Foreword

Dear Readers,

German agriculture has achieved a massive increase in productivity in the past decades. In my opinion, the outstanding characteristic of this development is that it has succeeded in producing more efficiently while becoming more environmentally compatible at the same time.

The decisive contribution has been made here by technical progress, which has made its way into agriculture too. This is not the only reason, however, because the use of state-of-the-art machinery requires a very well trained, skilled workforce. Our agriculture has reached a level of qualification here which enables the utilization of top technology.

Against this background, I am particularly pleased in this regard that the number of apprentices in the green professions has risen in recent years. Agriculture and forestry have some very good offers for young people who want to work in nature with animals and plants.

With around 17 and 11 million hectares respectively, agriculture and forestry take up more than half of the area of Germany. They are becoming ever more diverse in their structure, thus producing more and more new economic perspectives. Accordingly, new money-making combinations are opening up in in the field of the energetic and substantial recycling of renewable raw materials. In addition to this, there is a wide range of non-agricultural activities in many rural areas in the meantime. Newly prospering rural areas are distinguished by a large variety of economic activities.

Agriculture and forestry are not only a part of the economy, they are also a part of our society, our culture and our environment. They are indispensable partners in the bid to meet the new global challenges (feeding the world, climate protection, reliable energy supplies).

The agricultural families in Germany can be proud of their achievements. With this brochure, our intention is to position their work and commitment more prominently in the line of vision of public awareness.

Yours sincerely,

Ilse Aigner
Federal Minister for Food, Agriculture and Consumer Protection (BMELV)
The State of German Agriculture

Workforce and Structure

The structural development in agriculture continues to follow the trend that has been observed for many years: the number of agricultural businesses is on the decline. There was a reduction of 20.6 percent from 1999 to 2007, from roughly 472,000 to around 374,500. Approximately 1.3 million people work in these more than 374 thousand agricultural, forestry and fishing businesses, which is 12.9 percent less than in 1999. They generate a gross value added of around 20 billion euros, i.e. 0.9 percent of the entire gross value added in Germany.

In the period from 2005 to 2007, the number of people employed in German agriculture decreased further by 1 percent per annum. A reduction among family employees was counterbalanced by an increase among seasonal workers. The number of permanently employed persons remained virtually constant.

Agricultural Structure Survey 2007 and 2005 in comparison
Employees in 1,000

<table>
<thead>
<tr>
<th>Key Figure</th>
<th>2005</th>
<th>2007</th>
<th>Annual Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce (WF) Total</td>
<td>1,276.4</td>
<td>1,251.4</td>
<td>– 1.0</td>
</tr>
<tr>
<td>of which family WF</td>
<td>782.7</td>
<td>728.6</td>
<td>– 3.5</td>
</tr>
<tr>
<td>Permanent external WF</td>
<td>187.4</td>
<td>186.6</td>
<td>– 0.2</td>
</tr>
<tr>
<td>Non-permanent external WF</td>
<td>306.3</td>
<td>336.3</td>
<td>+ 4.8</td>
</tr>
</tbody>
</table>


Upstream and downstream economic areas of agriculture

Roughly 10 percent of all of Germany’s gainfully employed population work (2005) in the agricultural industry (farming and the upstream and downstream economic areas), which means around 4 million people. If the jobs in the processing of renewable raw materials are added, along with those in the forestry, timber and paper industry, this figure rises to 4.9 million people, which means that every eighth job in Germany is in this sector.

Upstream Area
Animal feed, pesticide and fertilizer industry; manufacturers of agricultural and forestry machinery; construction industry; trading with basic materials, machines and equipment

Downstream Area
<table>
<thead>
<tr>
<th>Closer observation:</th>
<th>More distant observation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food producing and tobacco processing industry</td>
<td>Food trading, gastronomy (without lodgings)</td>
</tr>
</tbody>
</table>

Source: BMELV, 425
Training in the Green Professions

The number of apprentices in agricultural professions has risen sharply in recent years. On a three-year average from 2006 to 2008, it was 9 percent higher than the average for the years 1999 to 2001.

The number of apprentices in 2008 fell by 1.6 percent over 2007, however (42,205 persons). An apprenticeship in agriculture and forestry is not only diversified and full of variety, the so-called green professions are also the jobs of the future, and therefore of great interest to young people.

Agricultural Area

More than half of the total area of Germany is used for agriculture. The size of the entire area used for agriculture, which currently amounts to approx. 17 million hectares, reduced only slightly from 1999 to 2007 by 1.2 percent. The average size of farms in Germany is growing on the other hand, from 36.3 hectares in 1999 to 45.3 hectares in 2007.

The development in agriculture towards bigger and bigger farms is continuing and this structural change is also taking place in the majority of the EU-27 countries.

There has been a severe decline in the number of agricultural businesses. The reduction of 20.6 percent between 1999 and 2007 equates to an average annual decrease of farm numbers of 2.5 percent.

94 percent of farms are family businesses with the legal structure of an individually owned firm. They account for the vast majority of agricultural production in Germany. More than half of the family businesses (55 %) are run on a part-time basis. With an average of 56.6 hectares, those farms run on a full-time basis in 2007 farmed an area roughly four times larger than those run on a part-time basis. While the number of family businesses (individually owned firms) has dropped since 2005 by 4.4 percent to roughly 350 thousand, the mean area of worked farmland has increased simultaneously by 1.6 hectares to 33.1 hectares.

Agricultural Structure Survey 2007 and 2005
in comparison
Results in 1,000

<table>
<thead>
<tr>
<th>Key Figure</th>
<th>2005</th>
<th>2007</th>
<th>Annual Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individually owned firms</td>
<td>366.3</td>
<td>350.1</td>
<td>– 2.2</td>
</tr>
<tr>
<td>of which run full-time</td>
<td>164.4</td>
<td>157.5</td>
<td>– 2.1</td>
</tr>
<tr>
<td>Part-time businesses</td>
<td>201.9</td>
<td>192.6</td>
<td>– 2.3</td>
</tr>
<tr>
<td>Leased area percentage of agricultural area</td>
<td>62.4</td>
<td>61.8</td>
<td></td>
</tr>
</tbody>
</table>

1) Compounded

Income Development in Agriculture

In FY 2008/09, the profits of full-time businesses (without legal entities in the new federal states) dropped by an average of roughly 23 percent over the previous year to 38,498 euros per business. The previous year, however (2007/08), income was very high due to the sharp increase in milk and cereal prices. For this reason, comparison with FY 2007/08 alone does not fully reflect the economic situation of farming businesses. The chart below shows profit development over the last five financial years.
The changes were very different for the individual business forms:

The decline in profits of almost 13 percent in crop farming businesses in FY 2008/09 is due mainly to the severe drop in cereal prices. The slump in profits by roughly 45 percent in dairy farming businesses is due mainly to the development of dairy produce prices. On average among the evaluated farming businesses, payment prices rose by 31 percent to 38.9 cents per kilogramme in FY 2007/08, then dropped by 21.8 percent in FY 2008/09 to 30.40 cents per kilogramme, which was almost the average in FY 2006/07 (29.77 ct/kg). On average, dairy businesses received 25,595 euros each in FY 2008/09 by way of direct payments and subsidies (company bonuses, compensatory allowance, payments for agricultural environmental measures, agricultural diesel refund). These direct payments made up 82 percent of the profit, which means that they secured the living of many dairy businesses.

In the processing businesses that focus on pig breeding and fattening, the severe drop in profits from the previous year was compensated by increased producer prices for pigs and lower expenditure for feed. Extreme income fluctuations are not uncommon in processing businesses.

The other business forms showed a drop in profits too in FY 2008/09 (horticulture -14.8 %, permanent crops -22.0 %, cattle breeding/fattening -26.5 %, mixed -10.0 %).

