

# Seeding the Future

Sustainability Report 2007 | 2008

**KWS SAAT AG**



## Key Economic Figures of the KWS Group

Fiscal year (figures in € million)	FY 07/08	FY 06/07
Net sales	599.1	537.9
Cost of sales	305.4	264.0
Selling expenses	106.1	101.5
General and administrative expenses	42.3	38.5
Other operating income and expense (net)	5.4	5.1
Research and development	80.6	75.2
<b>Operating income</b>	<b>70.1</b>	<b>63.9</b>
as a percentage of net sales	11.7	11.9
Interest expenses	1.7	2.1
<b>Net financial income/expenses</b>	<b>5.3</b>	<b>-6.0</b>
<b>Result of ordinary activities</b>	<b>75.4</b>	<b>57.9</b>
Income taxes	20.8	19.7
<b>Net income for the year</b>	<b>54.6</b>	<b>38.2</b>
as a percentage of net sales	9.1	7.1
Equity	398.0	366.1
Equity ratio in %	59.3	60.0
<b>Total assets</b>	<b>671.1</b>	<b>609.8</b>
<b>Dividend per share (in €)</b>	<b>1.70</b>	<b>1.40</b>
<b>Average number of employees</b>	<b>2,856</b>	<b>2,739</b>
Wages and salaries	93.7	88.6
Social security contributions, expenses for pension plans and benefits	25.3	22.7
<b>Total personnel costs</b>	<b>119.0</b>	<b>111.3</b>

# Fundamentals of Reporting

## Report boundary and topics

KWS SAAT AG's objective with this, its first Sustainability Report, is to provide information on its fields of operation, current activities and its strategy in relevant areas under its entrepreneurial responsibility. The report shows how KWS SAAT AG discharges this responsibility and how sustainability is lived at the company. It presents the company's organization, objectives, challenges and the progress made through its commitment to sustainability.

This report is a summary of relevant contents that were identified by means of a materiality analysis and prioritization. The report and additional information are available on the Internet at [www.kws.de/nachhaltigkeit](http://www.kws.de/nachhaltigkeit). Topics that are of relevance to sustainability but not presented in this report are to be included in coming reports.

The specifications of the internationally recognized Global Reporting Initiative (GRI G3) are used in this first KWS SAAT AG Sustainability Report 2007/2008. A detailed GRI index is reproduced at the end of the report. Contents and data that cannot be communicated for competitive reasons are indicated in the GRI index.

## Geographical context and time period

The period reviewed in the report covers the fiscal years 2006/2007 and 2007/2008. The fiscal year begins on July 1 of each year and ends on June 30 of the next year. Unless otherwise noted, the data in this report relates to KWS SAAT AG, KWS MAIS GmbH and PLANTA GmbH, which are all located at the company's headquarters in Einbeck, Germany. Employees at German breeding stations are also included. The focus of the facts and figures for the areas of product responsibility (cf. the sections "Sugarbeet Seed Processing" and "Customer Consulting") is on the sugarbeet segment, since this is the largest segment at Einbeck.

KWS' sustainability reporting in the Internet is augmented successively and may thus have a different boundary than this report in the medium term.

In line with the two-year cycle, the next Sustainability Report of KWS SAAT AG will be published in 2010.

### More information:

 [www.globalreporting.org](http://www.globalreporting.org)



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## Foreword by the Chairman of the Executive Board



Philip von dem Bussche  
Chairman of the Executive Board

**Dear Readers and Friends of KWS,**

We are pleased to present you with KWS SAAT AG's first Sustainability Report.

The decision to publish a Sustainability Report grew from the idea of reporting on the ecological and social aspects of our company's activities in a form separate from the Annual Report, which details the economic side of KWS. Sustainability and a sense of responsibility for the environment, protection of resources and the principle of providing for the future – these are values that KWS has always been committed to as a result of a long-term business model that is closely tied to nature.

After all, an intact natural world and available resources, such as soil, air and water, are essential to crop growth and the continued existence of a plant breeder. Biological processes and their immense potential never cease to amaze us as we discover, understand and use them – and that also teaches us humility in preserving nature for the generations after us.

One of the key issues here is the responsibility we assume through our products. Our core business is research into, breeding and the continuous development of top-quality plant varieties, and that also involves assessing the consequences of our products for farmers, our customers and nature. We strive to tackle this challenge with innovation and far-sighted thinking.

