture policy alliance that would establish a communications network for the purpose of elaborating PR campaigns regarding cultural activities in North Rhine-Westphalia. The alliance would also build on ideas and approaches developed by the Landeskulturkonferenz (Regional cultural alliance) which was created in 2001 by the North Rhine-Westphalian government. These efforts would lead to the development of viable cultural and arts policy solutions in the realms of coordination, networking, elimination of red tape, sustainable financing, community involvement, cultural education, events that promote cultural identity, regional development programs, and cultural activities with a pronounced leisure time or tourism orientation.

**Objective II: Citizen involvement**

It is essential that citizens have access to cultural amenities they find comprehensible and with which they can identify. At the same time citizens must also do their share to promote cultural activities and shape the cultural life of their communities. Thus, citizen involvement should become a cornerstone of modern cultural policymaking and support for cultural activities in the guise of community foundations, artistic or cultural associations, public-private and public-public partnerships, individual donations and so on.

Amateur artistic activities have a positive effect on the lives of performers and audiences alike and should be an integral component of life in North Rhine-Westphalia. Such activities should also receive adequate financial support.

**Objective III: Strengthen artists' independence and leverage synergies**

The subsidy granting process for cultural institutions and projects should be streamlined through the elimination of red tape, the simplification of rules and regulations and the elimination of long, drawn-out application processes.

An internet supported platform should be established that provides clear and understandable information about all ongoing North Rhine-Westphalian government cultural initiatives. This portal could provide information about undertakings such as the Kulturrat NRW (North Rhine-Westphalia cultural commission) Kulturpolitische Gesellschaft (National cultural development organization), the state's art and film commission, the activities of North Rhine-Westphalia's ten cultural regions and the Kulturatlas Westfalen project (Directory of cultural institutions and events). This platform would also enable all those interested in forging cultural alliances to find suitable partners for their projects.



#### **Objective IV: New financing models**

Cultural activities are an endangered species without public subsidies for their primary financial needs. But it is essential that systematic efforts also be made to increase the proportion of private sector financing models. Apart from foundations and patronage, the most promising approaches appear to be market based investment funds, risk capital models, social sponsoring and public private partnerships

#### **Objective V: Artists in schools program**

Artists' responsibility to society should include not only producing their work but also ensuring that their expertise is beneficial to and shared with society as a whole. Thus individual artists and cultural institutions should forge alliances with kindergartens, elementary schools and other North Rhine-Westphalian educational institutions with a view to bringing authentic cultural and artistic experience into classrooms and training programs.

#### **Objective VI: Leveraging off cultural events to forge a regional identity**

North Rhine-Westphalia needs high profile cultural events such as Christo wrappings, the MOMA exhibit in Berlin and Paris's Pompidou Center. Such events and venues generate tremendous excitement and reach audiences that ordinarily would not seek out fine art. Classical music events in addition to the Ruhr and Cologne music triennials should be developed.

#### **Objective VII: All the world's a stage for urban planning**

Urban planning efforts should focus on enabling cultural events to shape and enliven public space. Enhancing the quality of downtown areas by using them in imaginative ways for cultural events and leisure time activities is a highly practical and effective way to advance the cause of culture and the arts, which are key dimensions of modern leisure time and vacation modalities. Consequently, the potential of existing cultural spaces should be utilized and communicated more effectively. Mobility is essential when it comes to enhancing the effectiveness of and creating synergy between cultural venues and events. This can only be accomplished insofar as infrastructures and traffic planning models actively support such endeavors.

#### **From words to action**

The cultural and artistic landscape of North Rhine-Westphalia should be surveyed, including all of the state's cultural and artistic offerings as well as their structures and perceptions thereof. This survey would form the basis for restructuring and for new initiatives in this realm. The survey would determine which elements are lacking and which potential is as yet untapped, and would describe the broad outlines for the way forward. International benchmarking of the state's culture and arts related policies, infrastructures and support programs would shed light on successful practices elsewhere and would allow for

investigation of the practical and financial feasibility of such practices for North Rhine-Westphalia. This benchmarking study would be realized in close cooperation with the Bundestag committee's ongoing Kultur in Deutschland (Culture and the arts in Germany) investigation, which is slated to submit a comprehensive report by 2005.

- Kunststiftung NRW (North Rhine-Westphalia foundation for the arts) would initially serve as a model and incubator for the development of other such institutions. Contributors to such foundations could include the North Rhine-Westphalian government, municipal governments, savings banks and other banking institutions, as well as corporations and private individuals. Enterprises that contribute to these foundations could channel their benevolence into image building campaigns.
- Kunststiftung NRW would establish an internet supported liaison office whose mandate would be to publicize related cultural offerings, help promote the creation of alliances between cultural and artistic actors, provide consulting in the realm of cultural events marketing and further the development of young talent. Media and mobile telecommunications companies would establish a multimedia cultural positioning system that would provide an additional portal to cultural life in North Rhine-Westphalia. Steps would be taken to ensure that optimal access to this and other facilities is provided.
- North Rhine-Westphalia should also work with the state's educational and cultural institutions to promote the development of a college-level culture management program.
- The media industry is playing, and will continue to play, a key cultural and economic role in the process of structural change in North Rhine-Westphalia. Thus, it is essential that activities in this realm be organized and structured with maximum efficiency in mind.
- Establishment of NRW Kulturforum, a statewide series of conferences and cultural events that would publicize the concept of a statewide cultural foundation and the attendant network so as to encourage citizens to lend their active support to this initiative. NRW Kulturforum would be held at a highly symbolic and centrally located venue (e.g. on the grounds of the former Zollverein coal mine, now a world cultural heritage site) which would also serve to demonstrate how closely work, culture and the arts intermesh in North Rhine-Westphalia.

## About the Future Council NRW

The Future Council NRW was formed at the behest of the North Rhine-Westphalian government in the summer of 2001 and was made up of individuals from the scientific, business, political, church, cultural, media, sports, trade union and environmental protection communities (see pp. 46-47 for a complete list of members). The Council's mandate was to advance proposals that will promote future-oriented development in North Rhine-Westphalia and provide the impetus for empirical and conceptual implementation of the Agenda 21 process. The Council focused on the period extending from 2015 to 2030, with the emphasis on the former.

The Council was divided into four thematic working groups: Resource efficiency, future oriented technologies, job creation; Education and job training; Demographic trends; The quality of life in North Rhine-Westphalia. The report is divided into four sections that correspond to these themes. The Council was aided by a host of individuals and institutions (see p. 47).

In the course of elaborating the present report, the Council held 13 plenary sessions, in addition to the working group meetings. The Council adopted and approved the report on Feb. 25, 2004, and it was officially submitted to the North Rhine-Westphalian government and made public on March 18 of that year.

The Council urges the government of North Rhine-Westphalia to work toward implementation of our recommendations and to take steps that will ensure that a dialogue with the social groups concerned is initiated and sustained.

The North Rhine-Westphalian government should also evaluate at regular intervals the extent to which the report's recommendations have been implemented and should modify the report's stated objectives in light of the evaluation results.

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Working group 1      Resource efficiency, future oriented technologies, job creation

Working group 2      Education and job training

Working group 3      Demographic trends

Working group 4      The quality of life in North Rhine-Westphalia

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