### Profit Development in Full-Time Agricultural Businesses

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>Profit per Company in €</th>
<th>Change over the previous year in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004/05</td>
<td>36,647</td>
<td>+23.9</td>
</tr>
<tr>
<td>2005/06</td>
<td>36,137</td>
<td>–1.4</td>
</tr>
<tr>
<td>2006/07</td>
<td>41,125</td>
<td>+13.8</td>
</tr>
<tr>
<td>2007/08</td>
<td>49,844</td>
<td>+21.2</td>
</tr>
<tr>
<td>2008/09</td>
<td>38,498</td>
<td>–22.8</td>
</tr>
</tbody>
</table>

*Source: BMELV, 426*

### Profits of the principal profit-making agricultural businesses by business form

- **Crop farming**: -12.9 %
- **Dairy**: -45.5 %
- **Processing**: +242 %
- **Total of all business forms, including horticulture and viniculture**: -22.8 %
Milk deliveries in decline

Milk deliveries to German dairies increased slightly in 2008 and fell away again in 2009. The situation in the German milk market is tense. In March 2009, only approx. 24 cents was paid on average throughout Germany for a kilogramme of raw milk with 3.7 percent fat and 3.4 percent protein. This was a reduction of 33 percent over the same month the previous year. Producer prices continued to drop until July 2009, when they reached 21.83 cents per kilogramme. They recovered slightly in August, when they reached 22.17 cents per kilogramme, and when a price of 22.87 cents per kilogramme was achieved in September 2009, there were signs of an upward trend in the milk market which is still continuing slowly but surely. The deficit over the previous year has now narrowed to 10.22 cents.
Grain harvest 2009 with good results

With a total of 49.5 million tonnes, German farmers were once again able to bring in a high yield of mainly good to very good quality this year. In a comparison over several years between 2003 and 2008 with an average of 45.1 million tonnes, the harvest yield increased significantly by 9.7 percent. The total cereal area was reduced by 1.9 percent over the previous year, however, to 6.91 million hectares. The yields per hectare rose slightly.

The producer prices for cereal and rape have been under pressure since the 2009 harvest. They continued to decline until the end of October and were at times up to 45 percent below the level of the comparable period the previous year. In the meantime, the prices have stabilized on a low level and are currently between 18 and 24 percent below last year’s level for bread cereals and between 15 and 19 percent for forage cereals. The brewing barley market is still dominated by high supply and sluggish demand and has fallen below last year’s level by roughly 30 percent. The rape market has recovered slightly of late. Producer prices fluctuate between 24 and 27 euros and therefore fall short of last year’s price by around 15 percent. Over the next few months, the production stage is expecting a further stabilization of prices, especially for bread cereals.

Vegetable cultivation 2009 with mostly high yields

Outdoor vegetable growing (incl. strawberries) in Germany was slightly restricted in 2009 to around 131,100 hectares, which is 0.5 percent less than in 2008. The overall weather developments, which were very well balanced, produced an abundant range of vegetables in the course of the season with good quality in regions with sufficient precipitation. Diminished yields occurred where cultivated areas in regions with insufficient precipitation were not irrigated.

The revenues achieved with important cultures in vegetable growing lie below the production costs this year.
Meat

According to the information received up to now, meat production increased by 2.5 percent to 5.25 million tonnes in 2009. Consumption dropped again by 1.6 percent to 4.36 million tonnes, with the result that self-sufficiency increased from 103.9 percent in 2008 to 108.1 percent in 2009.

Beef production will decrease in Germany in 2009. The high price level of the previous year could not be maintained. Up until April, the prices for bulls were above last year’s level. This was also the case until March with slaughter heifers and until January with slaughter cows. Since then, there has been a rapid decline in prices.

Pork production increased by 2.7 percent with a simultaneous decrease in consumption of 2.5 percent.

Over the whole of 2008, with 1.54 euros per kilogramme dressed weight, the price level was 16.5 percent higher than the previous year (€ 1.32/kg DW). The price level of the previous year could not be maintained in the first half of 2009 (-4.5 %), but was nevertheless regarded as positive for the fatteners due to the considerably lower costs of feed and energy.

Overall, we can talk about a satisfactory price situation for producers in 2009.

Wine

The grape harvest in Germany gives reason to expect a good year in 2009. Although some of the vines were affected by blossom drop due to the persistently cool weather in the course of the growth period, the grapes were well developed and healthy thanks to sufficient quantities of rain and an above-average number of hours of sunshine. For this reason, an average harvest quantity of approx. 10 million hectolitres was achieved.

Eggs

2.95 million chicks were hatched in German hatcheries in July 2009 for the production of laying hens. Accordingly, a laying hen population of 38.5 million animals can be calculated for December 2009, which is a good 5 percent fewer than December 2008. By projection, this equates to a potential egg production of 10.78 billion eggs, which falls 4.6 percent short of the 2008 figure.

On average, consumers in Germany eat an egg every second day. Per capita consumption has been rising for five years and reached 212 eggs in 2008.
Productivity in German Agriculture

German agriculture has achieved a massive increase in productivity in recent years, a fact which is also reflected in increased cereal yields per hectare and the increasing milk output of cows.

With 59 percent of the total crop growing area, grain cultivation takes up most of the arable land, which makes it the most important crop. Grain was grown on roughly 7 million hectares of land in 2008.

Grain Yield

Grain yield on a three-year average.

1) Former federal territory.

Source: BMELV, 425

Area used for agriculture (AA) by culture type

2008

Source: Federal Statistics Office, BMELV, 425
A dairy cow in Germany produces between 18 and 25 litres of milk per day, or roughly 7,000 kilogrammes per year, thus providing 21 German citizens with fresh milk and dairy produce.

The average daily output of a dairy cow produces:

- 4 packets of butter or
- 2.2 kilogrammes of cheese or
- 19 kilogrammes of yoghurt.

### Milk Yield

![Milk Yield Graph]

<table>
<thead>
<tr>
<th>Year</th>
<th>Milk Output per Cow (kg per year, all cows)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>4,000</td>
</tr>
<tr>
<td>1995</td>
<td>5,000</td>
</tr>
<tr>
<td>2007</td>
<td>6,000</td>
</tr>
<tr>
<td>2008</td>
<td>7,000</td>
</tr>
</tbody>
</table>

1) Former federal territory

Source: BMELV, 425

### Responsible Livestock Farming in Agricultural Businesses

Livestock farming is the main source of income in agriculture. Approx. 60 percent of the revenue from German agriculture comes from the sale of livestock farming products.

### Pigs

In May 2009, roughly 26.9 million pigs were kept in approx. 67,600 farms in Germany. This means that the number of pigs has increased by 0.6 percent since the survey of 3 November 2008. Compared with the November survey, there was a slight rise in the number of farms that keep pigs (+ 500 farms). This means that the decline in the number of pigfarming businesses that was recorded between May and November 2008 has not continued overall.

There was a slight rise in the number of breeding sows of 0.5 percent (+ 11,000 animals) to 2.3 million in the last six months. The increase among fattening pigs amounted to 2.5 percent or 276,000 animals, which means there was a total of roughly 11.5 million fattening pigs in German sties in May 2009.

With a share of almost 20 percent, Germany is the largest pork producer in the EU and with 15 percent, the second largest producer of beef and veal.