As a company with a tradition of family ownership, we also bear a responsibility toward our employees. Satisfied, motivated and highly qualified employees are crucial if a company is to survive and thrive in the face of ever fiercer competition. That is why we foster the development of our employees wherever we can and ensure a performance-oriented, plea-

sant working environment. As a neighbor and business partner to our region and an economic factor here, we are committed to responsible action, active dialogue with our stakeholders and fair dealings with each other. Our mission is to make a positive contribution to society's advancement.

With this Sustainability Report, we want to demonstrate our responsible and value-oriented approach in all areas of our business operations. We have broken new ground in creating it and are aware that this first report cannot claim to be comprehensive. We have decided, for example, to focus our reporting on activities related to sugarbeet seed processing at our headquarters in Einbeck. This focus does not apply to our comments on corporate governance and research and development. The boundary is to be expanded continuously in coming reports. We have been guided by the Global Reporting Initiative standard, which we will also use in creating our future Sustainability Reports.

Transparency, openness and honesty are the values by which we traditionally measure our actions. Our goal is therefore to provide you with background and objective information on what we do by reporting the facts in a neutral fashion. With this report, we would like to examine our operations in the light of sustainability, discuss the risks, opportunities and conflicts arising from our responsibility for sustainable products, and reveal particular future perspectives. The greatest challenges facing us as a plant breeder are climate change, food shortages, competition for the use of agricultural areas for food, fodder or bioenergy, criticism of green genetic engineering and recruiting qualified employees. Yet these challenges also present our greatest opportunities. They relate to training young people and our contribution to feeding the world and protecting its climate with bioenergy as a climate-friendly alternative to fossil fuels.

As part of this, we develop new plant varieties that adapt to climate change yet deliver high yields and are resistant to diseases and pests. No country or company can master the challenges of the future on its own. As an international plant breeding company whose products stand at the beginning of the food chain, KWS is conscious of its global responsibility and is committed to doing all it can to help secure the future.

Seeding the future – that means sustainability and future orientation in our thoughts and deeds.

We would like to thank everyone who has collaborated in creating this first Sustainability Report from KWS, and we hope you find it to be interesting and stimulating reading.

On behalf of the Executive Board, I offer my best regards from Einbeck.

A handwritten signature in black ink that reads "Yours Philip Bussche". The signature is written in a cursive, slightly slanted style.