On average, roughly 398 pigs per farm are kept in Germany, although there are very great differences in farm sizes from region to region.
Livestock husbandry in agricultural businesses
May 2009

<table>
<thead>
<tr>
<th></th>
<th>Farms</th>
<th>Animals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>Cattle</td>
<td>183.0</td>
<td>12,945</td>
</tr>
<tr>
<td>of which dairy cows</td>
<td>97.4</td>
<td>4,205</td>
</tr>
<tr>
<td>Pigs</td>
<td>67.6</td>
<td>26,887</td>
</tr>
<tr>
<td>of which breeding sows</td>
<td>22.9</td>
<td>2,307</td>
</tr>
<tr>
<td>fattening pigs</td>
<td></td>
<td>11,457</td>
</tr>
<tr>
<td>Sheep</td>
<td>27.9</td>
<td>2,370</td>
</tr>
<tr>
<td>Poultry 1)</td>
<td>92.2</td>
<td>128,463</td>
</tr>
<tr>
<td>Livestock Density(£S/100 ha)</td>
<td>99.8</td>
<td></td>
</tr>
</tbody>
</table>

1) 2007; poultry are only surveyed every 2 years. Source: Federal Statistics Office, BMEV, 425

Cattle

With minus 0.3 percent, the drop in the total number of cattle and calves between November 2008 and May 2009 was minimal. The total number of cattle has been stuck at just under 13 million for two years with hardly any regional differences. According to the information received up to now, beef production will decrease by 0.7 percent to 1.9 million tonnes in 2009.

4.2 million dairy cows were kept in Germany in May 2009. Despite the poor economic situation of the dairy farmers, the number of dairy cows has dropped only slightly by 0.6 percent.

The decline in the number of dairy cow farmers was more distinct. By the cut-off date of 03 May 2009, 97,000 dairy cattle farming businesses were recorded here, which is roughly 2,000 farmers or 2 percent fewer than six months ago.

With a share of approx. 20 percent of production value, dairy cattle farming is the mainstay of German agriculture.
Highly Productive and Efficient German Agriculture – Development 1900 to 2008

Key Economic Figures

<table>
<thead>
<tr>
<th>Key Figure</th>
<th>Unit</th>
<th>1900</th>
<th>1950%</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural area per capita</td>
<td>ha/cap.</td>
<td>0.63</td>
<td>0.29</td>
<td>0.21</td>
</tr>
<tr>
<td>Percentage of workforce</td>
<td>Percent</td>
<td>38.2</td>
<td>24.3</td>
<td>2.1</td>
</tr>
<tr>
<td>Percentage of gross value-added</td>
<td>Percent</td>
<td>29.0</td>
<td>11.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Workforce (WF)</td>
<td>WF/100 ha</td>
<td>30.6</td>
<td>29.2</td>
<td>3.1</td>
</tr>
</tbody>
</table>

1) Former federal territory.
Source: Federal Statistics Office

In 1950, a farmer produced enough food to feed 10 people. Today, this figure has risen to around 140 people (without animal feed from abroad).

Organic farms and agricultural areas

In recent years, more and more agricultural businesses have decided to convert to organic farming methods.

In 1996, the percentage of organically farmed agricultural businesses was still as low as 1.3 percent (7,353 farms) with a total of 2.1 percent of the entire agricultural area. In 2008, this figure had risen to 5.3 percent of agricultural businesses (19,813 farms) using organic farming methods on 5.4 percent of the agricultural area.

Poultry

Laying hens are kept on approx. 73,000 farms in Germany (May 2007).

The last exemption permits for the conventional farming of laying hens in battery cages expire at the end of the year in Germany. From then on, only ecological, free-range and barn eggs from German production will be available to consumers, along with eggs from hens kept in small groups.

Good performance in livestock farming depends to a great extent on the wellbeing of the animals. Animal welfare and economical aspects come together here.
German Agriculture in the EU

Germany is one of the most important agricultural producers in the EU

Of all EU member states, the most milk is produced and the most pigs are kept here. Overall within the European Union, Germany is second only to France where animal produce is concerned and fourth, after France, Italy and Spain, where vegetable produce is concerned.

Foreign Agricultural Trade

According to the WTO, Germany comes in second in global agricultural trading where imports are concerned and third, after the USA and the Netherlands and before France, where exports are concerned. German agricultural exports have more than doubled since 1990 and quadrupled since 1980.

Today, German agriculture generates a quarter of its sales revenue from agricultural exports.

Total German exports in the first half of 2009 slumped by almost 24 percent over the equivalent period of the previous year. Foreign agricultural trading was less negative over the same period. There was a drop of 5.6 percent (€ 23.0 bn) in exports and 2.5 percent (€ 28.2 bn) in imports over the first half of 2008. There was an increase in exports of meat and meat products, as well as cocoa products and cereals. This was counter-balanced by a drop in milk and dairy produce exports.

The agricultural trade deficit increased from 4.6 to 5.2 billion euros.

With 80 percent of exports and 68 percent of imports, the EU member states are the most important sales market for German products and the most important procurement source.

The most important EU buyer countries of German agricultural exports continue to be the Netherlands, France and Italy.

In agricultural trading with third countries, exports dropped by 5.5 percent to 4.5 billion euros and imports by 1.9 percent to 9.0 billion euros.

One of the main concerns of the Federal Ministry for Food, Agriculture and Consumer Protection (BMELV) is to support companies from the agriculture and food sector in their efforts to acquire new sales markets, above all in non-Community countries. This is of particular importance against the background of the omission of the Central Marketing Association for German Agriculture (CMA) in accordance with the ruling of the Federal Constitutional Court of 3 February 2009.

The ministry sees itself primarily as a door opener. The BMELV action plan “Promotion of Agricultural Exports” comprises concrete measures with which above all small and medium-sized enterprises (SME) are to be supported. These instruments consist of improved promotion at foreign trade fairs, market studies on new target markets, economic delegation trips with political accompaniment and the integration of important CMA foreign offices into the system of foreign chambers of commerce (AHK).

Development of German Agricultural Exports
from January to September 2009
Preliminary Information

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2009 over 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>in bn. €</td>
<td>%</td>
</tr>
<tr>
<td>Total German exports</td>
<td>591.4</td>
<td>- 22.3</td>
</tr>
<tr>
<td>of which agricultural and food industry products</td>
<td>35.0</td>
<td>- 5.4</td>
</tr>
</tbody>
</table>
Food Industry and Food Supply

### Versatile, high-quality and affordable food

The food sector is one of the largest employers in Germany.

Significant branches of the producing food sector are:

- Slaughtering and meat processing
- Milk processing
- Production of bakery products and confectionery
- Fruit, vegetable and potato processing
- Breweries.

Sales of 156.3 billion euros were achieved in approx. 5,800 businesses with 535,000 employees in 2008. The food industry is the fifth largest branch of industry in this country.

Overall self-sufficiency in agricultural products lay at 90 percent in 2007/08. Without taking imported animal feed into account, the level of self-sufficiency was 80 percent in 2007/08.

The range of foods offered by the agricultural and food industry in Germany is extremely diverse. A typical supermarket today offers many different types of breads, cheeses, fruits and vegetables. The selection ranges from regional specialities and specially produced foods, such as organic produce, to offers from all over the world.
Food Prices

Good food is reasonably priced in Germany. On average, Germans spent 9.9 percent of their total expenditure on food in 2008. Within the EU, less is spent on food only in the United Kingdom, Ireland, Luxembourg (approx. 8% respectively) and Austria (9.4%).

Consumer prices for food have risen much more slowly than overall consumer prices for many years. From 1991 to 2008, overall consumer prices increased by an average of 2.0 percent per annum, while consumer prices for food increased by an average of only 1.1 percent. Despite these price increases, groceries are more affordable today than they were in the seventies and eighties.

After food and energy prices peaked in 2007 and early 2008, the rate of food price increases has slowed continuously since August 2008. Compared to the previous year, food was 3.4 percent cheaper, but fish and fish products were dearer than they were in October 2008.

It is still the case that farmers are paying relatively high prices for operational supplies, such as fertilizer, diesel and agricultural machinery. These prices hardly dropped at all during the economic crisis. The last price index for agricultural operational supplies determined for July 2008 was 44.8 percent higher than it was in 2000. While the producer prices for agricultural products fell by 19 percent in the first quarter of 2009 compared to the first quarter of 2008, the prices for operational supplies dropped by not even one percent.

Milk, cheese and eggs in the EU overall and in selected member states
Annual rate of change in %

Source: Eurostat; BMELV, 425
Measures and Financing of Agricultural, Forestry and Fishing Policy

Competitiveness

The market and structural policy measures of agricultural policy strengthen the competitiveness of the agricultural industry. The promotion of agricultural investments, market structure improvements and forestry measures, as well as support in the fishing industry, serve to improve economic efficiency and therefore to directly improve each company’s competitive ability. The initiatives to simplify and reduce bureaucracy on a European and national level take a burden off the companies on the cost side. With activities to promote exports, the BMELV helps the agricultural sector to open up, expand and consolidate new markets abroad.

Agricultural Social Policy

Competitive agriculture is the achievement of hard-working, active farmers who have to rely on their ability to provide adequately for themselves and their dependents in their old age and in the event of accidents, sickness, death and the need for nursing care. For this reason, an important supporting pillar of national agricultural policy is agricultural social policy, which helps to avoid social hardship as a result of the structural changes in agriculture.

Due to the significant decrease in the number of contributors with a simultaneous decrease in the number of benefit recipients at a very much slower rate, it has become necessary to adapt agricultural social insurance to the altered demands and make it fit for the future. To this end, reforms were implemented which consistently pursue the following objectives:

- Modernization of organizational structures
- Reliability of the provision of national government funding and
- More fairness in regard to contributions.

The profession-orientated special system of agricultural social insurance requires cofinancing from society as a whole on the basis of solidarity, because the demands on the contribution payers alone, i.e. active farmers, would be too great. For this reason, an essential component of national agricultural policy consists of federal government assistance within the scope of agricultural social policy, with which the financial viability of the agricultural social security system is guaranteed.

The federal government will be providing a total of almost 4 billion euros for this purpose in 2010.

The following essential measures are to be financed with federal government funding:

- Farmers’ pension expenses not covered by contributions and other income.
- Benefits paid to pensioners and retired farmers in the agricultural sickness insurance fund to the extent that these are not covered by their contributions and a financing contribution from the active members.
- Lowering of the entrepreneurial contributions in agricultural accident insurance.
- Supplementary compensation benefits to former agricultural and forestry employees.
During the past legislative period, federal funding was not questioned or even cut for the first time in a long time. The new federal government has even laid down in the coalition contract that federal subsidies to the agricultural accident insurance scheme are to be raised to 200 million euros a year in 2010 and 2011. Within the scope of the special programme for agriculture, an additional 100 million euros is to be provided in 2010 for the federal subsidy to the agricultural accident insurance scheme.

In addition to this, federal government funding was used to support the settlement of fixed-rate pensions in the agricultural accident insurance scheme in the years 2008 and 2009 with great success, whereby it was also possible to permanently improve the expenses structure in the agricultural accident insurance system. In the health insurance scheme for agricultural workers, the federal government carries the biggest share of expenses for pensioners, with roughly 1.2 billion euros per year. The contribution-free co-insurance of children was established despite considerable opposition. Within the scope of Economic Stimulus Package II, the agricultural health insurance funds received a further 40 million euros for 2009, which has allowed them to reduce contributions by 10 percent on a national average since July 2009. Ultimately, the largest federal subsidy of 2.3 billion euros p.a. goes to the farmers’ pension scheme with which the federal government finances roughly three quarters of the expenses, thereby making an important contribution towards generational justice.

The realignment of agricultural social policy has not been completed yet, however. It is now up to the authorities responsible for agricultural social insurance to adapt their organization expeditiously to the altered conditions. A policy that focuses on the insured persons while performing all other tasks efficiently is not a contradiction. It is also important, however, to be thrifty and economical with the federal funding and contribution sums of the agricultural businesses, because only in this way can joint responsibility be assured for a modern, future-proof and independent system of agricultural social security to the benefit of the farmers and their families within a competitive agricultural sector.
Policy for Rural Areas

Rural areas today are faced with tremendous challenges through the globalization of markets, demographic change and climate change. The great topics of our times affect rural development too and bring new development opportunities as well as problems with them.

Rural areas are very heterogeneous – also in respect of their economic performance potential and job situation.

Objectives of rural development

The promotion of rural development should be concentrated even more on regional developments in future, as well as the responsibility of the regions to increase growth and employment and ensure a high quality of living. The following objectives can be derived from this:

- Strengthening of economic power and diversification and the creation of new jobs
- Adjustment of the technical and social infrastructure to suit requirements
- Innovative handling of migration and ageing
- Improvement of perspectives for young people
- Ensuring that land utilization is compatible with nature and the environment
- Linking of the environmental and recreational functions of rural areas
- Maintenance and care of cultivated areas.

In addition to its responsibility for agricultural policy and consumer protection, the BMELV also considers itself responsible for representing the interests of rural areas and linking up rural development across all the many different areas of politics.

The Economy and Jobs

Agriculture is an important economic factor in rural regions. Measured by the size of the workforce, however, and the share in brutto value added, agriculture today is no longer the most significant sector of the economy in rural areas, which have long since followed the global trend towards a service society. Around two thirds of the gross value added in rural regions is generated today in this sector. For this reason, additional motors for economic development must be deployed today in agriculture and its related areas in most rural regions. Tourism, for example, still conceals unused potential for income and employment in many regions.

Medium-sized industrial and commercial businesses are also of great importance for the economic development of rural areas, however.

Culture and the Environment

With their ability to conserve soil, water and air and make a positive contribution to climate development, agriculture and forestry actively structure cultivated landscapes, while bringing indispensable products to the market at the same time.

The utilization of natural resources, along with their development and conservation, is inseparably linked with agriculture and forestry and has become their trademark.

The tasks of agriculture and forestry go beyond the mere production of food and renewable raw materials. They are not only a part of the economy, they are also a part of our society, our culture and our environment.

The conservation of culture and the environment is a goal which cannot be achieved from the point of view of efficiency alone. Accordingly, unmistakable, tasty, hand-crafted foods are an expression of a regionally diverse agriculture.
In terms of area, forestry is the second largest land utilization form after agriculture. Roughly one third of the total area of Germany is covered in forest (approx. 11 m. ha). Every year, these forested areas produce a total of roughly 70 million cubic metres of timber, a valuable and renewable raw material.

In addition to this, forests also fulfil a number of social functions. CO$_2$ is bonded into the forest, forest floor and wood products over long periods. Forests protect the soil from water and wind erosion and their filter effect makes a major contribution towards the regeneration of air and water. With their long life cycles, forests offer safe and secure living space to numerous animal and plant species. In this way, they make a decisive contribution towards maintaining biodiversity.

Forests are also important recreation areas. People use them for numerous leisure activities. In many places, large forest areas are the prerequisite for gentle, ecologically compatible tourism which provides economic opportunities to the local population.

Visits to the forest are free, but they have a considerable economic value at the same time. Several years ago, the monetary value of the forest’s recreation and relaxation capability was determined to be slightly more than 50 euros per visitor per year on average. Projected to all forest visitors within the population, this equates to roughly 2.5 billion euros for forest regions close to urban areas. The value of holiday recreation in Germany’s forests has been estimated at an additional 0.5 billion euros per annum.