Philip von dem Bussche  
Chairman of the Executive Board

# Company Profile

## Seeding the Future – Since 1856

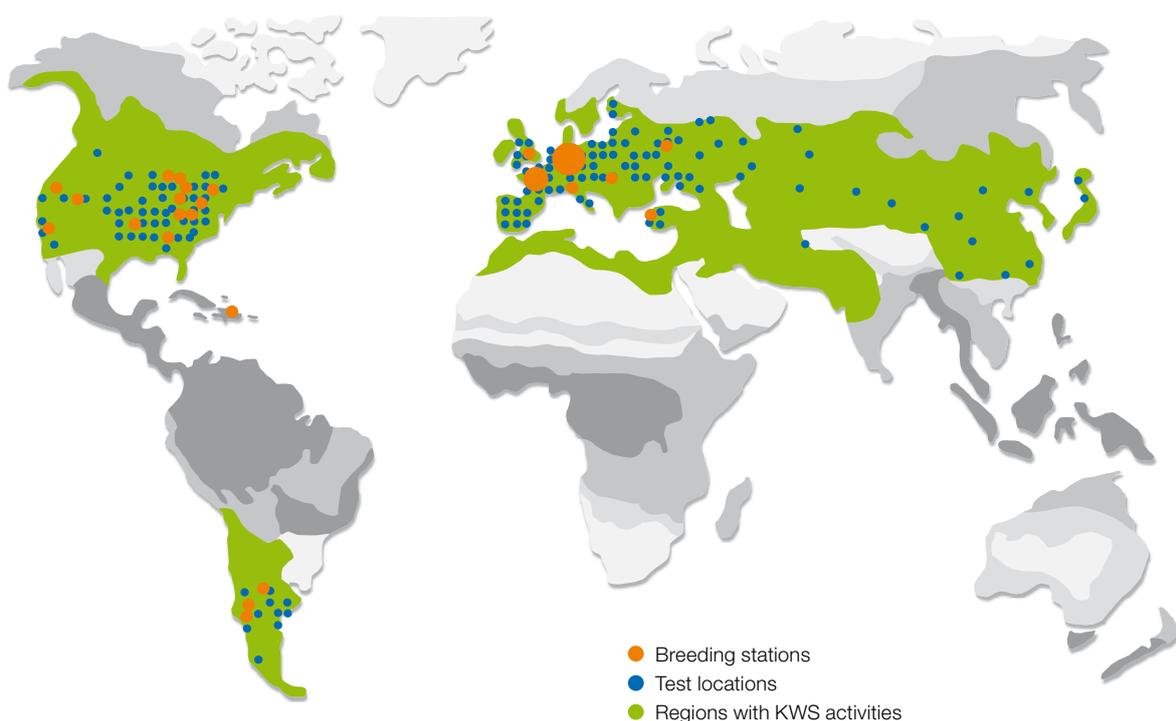
KWS was founded in Klein Wanzleben near Magdeburg in 1856 and converted to a stock corporation named Zuckerfabrik Klein Wanzleben vormals Rabbethge & Giesecke AG in 1885. At the end of the Second World War, British troops relocated the company to Einbeck, where the company's headquarters are now situated. Starting from these very humble beginnings, its objective was then to catch up with the leading international plant breeding companies. KWS now operates in 70 countries and has 2,856 employees – of whom 1,028 work at KWS SAAT AG, KWS MAIS GmbH and PLANTA GmbH. Apart from KWS SAAT AG, 44 subsidiaries and associated companies are consolidated in the KWS Group. Its product portfolio comprises all the main agricultural crops for the moderate climatic zone, in particular sugarbeet, corn, cereals and oil seed such as rapeseed and sunflowers. Our operations relate to growing plants for the production of food, fodder and energy for all methods of agriculture – conventional, organic or using genetically optimized varieties. Seed production and distribution of these crops are organized in the Sugarbeet, Corn (including oil seed) and Cereals segments, while KWS' core compe-

tence – breeding new varieties – is located in the basic segment of Breeding & Services, from where the varieties are licensed internally to the product segments.

Broad diversification in products and markets is a key requirement for the company's future development in what is a largely consolidated industry. However, a crucial factor is our innovative strength, which is reflected in the approvals of new products. It must be noted in this regard that the development of a variety, including the mostly official approval processes, takes more than ten years. Worldwide, we obtain around 250 distribution approvals for new varieties every year.

The KWS brand is an expression of our company's more than 150-year history. It embodies all the values that have grown and been lived over all these years and that generations of KWS employees have established and evolved in dialogue with our customers. The result is deep trust in our products and workforce.

KWS: A worldwide presence in the moderate climatic zone



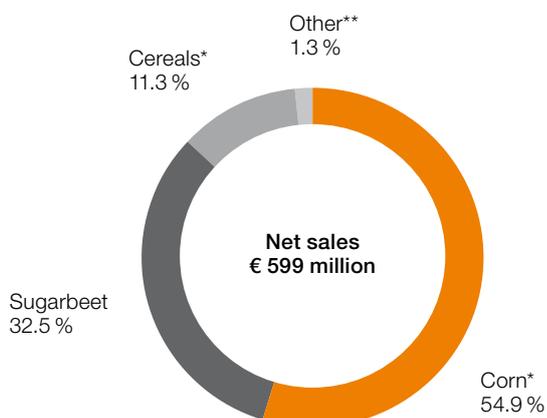


Einbeck has been KWS SAAT AG's headquarters for more than 60 years. More than 800 employees work there in research and breeding, sugarbeet seed processing, distribution and administration

The cornerstones of the KWS brand include:

- Sustained and large investments in research and breeding so that we can give our customers varieties that keep on offering higher yields and hardiness. Our goal is to identify trends in agriculture at an early stage so as to develop future-oriented solutions.
- Nurturing personal relationships. We attach great importance to being a trusted partner and expert advisor to our customers.
- Our independence as a seed specialist. Our independence as a company with a tradition of family ownership ensures our ability to make decisions freely and to operate sustainably.