Scientists use many different methods to evaluate the benefits and value of these non-marketable features of agriculture and forestry, e.g. the conservation of cultivated landscapes. The mere act of keeping an area clear of shrubs and trees, (mulching once a year) would cost about 100 euros per hectare per year, depending on the terrain. The maintenance of a rough pasture rich in species in the Swabian Alb region could only be achieved with extensive cultivation which would cost round about 540 euros per hectare every year (total costs of cultivation / market proceeds).
EU Support for the Development of Rural Areas

The areas of main emphasis of the policy for the development of rural areas (2nd pillar of European agricultural policy) are:

1. Improvement of the competitive ability of agriculture and forestry
2. Improvement of the environment and landscape (including recognition of the social achievements of agriculture and forestry through agricultural environment measures and compensatory allowance)
3. Improvement of the quality of living in rural areas and the diversification of the rural economy (incl. promotion of village development, income combination beyond agricultural activities, small business)
4. (Partially) integrated development approaches (leaders).

EU and national promotion instruments combined produce attractive promotion offers

The EU regulation on the development of rural areas by the European Agricultural Fund (EAFRD Regulation1) outlines the spectrum of possible measures to promote rural development in the promotion period 2007 – 2013. It also leaves the member states a great deal of flexibility to respond in the best possible way to the specific conditions and potential of each region. In Germany, the joint task “Improvement of the Agricultural Structure and Coastal Protection” (GAK) forms the core of many of the programmes of the federal states (Laender) with regard to finance and content. It contains a wide range of agricultural structure and infrastructure measures. What exactly is to be promoted in each region is determined in the development programmes for the rural areas of the federal states. With the financial support of the EU and federal government in the GAK, each federal state is able to offer an attractive range of promotion measures aligned to regional requirements.

Over 2.5 billion euros is available every year

In the promotion period 2007 to 2013, a total of roughly 18 billion euros of public funding from the EU, federal and state governments has been made available for the promotion of the development of agriculture and rural areas. This equates to an average of more than 2.5 billion euros a year.

In 2010, it is likely that 725 million euros of federal government funds alone will be provided for the development of agriculture and rural areas through the joint task “Improvement of the Agricultural Structure and Coastal Protection” (GAK). Together with the funds from the federal states, total GAK funding will amount to approx. 1.3 billion euros, to which a further 1.3 billion euros of EAFRD funds can be added. This means that a total sum of approx. 2.6 billion euros will be available for the development of agriculture and rural areas in Germany in 2010.

Financing – The BMELV Budget

5.86 billion euros (previous year € 5.29 bn) has been allocated to the 2010 BMELV budget (Detailed Plan 10). Detailed Plan 10 is also aligned to strengthening rural areas and Germany as an agricultural producer, and giving financial support to consumer policy. With roughly 64 percent of the expenditure in Detailed Plan 10, federal government funding of agricultural social policy is still a very substantial part of national agricultural policy spending.

A total of 725 million euros has been allocated to the joint task “Improvement of the Agricultural Structure and Coastal Protection” (GAK) in 2010. Included in this sum are broadband promotion, advancement of the decentralized supply of renewable energy and an additional 25 million euros in excess of the existing coastal protection budget for urgent coastal protection measures due to climate change. The federal government is taking a 60 percent share in the financing of promotion measures in the field of agricultural structure improvement and a 70 percent share in measures to improve coastal protection.

As the largest item of expense in agricultural social policy, the federal subsidy towards farmers’ pension provisions amounts to 2.28 billion euros, while subsidies for agricultural health insurance amount to 1.25 billion euros. To avoid contribution rate increases, the federal subsidy towards the agricultural accident insurance institutions (LUV) is to be increased by 100 million to 200 million euros.

To overcome the current crisis, a two-year special programme for agriculture is planned to bridge the difficult income situation of agricultural businesses, which has also been caused by a slump in prices in certain agricultural markets (especially in the dairy sector). An essential element of this is a “Grassland Milk Programme” which is to be allocated total funding of 300 million euros in 2010. Elements of the programme are a grassland premium for milk producing businesses with grassland of probably around 37 euros per hectare of grassland (€ 111 m) and a cow premium of around 21 euros per cow for milk producing businesses (€ 85 m). Additional funds of roughly 100 million euros can be utilized for additional strengthening of the LUV.

On top of this, there is a crisis liquidity help programme totalling 25 million euros which is intended to reduce interest rates for liquidity assistance loans granted by the Landwirtschaftliche Rentenbank, as well as a federal guarantee to secure loans of this kind.

Renewable raw materials are to be supported with 50 million euros in 2010. Above all research, development and demonstration projects are to benefit from these funds in order to open up and/or expand production, sales and utilization possibilities for renewables.

A total of 148 million euros has been assigned for consumer policy – health and economic consumer protection as well as consumer information. Of this sum, 19 million euros (including funding from the national action plan “IN FORM – Germany’s Initiative for Healthy Eating and More Exercise” will be available for consumer information projects. As was the case last year, the Federation of German Consumer Organizations (VZBV) will receive 8.7 million euros. The consumer protection foundation Stiftung Warentest is to be given additional foundation capital over the coming years and 20 million euros was budgeted for this purpose in 2010. In this way, the subsidy is to be cut back successively and will amount to 5.5 million euros in 2010.
5.3 million euros has been budgeted for the promotion of model and demonstration projects. Training, explanatory and information measures in the Federal Programme for Organic Farming are to be promoted specifically with 16 million euros along with research projects.

Another area of main emphasis is the promotion of innovations in the areas of food, agriculture and consumers, for which 25 million euros has been allocated.

A total of 378 million euros is being placed at the disposal of the four new federal research institutes. Worthy of special mention here is the complete conversion of the Friedrich-Loeffler Institute on the island of Riems into a scientific centre in the field of animal health and epizodic disease research with state-of-the-art high-security labs and animal sheds.

### BMELV Budget

<table>
<thead>
<tr>
<th>Measure</th>
<th>2009 Estimate</th>
<th>2010 Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural social policy</td>
<td>3 686.0 1)</td>
<td>3 800.0</td>
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<tr>
<td>Consumer policy (including BfR and vzbv)</td>
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<td>Fishing</td>
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<tr>
<td>Renewable raw materials</td>
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<td>Liquidity help loans</td>
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<tr>
<td>Grassland Milk Programme</td>
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<td>Model and demonstration projects</td>
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<td>Federal programme for organic farming</td>
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<td>16.0</td>
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<td>Bilateral cooperation with the FAO</td>
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<td>15.0</td>
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<td>Miscellaneous measures</td>
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<tr>
<td>General appropriations overall</td>
<td>4 010.4</td>
<td>4 507.6</td>
</tr>
<tr>
<td>Joint task “Improvement of the Agricultural Structure and Coastal Protection”</td>
<td>675.0 2)</td>
<td>675.0 3)</td>
</tr>
<tr>
<td>Special outline plan for coastal protection</td>
<td>25.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Market organization costs</td>
<td>100.0</td>
<td>92.5</td>
</tr>
<tr>
<td>Ministry, federal offices and federal research institutes</td>
<td>480.5</td>
<td>562.8</td>
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<tr>
<td>Detailed Plan 10</td>
<td>5 290.9</td>
<td>5 862.9</td>
</tr>
</tbody>
</table>

Differences are possible due to numbers being rounded off.

1) Increase of LUV by 100 m. euros through reduced expenditure in other areas of the detailed plan, as well as sales proceeds and an additional 200 m. euros for the compensation campaign for the buyout of small pensions.

2) Increase of 45 m. euros through budget endorsement.

3) Increase of 25 m. Euros through budget endorsement.

Source: BMELV, 113
Agricultural Utilization Sustains Biodiversity

Conservation and Maintenance of our Cultural Landscape

Unique and regionally typical cultural landscapes rich in a biological diversity of many different wild and cultivated species have arisen through agriculture and forestry in Germany, where the majority of Germany’s flora and fauna is to be found (approx. 72,000).