The KWS Group – Sales by segment  
Fiscal year 2007/2008



\* also includes oil and field seed  
\*\* includes services and farming

The KWS Group generates net sales of €599 million from seed business with agricultural crops, which makes it the world's No. 4. This is the result of sustained growth in net sales at an annual average of 6% over the past ten years. Our operating income (EBIT) has also grown to the same extent, despite a steadily growing research and development (R&D) budget and capital expenditure – in particular on developing new markets – that is always above depreciation. Our future goal is likewise to achieve average sales growth of at least 5% and a double-digit EBIT margin.

More information:  
 Innovation and Sustainability  
[www.kws.com](http://www.kws.com)

# Management with a Sense of Responsibility

## Plant Breeding – Challenge for an Industry

### Our Sustainability Approach

Our core business is to provide seed in the markets of the moderate climatic zone for farmers to grow plants for the production of food, fodder and energy. The focus of all the company's activities has been and is to produce and offer better seed. "Better" means seed that delivers optimum yields and is tailored to our customers' wide range of very different regional and climatic conditions and requirements. As part of this, we also have to find answers to the effects of climate change or the need to feed the world's growing population.

Plant breeding is not an ad-hoc business that is accomplished from one day to the next. In our daily work, we are accustomed to thinking in terms of generations and working with generations of plants. Consequently, time is a factor of central importance in several respects. It takes ten to twelve years to develop a new variety and put it on the market. New requirements for a variety's quality and features or the occurrence of diseases that might impact the plant's growth must be taken into account in development work at an early stage.

In breeding new varieties, we have relied unswervingly since our beginnings on developing the latest breeding and research methods. That is why we invest an above-average proportion of our sales revenues in research and development compared with the rest of the industry – and that pays off. Modern plant breeding is no longer conceivable without biotechnology methods. Of great importance in this connection is genome research, which – despite tangible successes – is still in its infancy regarding the leveraging of its potential. We are tackling this challenge by intensifying our research and putting together and expanding our team of scientists.

KWS is doing all it can to achieve breeding progress of 1% to 2% a year in plant performance in the future and at the same time to preserve the available genetic resources in their wide diversity. As part of this, soil as a factor of production and the conservation of its fertility during its use are of great importance. All in all, this value added process in breeding demands insight and far-sightedness, strategic planning and responsible actions. Our employees act in this spirit, decisively and on their own responsibility.

#### Implementation of the requirements

The basis of our approach is for all functional areas of KWS to act in compliance with existing national and international legal regulations and guidelines, responsibly and with sustainability in mind. This must be ensured at all levels so as to minimize business risks and increase sustainability. That is why KWS – in compliance with the German Corporate Governance Code – has established a comprehensive system for responsibility management to assist all its employees in discharging and fulfilling their responsibilities. It is based essentially on four mainstays:

- Integrated management system and risk management
- Compliance
- Responsibility for the environment and society
- Dialogue with stakeholders – communication and transparency

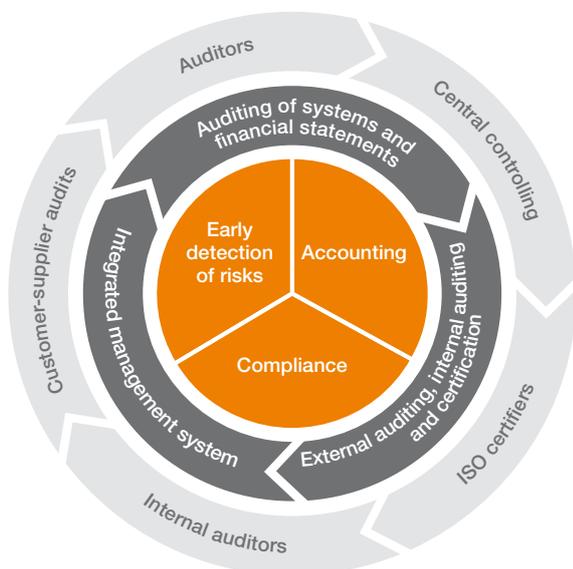
All major aspects, such as product responsibility, environmental protection and social concerns, are addressed. This is also reflected in KWS' principles "Development with a Distinct Image", which were adopted in 2000 and since then have been binding as guidelines for responsible action on the part of KWS. The approach of sustainability is thus a guiding principle of KWS vis-à-vis customers, shareholders, employees and consumers – i.e. toward humankind and nature.