Among the most botanically diverse areas in Germany are grassland habitats, meadows and pastures, with over 850 typical grassland species, and oligotrophic grasslands with almost 1,000. Supporting 837 grassland species, the arid and semi-arid grasslands, whose potential in terms of species is of particular functional importance to agriculture, especially under the aspect of impending climate change, are extremely biodiverse grassland habitats. Wet grasslands and marsh meadows have 392 grassland species, cultivated meadows 298 and cultivated pastures 221. They are ideal for a healthy animal nutrition and the conservation of wild plant species. Agricultural environmental programmes are an important instrument for maintaining biodiversity in agricultural ecosystems. They were implemented on roughly 29 percent of the agricultural area in 2007.

Modern Agriculture Conserves the Environment

Emissions from Agriculture

The utilization of drained organic soils, livestock farming and the use of mineral fertilizers are the main emission sources of climate-relevant gases from agriculture.

Agriculture’s share in greenhouse gas emissions is estimated to lie between 10 and 14 percent worldwide. Agriculture contributes roughly 11 percent of Germany’s greenhouse gas emissions.

Depending on the survey method employed, the contribution of the entire Food sector, including production, processing, transport etc, lies between 16 and 20 percent. The contribution of agriculture towards overall CO₂ emissions is 6 percent, nitrous oxide (laughing gas) emissions 54 percent and methane emissions 51 percent.

Methane emissions are attributable to 93 percent to cattle farming, mainly dairy herds. Since 1990, however, there has been a reduction of 24 percent.
The CO₂ balance of agriculture and forestry in Germany is clearly positive, because agricultural emissions totalling 133 million tonnes of CO₂ equivalent – including the manufacture of nitrogen fertilizers – is balanced off by absorption by plants of 168 million tonnes. Agriculturally utilized soils are also an emission source of climate-relevant gases.

**Emissions of climate gases through livestock farming**
in 1,000 t

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CH₄</td>
<td>Fermentation during digestion</td>
<td>1038.3</td>
<td>899.7</td>
<td>877.1</td>
<td>872.5</td>
<td>852.2</td>
<td>819.5</td>
<td>802.4</td>
<td>809.3</td>
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<td></td>
<td>Industrial fertilizer management</td>
<td>296.6</td>
<td>265.0</td>
<td>269.2</td>
<td>266.7</td>
<td>265.9</td>
<td>255.9</td>
<td>256.4</td>
<td>261.0</td>
</tr>
<tr>
<td>N₂O</td>
<td>Industrial fertilizer management</td>
<td>9.3</td>
<td>8.3</td>
<td>8.2</td>
<td>8.1</td>
<td>8.0</td>
<td>7.8</td>
<td>7.7</td>
<td>7.8</td>
</tr>
<tr>
<td>NO</td>
<td>Industrial fertilizer management</td>
<td>1.3</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.0</td>
<td>1.1</td>
<td>1.1</td>
</tr>
</tbody>
</table>


Ammonia and nitrogen monoxide are indirect greenhouse gases, but because all nitrogen inputs influence emissions of nitrogen compounds, NH₃ and NO emissions must also be taken into consideration to determine the level of emissions from agricultural soils.

**Measures to Reduce Emissions**

- Reduction of the emission of CO₂, methane and nitrous oxide:
  - More efficient fertilizing
  - Energy saving,
  - Increased efficiency in livestock farming

- Preservation of grassland and increase of the humus content of soils
- Expansion of organic farming and
- Slowing of the consumption of land at the expense of agricultural and forestry areas (carbon sink destruction).
Agriculture and Forestry Promote Active Climate Protection

Climate protection and adjustment to climate changes

Although agriculture and forestry emit greenhouse gases, they are at the same time the only sectors of the economy that make an active contribution to climate protection by binding atmospheric carbon dioxide into long-term biomass.

Agriculture and forestry already suffer considerable damage today through climate change and the increasing frequency of extreme weather conditions (storms, heavy rain, hail, floods, dry periods/drought). These risks will increase in the future if no adjustment measures are taken.

Cultivation of renewable raw materials

Renewable raw materials (RRM) were grown on almost 2 million hectares (almost 17% of total German farmland) in 2009. This percentage has remained relatively constant for the last three years.

The biggest share is taken up by energy crops (approx. 1.7 m. ha). This means that agriculture is an important supplier of the base products for renewable energy sources.

Through the use of renewable energy, CO₂ emissions were reduced by around 109 million tonnes in 2008.

Measures for the further utilization of substances and energy

Electricity, heat and fuel production, as well as the utilization of renewable raw materials, are to be expanded efficiently and sustainably. Important prerequisites for this include the exploitation of unused, permanently available biomass potential, improved efficiency of biomass utilization and more focus on the promotion of CO₂ savings.
More employment and sustainability through innovations in renewable resources

Approximately 278 thousand people are currently employed in the renewable energy sector. 34.5 percent of them – approx. 96 thousand – work in the bioenergy field. Roughly 53 thousand jobs have been created in the chemicals and materials area through the utilization of renewable resources.

<table>
<thead>
<tr>
<th>Plants</th>
<th>Raw Material</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ha</td>
<td></td>
</tr>
<tr>
<td>Industrial crops</td>
<td>Industrial starch</td>
<td>140,000</td>
<td>130,000</td>
</tr>
<tr>
<td></td>
<td>Industrial sugar</td>
<td>22,000</td>
<td>22,000</td>
</tr>
<tr>
<td></td>
<td>Technical rapeseed oil</td>
<td>120,000</td>
<td>120,000</td>
</tr>
<tr>
<td></td>
<td>Technical sunflower oil</td>
<td>8,500</td>
<td>8,500</td>
</tr>
<tr>
<td></td>
<td>Technical linseed oil</td>
<td>2,500</td>
<td>2,500</td>
</tr>
<tr>
<td></td>
<td>Fibre plants</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td>Pharmaceutical ingredients and dyes</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>304,000</td>
<td>294,000</td>
</tr>
</tbody>
</table>

| Energy crops | Rape for biodiesel/vegetable oil | 915,000 | 942,000 |
|              | Sugar and starch for bioethanol | 187,000 | 226,000 |
|              | Plants for biogas | 500,000  | 530,000  |
|              | Permanent cultures for solid fuels | 2,000    | 3,500    |
|              | Total | 1,604,000 | 1,701,500 |

Total RRM cultivation | 1,908,000 | 1,995,500

1) Preliminary.
Source: Fachagentur Nachwachsende Rohstoffe e. V., BMELV

Bioenergy

With around 159 terawatt hours or roughly 68 percent, biomass made the biggest contribution to energy production from renewable sources in 2008, followed by wind power (approx. 17 %) and hydropower (approx. 9 %). The worldwide share of bioenergy in total end energy consumption is 14.6 percent, the majority of which comprises traditional biomass utilization.

The share of bioenergy in total fuel consumption amounted to approx. 5.9 percent in Germany in 2008 (2007: 7.2 %, 2005: 3.8 %), the contribution to total power generation approx. 4.4 percent (2007: approx. 3.8 %) and the contribution to total heat provision approx. 6.9 percent (2007: approx. 7.2 %).

With the Biomass Action Plan, the BMELV has presented a concept to expand the utilization of bioenergy efficiently and sustainably.
Structure of energy provision from renewable sources
2008

Biogenic fuels (electricity) 11.6%
Biogenic fuels (heat) 41.6%
Photovoltaics 1.7%
Geothermics 1.1%
Solar thermics 1.8%
Wind energy 17.3%
Hydropower 9.1%
Bio fuels 15.7%

Substance utilization

Currently approx. 2.7 million tonnes of renewable raw materials are used every year in Germany by the chemical-technical industry to extract the substances they contain. Overall, approx. 13 percent of the raw materials used by the chemical industry in Germany are renewable.