# Compliance

In their day-to-day work – in interacting with each other, customers and government agencies – our employees have to know in every situation exactly what freedoms they have and to what extent these freedoms are limited. In this connection, KWS understands compliance as meaning more than just entrepreneurial activity in accordance with national and international laws and guidelines. Our compliance system also ensures that rules of conduct and behavior accord with the company’s ethical principles. How does that work in detail?

The central contact person for all matters relating to compliance is the Compliance Officer. He or she advises the business segments in applying laws, regulations and rules of conduct and controlling their observance. The officer can be reached at all times through our compliance hotline. A regularly published Compliance Newsletter informs employees of the latest rules and regulations, for example about the double-checking principle that governs the signing of documents. In preparing and enforcing planned measures, the Compliance Officer is supported by a committee in which the Executive Board is also integrated through participation of one of its members.

## Risk management network



The set of instruments developed by the compliance organization is crucial as a guide for employees in their everyday work. Since July 2007, KWS has defined basic rules of conduct for all business activities in a clear and understandable written form in its “Code of Business Ethics”. One special focus is made up of the regulations it contains on conflicts of interest. A separate international Anti-Corruption Policy precisely defines the constraints on accepting and giving presents and donations, issuing invitations and paying for trips. As a publicly listed company, KWS strictly ensures that insider information is treated confidentially, i.e. is not disclosed to third parties or used by employees themselves. Here, too, an insider policy and an insider declaration have been laid down in writing and can be obtained by all employees. The external auditor and tax consultant Ernst & Young audited the effectiveness and sustainability of this compliance system in May 2008 and assessed it as being in sound working order.

## Risk management

The task of a risk management system is to identify risks for the company’s value creation at as early a stage as possible, evaluate the likelihood of their occurring and their potential impact and to enable an adequate response. In accordance with this definition, our risk management activities are integrated firmly in controlling and in the quality and process monitoring system. Procedural instructions in the integrated management system govern how risks are identified in the individual units by means of a key ratio control system. The clear assignment of responsibilities and competencies means that negative impacts from market changes, technology developments and changes in general political conditions can be countered quickly and rigorously.

Internal and external dialogues are of great importance in implementing sustainability. We communicate what we do. As a result, our business activity is clear and transparent at all levels and in all areas – for customers and consumers as well as others.

### More information:

-  Innovation and Sustainability, Environmental Management
-  [www.kws.de/nachhaltigkeit](http://www.kws.de/nachhaltigkeit)
- [www.kws.com/ir](http://www.kws.com/ir)

## Dialogue with Stakeholders

Maintaining a good culture of dialogue is more important today than ever. With the increased challenges facing agriculture now and stemming from the rising global need for food and energy, from climate change and the associated economic, ecological, social and political consequences, the array of issues and discussion partners is also growing. These partners include representatives of science and research, the financial market, media, politics, political parties and legislative bodies, agricultural markets, non-governmental organizations (NGOs), associations, public authorities, vocational organizations, churches, consumer cooperatives and social insurance funds. KWS' dialogue with these partners is characterized by openness and trust. Under the "Code of Business Ethics", our employees are committed to mutual respect and to living up to our responsibility. That is because every single employee bears responsibility for KWS in his or her social context, in relations with public authorities, in public and at the company itself.

KWS is a member of many agricultural and related associations, professional groups and scientific institutions and is represented in these organizations. We share scientific knowledge worldwide through our participation in congresses, cooperation with universities and our own local scientific colloquiums and events. We conduct a continuing dialogue with representatives from the world of politics and government at the municipal, state, national and even European Union levels. Our goal is to help shape opinion and the climate for research in Germany, as well as the general social and political conditions for using green genetic engineering.

The 5,000 visitors to KWS in Einbeck every year come mainly from the agricultural industry. This dialogue is supported by photographic and written informational material for internal and external communication – for example, the company magazine "KWSIntern", the external newsletter "KWS in Dialog" and brochures on agricultural topics.

Intensive dialogue with scientists and researchers has long been a tradition at the company. Prof. Christiane Nüsslein-Volhard (winner of the Nobel Prize for Medicine in 1995) and Prof. Ernst-Ludwig Winnacker (member of the Supervisory Board of KWS from 2003 to 2007 and Secretary General of the European Research Council), visited us last April to learn more about KWS' current genetic engineering projects and our research company PLANTA. The status of the social debate on "green genetic engineering" in Germany was discussed with the Executive Board member responsible for breeding and research and the Chairman of the Supervisory Board.