The range of application areas for renewable raw materials is expanding continuously:

- Timber as a building material and for conversion into energy
- Oil plants, such as rape and sunflower, for the production of biodiesel and lubricants
- Vegetable starch from potatoes, corn or wheat as the basic substance for adhesives, bioplastics or as an aggregate for the paper industry
- Beet sugar for the manufacture of tensides and bioplastics
- Plant fibres of flax or hemp for compound materials in the automotive industry and as insulation materials
- Medicinal and aromatic plants for the manufacture of pharmaceutical and cosmetic products.

The cultivation area in the field of substance utilization is just under 300,000 hectares. Due to sinking production figures with paper and cardboard, there has been a slight reduction in the areas used to obtain industrial starch.

Supplementary to the biomass action plan, the “Action Plan of the Federal Government for the Utilization of Substances from Renewable Resources” came into effect in September 2009.

Alternative utilization options

There has always been competition in agriculture regarding the utilization of land. Farmland has always been used for the production of food as well as fodder for livestock (energetic utilization).

In Germany, there is sufficient farmland to feed the entire population. In addition to this, there is also enough land for the energetic and substantial utilization of biomass, which means that German farmers can provide both: good food and renewable raw materials from the fields.

Whether farmers use their land for the production of bioenergy or the production of food and feedstuffs depends on the profits that can be achieved in each instance.

With the further expansion of bioenergy, options to reduce land use competition will have to be found.
Animal feed imports to Germany in 2008
Percentage (%)

The Netherlands Brazil Argentina France Poland Czech Rep. Indonesia Austria Belgium Denmark Malaysia Peru USA

Feed grain not included. Only countries of origin with German imports of 5,000 t and more in 2008.
Source: Federal Statistics Office, BMELV, 425

Measures:

- Mobilization of residual substances, such as liquid manure, straw, landscape maintenance products and residue timber from forests as additional biomass potential without competition from food production
- Establishment of new cultivation systems, such as operational plantations for timber production, agro-forestry systems (food and energy crops in one area), extensive energy crop cultivation in nature conservation compensation areas
- Optimization of food, energy and industrial crop yields
- Expansion of the range of useful energy crops as an alternative to corn
- Improvement of the efficiency of biomass utilization
- Ensuring of sustainability, even with imports, by means of suitable documentation systems (e.g. sustainability certification)
- Linking of substantial and energetic utilization (energetic utilization only at the end of the process chain/life cycle of a product), key word: Cascades of Use
- Increased utilization of particularly efficient recycling options with a particularly high greenhouse gas-reducing potential
- Reduction of the amount of land used for settlement and transport, which still use up more than 100 hectares every day (reduction to 30 ha per day by 2020 is the goal of the federal government’s sustainability strategy).
Forestry and Timber Industry

The forestry and timber industry provides a valuable and coveted raw material

According to tree-felling statistics, with a total of around 55 million cubic metres, roughly 28 percent less raw wood was processed in 2008 than the previous year, in which 77 million cubic metres were processed due to the large amounts felled by storms. Another reason for the reduction in felling lies in the drop in demand as a result of the general economic situation. The 2008 inventory study has established an average annual felling rate of 70.5 million cubic metres of timber harvested in the period from 2002 to 2008.

This means that – as has been the case for decades – the felling of raw timber remains below the level that would be possible in accordance with the sustainability principle. This also means that the high level of reserve stocks has increased further. The overall balance of the inventory study shows that a total of 10 percent more timber was grown between 2002 and 2008 than was harvested, and that the total stock of timber has increased by 2 percent.
At the same time, per capita consumption of timber and wood products has risen sharply.

As far back as 2004, with the Charter for Timber, the federal government concluded a strategic alliance between politics, industry and social groups with the goal of increasing timber consumption in Germany by 20 percent (1.1 to 1.3 cubic metres per capita) by 2014, because positive climate, energy, environmental and resource political effects for society are linked with it and because it secures and/or creates jobs, especially in rural areas.

In Germany, material utilization currently accounts for 60 percent of timber utilization and energetic utilization for the remaining 40 percent. A tangible growth in consumption has been recorded in the energetic utilization of timber, partly due to the expected further increase in fossil fuel prices (heating oil and natural gas). Of the various renewable energy sources, the most (approx. 39%) end energy (heat, electricity) was acquired in 2008 from solid biomass (mainly made of wood), well ahead of wind power (approx. 17%), biofuels (approx. 16%) and hydropower (approx. 9%).

In the forestry and timber sector (raw timber, semi-finished and finished goods), Germany has developed into a net exporter in recent years in terms of both quantity and quality. This development continued in 2008 despite the global economic slump. The foreign trade balance closed in 2008 with a quantity balance of 18.4 million cubic metres (raw wood equivalent) and an 11.4 billion euro export surplus in terms of value.

### Total timber balance of the Federal Republic of Germany in millions of m³ (raw wood equivalent)

<table>
<thead>
<tr>
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<th>2007</th>
<th>2008</th>
</tr>
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<tbody>
<tr>
<td><strong>Yield</strong></td>
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<tr>
<td>Felling</td>
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<tr>
<td>Waste paper,</td>
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<td>Waste wood,</td>
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<td>10.0</td>
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<tr>
<td>domestic yield</td>
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<tr>
<td>Imports</td>
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<tr>
<td>Stocks in storage,</td>
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<tr>
<td>reduction</td>
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<tr>
<td><strong>Total Yield</strong></td>
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<td>231.0</td>
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<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Exports</td>
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<td>136.5</td>
</tr>
<tr>
<td>Domestic</td>
<td>107.9</td>
<td>94.5</td>
</tr>
<tr>
<td>consumption</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Utilization</strong></td>
<td>265.9</td>
<td>231.0</td>
</tr>
</tbody>
</table>

1) Preliminary data.
2) Projected value.
Source: Calculated on the basis of the data contained in official statistics, details provided by the Federation of German Paper Factories and Weimar and Manitu 2008
Fishing Policy

The fishing industry is a traditional branch of the economy and an important economic factor in Germany’s coastal regions

The fishing industry employs more than 41,000 people who supply consumers with over 1.3 million tonnes of high-quality fish produce every year. Jobs that are directly or indirectly connected with fishing form the backbone of many regions on the German North Sea and Baltic coasts, where fishing has been integrated into the local economy and way of life for centuries. A similar situation exists with the fishing of inland waterways in rural areas. Fishing also enhances appeal for tourism.

The fishing industry in Germany comprises the sectors fishing (large and small scale deep-sea fishing, cutter and coastal fishing and inland waterway fishing), the fish industry, fish import industry, fish wholesale, fish retail and fish gastronomy.

With 1,825 boats at sea, as well as in mainly small inland waterway fishing businesses and aquacultures, German fisheries catch and produce 265,000 tonnes of fish and seafood with a value of roughly 0.4 billion euros. The self-sufficiency rate with fishery products lies at around 25 percent. With 15.6 kilogrammes, per capita consumption of fish reached a new record high last year.
Promotion of the fishing structure

The BMELV coordinates the fishing structure in Germany that is cofinanced by community funding from the EU through the European Fisheries Fund (EFF).

Main focus in recent years:

- Three modernization projects in **large-scale deep-sea fishing**
- 11 new construction projects and 145 modernization projects in **small-scale deep-sea and coastal fishing**
- Promotion of the construction and modernization of boats and to improve the technical equipment of **inland fishing businesses** and the
- Programme to expand and modernize **aquaculture**

The companies involved in **processing and marketing** made use of the promotion opportunities offered by the FIFG (Financial Instrument for Fisheries Guidance) to a great extent to improve production conditions and product quality.

Marine environment – and marine conservation

Our fish stocks are at risk. Only rapid and unequivocal measures can relieve the situation in the long term. The federal government supports this strategy in the European Union. In the interest of the environment and consumers, as well as a healthy fishing industry, focus must be shifted without restriction to environmental compatibility, sustainability and the protection of ecosystems and our oceans as the prime objectives of fishing policy.