The state government of Lower Saxony conducts a program in business and administration in cooperation with the Northern German Institute for Trade and Industry in Hanover. It is designed as a two-week exchange for employees of ministries and government agencies with business. It has been in existence for more than 20 years and KWS has taken part in it intensively since 1990. In this time, 15 employees have completed practical training at KWS and 15 at Lower Saxony's Ministries of Agriculture, the Environment, Finance and Economics and in the state chancellery.



Sharing information on the subject of biotechnology in plant breeding: "An indispensable method of securing our food supply" (Center: Prof. Christiane Nüsslein-Volhard and Prof. Ernst-Ludwig Winnacker; on the right: Dr. Andreas J. Büchting, Chairman of the Supervisory Board)

### Debates and controversies

By using genetic engineering methods in our research and development work in plant breeding, we have also taken on the social responsibility for introducing this new technology. We have a commitment to provide extensive information on this issue at our events and in our press releases and informational materials. The development of methods and possible applications for green genetic engineering in agriculture has been accompanied by intensive discussion on its opportunities and risks in Germany and Europe since its beginnings. We conduct this debate about green genetic engineering with all interest groups, such as scientists, political representatives, churches, associations, customers and NGOs. The open, objective yet critical and continuous sharing of information, opinions and experience enables us to reflect on the objectives, methods and results of our work. In addition, we discuss our research and development projects with independent experts from a wide range of scientific disciplines in the “Plant Breeding Advisory Board” founded by KWS.

We applied to the German Federal Office of Consumer Protection and Food Safety (BVL) for permission to conduct field trials with genetically modified sugarbeet that is tolerant to the herbicide Roundup® at several locations in 2008 for research purposes, and this approval was granted on March 31, 2008.

The location for the trial in Northeim was occupied by opponents of green genetic engineering on April 12. KWS had informed inhabitants at the trial locations about the project even before the BVL gave its permission. The sugarbeet was sowed on the occupied field on April 29 in the presence of 450 employees, who showed their commitment to Germany as a place for conducting research. The trials at the other locations were staged under guard and without any further incidents during the vegetation period. We are now analyzing the trials.

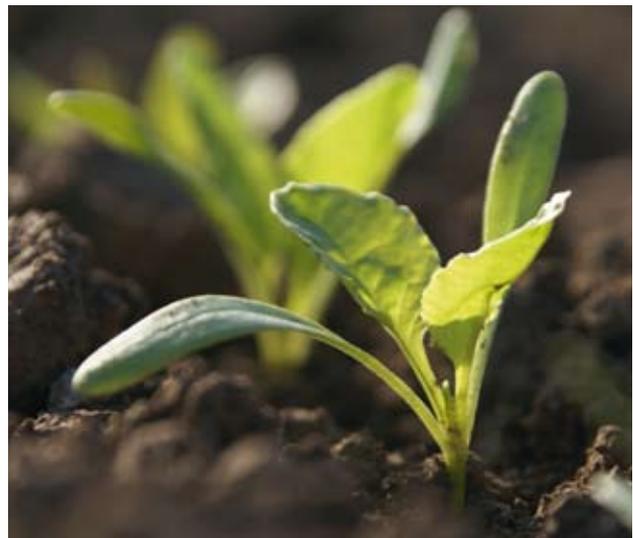
#### More information:

 Plant Breeding Advisory Board, Research and Breeding, Customer Consulting, Social Commitment

 [www.kws.de/freilandversuche](http://www.kws.de/freilandversuche)



Preparing the soil to sow genetically modified sugarbeet in the trial field



Start of growth – genetically modified sugarbeet emerging at the end of May

#### Objectives

Strategic objective	Measures	When?
Continuing dialogue	Regular newsletter: “KWS in Dialogue”	FY 2008/2009
	Event on the subject of freedom of research with German universities	FY 2008/2009