There is a close interplay between the fishing industry and environmental conservation. Although fishing depends on an intact environment, it also has an influence on the maritime environment. There can only be a reliable future for the fishing industry if fishing is practiced in a sustainable manner, which means in harmony with nature and with a view towards the wellbeing of future generations. For this reason, more efforts have to be made both nationally and internationally to reconcile economic interests with marine conservation requirements better than has been the case up to now.

Development of management and recovery plans

Within the scope of EU fishing policy, Germany supports the further development and consistent implementation of recovery and management plans spread over several years for overfished stocks. The BMELV fishing research department performs some decisive preliminary work to this end. In addition to this, the
Sustainable catching methods and active marine protection are the guarantors of the future economic success of fishing.

Protection of sensitive deep-sea ecosystems against destructive fishing practices

Germany and the EU contributed considerably towards ensuring that an agreement was reached on UN level in December 2006 imposing obligations to regulate deep-sea fishing and protect deep-sea habitats. On the initiative of Germany, the EU adopted a regulation in mid-2008 to protect deep-sea ecosystems against destructive fishing practices.

Combating illegal fishing

Political efforts to achieve a sustainable fishing industry in the world’s oceans are being undermined by illegal, unreported and unregulated fishing (IUU fishing), the value of which is estimated at up to 10 billion euros. Germany continues to use its influence in Brussels to ensure that the EU takes on a leading role in the battle against illegal fishing. The EU fisheries ministers agreed on a regulation at the end of June 2008 whereby the member states are obliged to take effective measures against illegal fishing through:

- stricter controls
- unbroken traceability of fish products from third countries
- severe sanctions in the event of infringement.

Developing countries are being supported by the EU with measures against illegal fishing.

Environmental seal for fish products

Consumers can also make a contribution towards the sustainable usage of global fish stocks by consciously deciding in favour of fish products acquired by sustainable methods. Environmental seals of approval awarded to fisheries that are proven not to contribute to the problem of overfishing can help them here. The blue seal of the Marine Stewardship Council (MSC), which is already to be found on numerous fish products, has the greatest level of awareness in Germany, but there are also several other environmental seals. Together with representatives of the fishing and fish processing industry, food traders and environmental and consumer associations, the BMELV is in the process of establishing minimum requirements for a reliable legal framework for the credibility of the fishery environmental seal, which are then to be presented to the European Commission.

Fish consumption: the Big 5

Fish consumption by species in %

<table>
<thead>
<tr>
<th>Fish Type</th>
<th>Consumption in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska Pollack</td>
<td>24.7</td>
</tr>
<tr>
<td>Herring</td>
<td>20.8</td>
</tr>
<tr>
<td>Freshwater fish</td>
<td>11.1</td>
</tr>
<tr>
<td>Salmon</td>
<td>10.2</td>
</tr>
<tr>
<td>Tuna and bonito</td>
<td>4.4</td>
</tr>
<tr>
<td>Pangasius</td>
<td></td>
</tr>
</tbody>
</table>

Source: FIZ  As of: 2008
International Nutrition and Agricultural Policy

Securing the world’s food supply through productive and sustainable agriculture

Roughly one billion people currently suffer from hunger and chronic malnutrition.

The supply situation has been worsened above all by the economic and financial crisis. Agriculture plays a key role in the attempt to overcome the global challenges of poverty and malnutrition. What is required here is a worldwide increase in food production and a strengthening of income in countries affected by poverty. Agricultural research should be intensified parallel to this.

Growing demand for food

In its study World Agriculture: Towards 2015/2030, the FAO predicts an annual grain production requirement of 3 billion tonnes up to the middle of the century due to demographic developments. Currently, approx. 1.7 billion tonnes are produced every year (excluding rice). In 2050, according to the FAO prognosis, 470 million tonnes of meat will be consumed, 72 percent of it in developing countries, which currently consume 58 percent. The demand for biofuels could also have a strong influence on agricultural production.

90 percent of the increase in agricultural output could be covered by higher harvest yields and more intensive agricultural land utilization. The agricultural area in developing countries, however, would have to be increased by around 120 million hectares in order to meet the production target (3 billion tonnes).

Food price development

Due to an unusual market situation, global agricultural prices – especially for wheat, corn, rice and dairy products – rose suddenly by 70 percent between September 2006 and February 2008. There has been a severe decline in the prices for agricultural raw materials since February 2008, however. Although prices were corrected downwards in recent months, the price increases of the recent past have in no way been cancelled out. Most forecasts for the coming years assume that in the period from 2009 to 2018, the real prices for grain will lie an average of 10 to 20 percent above the level of the period from 1997 to 2006. An even sharper price increase is expected for vegetable oils (+30%). Stagnating real prices are being predicted for meat and only a very slight increase for milk.

Price fluctuations will be much more pronounced.

Different effects in developing countries:

- The poor social classes in developing countries are affected particularly severely in the short term (smallholders, farm labourers, landless workers, non-agricultural households).
- Rising prices open up income opportunities, even for smallholders, in the medium-to-long term and can increase the contribution agriculture makes towards economic growth.

Prospects

Due to the grave humanitarian effects and related endangering of political stability in several of the affected countries, fast and coordinated action by the international donor community, as well as government and non-government aid organizations, is still required.

In the long term, the food crisis must be met by an increase in agricultural production, particularly in developing countries.

This process requires the responsibility of the developing countries as well as that of the food-exporting countries. The aid provided by the international community should be directed primarily at supporting the governments in the developing countries, accepting their self-responsibility, tearing down structural obstacles and asserting the right for food. Agriculture and rural development must acquire a significantly higher status.
The BMELV Bilateral Cooperation Programme

The BMELV bilateral cooperation programme contributes towards the securing of food supplies all over the world. The projects currently running in Russia, Ukraine, Kazakhstan and China are designed to provide further and advance training to specialists and executives in the partner countries in the areas of nutrition, agriculture and consumer protection. In addition to providing consultancy services to parliaments and governments within the scope of “Agricultural Policy Dialogues”, the imparting of practical knowledge and skills to specialists in the partner countries is of particular importance. This involves the conveyance of modern technologies and the utilization of modern techniques in animal and plant production.

Three projects were run in Russia, Ukraine and China in 2009 in cooperation with companies from the German agriculture and food industry. In the course of these projects, the companies provide the necessary technology and organize training events. In addition to the conveyance of the latest knowledge, projects of this kind also help to improve economic cooperation, thus producing win-win situations for all partners involved.

A project to secure the food supply in Africa is currently in preparation. In cooperation with trade and industry, a “German-Ethiopian Agricultural Further Training Centre” is to be established.

The BMELV has 4 million euros at its disposal for these projects in 2009, to which quite a considerable sum can be added thanks to the commitment of trade and industry. Since 1994, the BMELV has contributed approx. 60 million euros to bilateral project work.

The BMELV Twinning Programme

Since the beginning of the EU authorities twinning programme in 1998, there have been more than 2,600 project tenders throughout the EU with a finance volume of around 1.8 billion euros.

Germany has bid for more than 1,000 projects and been awarded roughly 600. Of all federal government departments, the BMELV has the best success rate, with around 140 acquired projects.

Areas of main technical emphasis are

- Food control
- The veterinary system
- Pesticides
- Consumer protection

Regional emphasis will be placed in future on the candidate and Western Balkan countries, as well as European Neighbourhood Policy.

The BMELV has committed itself to twinning projects in order to

- Raise the standard for complete assumption of EU law (for candidate countries) or alignment to EU level (for countries with no perspective of joining), thus creating equal economic conditions within the EU
- Lay the foundation for a better EU agricultural policy through knowledge of one another’s structures
- Strengthen cross-border cooperation in agriculture and consumer protection
- Deepen political and economic cooperation.
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