# KWS' Plant Breeding Advisory Board

## Forum for dialogue, focusing on the assessment of the impact of technology

The "Plant Breeding Advisory Board" already has a long tradition and, as an external instance advising KWS, is one of the most important institutions in our dialogue with stakeholders. It was founded in 1990 as the "Genetic Engineering in Plant Breeding Advisory Board," and until 2005 it dealt primarily with questions on the use of green genetic engineering. In 2006, it was renamed the "Plant Breeding Advisory Board" and its purview expanded to include all areas of current and future importance to agriculture. The Advisory Board is composed of members who serve for a limited period of time in accordance with the principle of rotation. There are five to seven honorary, independent and personally appointed members who can contribute a wealth of experience from different technical backgrounds and academic and scientific disciplines: molecular biology, theology, philosophy/ethics, ecological and conventional agriculture, the assessment of technology and agricultural economics. Questions of relevance to KWS are passed to the Advisory Board's members so that a diversity of opinions and new ideas can be gathered and future developments for KWS discussed and evaluated. The meetings are also used to look back at, reflect on and assess the effects of KWS' business activity on society and the environment.



Transparency through continuous reporting in dialogue with Advisory Board members

Twice a year, questions and problems relating to the use of new technologies in agriculture are discussed in the Plant Breeding Advisory Board with representatives of the company, including members of the Executive Board and external speakers.

Various questions are raised in an objective discourse at these meetings. Ethical, ecological, social, political, economic, technological-scientific and normative assessments and interests are brought to light. Ideas are exchanged on the basis of mutual trust and with the greatest possible openness, know-how and transparency. Research projects and development strategies are also presented so that options and, when possible, recommendations for the company can be jointly formulated. The objective is to include different social demands and perspectives, including decidedly critical views, in expanding the company's knowledge and in its decision-making. The KWS employees who take part in these meetings thus also have an opportunity to contribute their own views and assessments of new technologies and future developments to the discussion and to expand their horizons. As a result, the Advisory Board also promotes internal communications at the company in the spirit of corporate governance.

The suggestions and recommendations made by this body are of great relevance to KWS' Executive Board. They help support the company's development and underpin its strategies and are implemented at the company through appropriate activities. The Advisory Board thus acts as a stimulus, sensor and reflector for current and future challenges faced by KWS. It also sees itself as an institution for evaluating technology and assessing its impact, and to this day it remains one of a kind in our industry.



The Plant Breeding Advisory Board – discussion and scrutiny of new developments

**Under discussion: competition for cultivation areas**

In 2007 and 2008, the Advisory Board discussed the perspectives, opportunities and risks of cultivating energy plants in connection with the issue of climate change and the resultant competition with food crops.

One of the findings was that KWS is well prepared in terms of its breeding objectives for energy plants: Stress tolerance to heat, dry climates, increasing pressure from diseases, ozone stress, UVB radiation and a growing CO2 concentration. Directly linked to this is also the development of new methods for measuring related plant characteristics so as to enable more systematic selection of suitable genotypes.

In the reporting period, the structure and contents of this first Sustainability Report of the company were discussed with the Advisory Board’s members. A further and major focus in the spring of 2008 was the discussion of the public perception of the open-air trials of genetically modified Roundup® Ready sugarbeet and how KWS handled the demonstrations against these trials by persons occupying the fields.

The Plant Breeding Advisory Board will hold its 40th meeting this fall and deal with the subject of biodiversity and plant genetic resources.

**More information:**

-  Dialogue with Stakeholders, Energy Plants, Future Prospects
-  [www.kws.de/nachhaltigkeit](http://www.kws.de/nachhaltigkeit)
- [www.kws.de/gentechnik](http://www.kws.de/gentechnik)

## Research and Breeding

We have the goal of supporting all farmers with custom solutions and offering ideal varieties and expert advice for their operations. Our outstanding commitment to research and breeding is the foundation for our business success.

Agriculture supplies a growing number of people with food, fodder, regenerative raw materials and energy. High-quality seed and our crops' high-performing varieties are at the beginning of every value chain in farming. The breeding progress in the performance of the varieties KWS breeds is between 1% and 2% a year, depending on the plant type.

### Development of varieties for modern, sustainable agriculture

KWS has been breeding plants for the moderate climatic zone for more than 150 years. The goal of our research and breeding (R&D) is to develop competitive plant varieties that enable efficient and resource-sparing agriculture in the markets that are relevant to us. For a long time now, KWS has invested around 15% of its annual net sales in R&D, one of the highest figures among global seed companies. Some 1,000 employees worldwide work in R&D, over 100 of them in applied biotechnology. KWS' expenditure on research in fiscal years 2006/2007 and 2007/2008 totaled around 75 and 80 million euros respectively.

KWS' plant breeders leverage the latest research results from agricultural and plant science. Partnerships with public and private research institutes worldwide are a core element of our R&D activities. Modern plant breeding is no longer conceivable without biotechnology methods; of great importance for us is genome research, which analyzes characteristics at the molecular level. New methods for molecular marker technology (diagnostics) and genetic engineering can be derived from the results of genome research. We use genetic engineering methods in breeding openly and transparently, well aware of our responsibility.



Work in the sugarbeet breeding garden

We strive to deliver products that can be used for all kinds of agriculture: conventional farming, farming with genetically optimized plant varieties, and ecological agriculture. Most of our seed is still sown in conventional farming operations. Genetically modified varieties account for 22% of the KWS Group's net sales. These products are marketed almost wholly in North America.

KWS SAAT AG's breeding departments are organized in a crop-specific structure. They have a broad pool of breeding material and a large network of breeding and trial stations in all the world's moderate climatic zones. As a result, the individual candidates can be tested under a wide range of different climatic and local conditions to determine whether the varieties are suitable for cultivation.

The breeders are supported in developing varieties by service units such as a chemical laboratory and the Phytopathology Department. Special data processing programs are available for statistical analysis of the trials and data management and documentation across departmental boundaries. The scientists and technical employees of our research company PLANTA provide their scientific know-how at the level of the plant cell, molecular genetic analyses and the application of genetic engineering methods.



# Market-Oriented Project Planning and Control

The KWS Group runs its own breeding programs for sugarbeet, corn, oil plants, cereals, sorghum and field seed. KWS SAAT AG's R&D projects are agreed on between R&D management, the persons in charge of the crop-specific breeding departments, and the division management, which defines current market requirements. The projects are then proposed to the Executive Board for adoption in the annual budget process.

As part of comprehensive reporting, development objectives are defined, progress and the achievement of milestones are regularly reviewed, and changes or adjustments are made to the individual programs and projects. The core

component of this reporting is an annual performance status report. It is created in the individual breeding departments and submitted to the Executive Board and unit management. In analyzing the performance status, the results of official variety tests and KWS' own performance tests on varieties and young breeding material are evaluated and changes in breeding methods explained.

The performance trends are compared with the annually reviewed breeding objectives from the units and the targets defined by the overall company's strategic planning every two years. These findings form the basis for defining the contents, budgets and structure of the R&D program.

## Focus of KWS SAAT AG's R&D activities

### Sugarbeet

- Strengthening and further development of resistance to diseases and pests, such as Rhizomania, Cercospora, Rhizoctonia and nematodes
- Intensification of research and breeding activities for energy beet
- Expansion of marker technology and its integration in practical breeding programs

### Corn

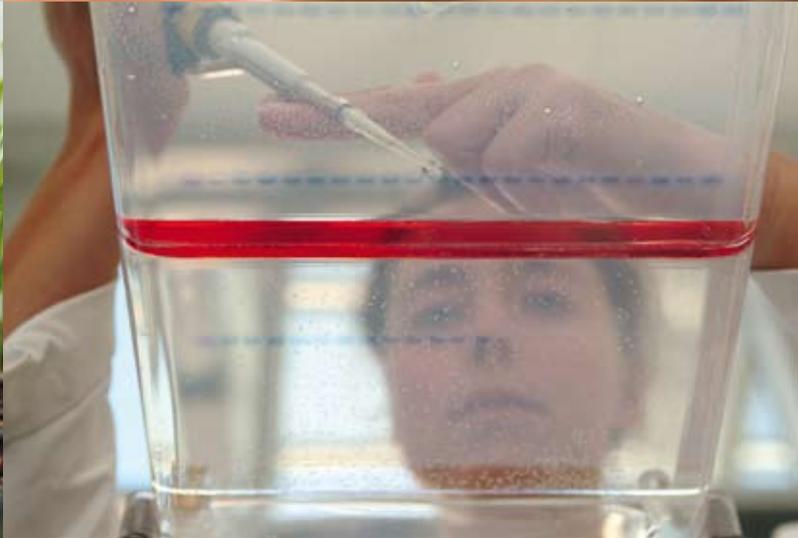
- Strengthening and further development of regional breeding programs in France, Southeastern Europe and the U.S.
- Expansion of marker technology and its integration in practical breeding programs
- Intensification of the genome research programs
- Intensification of cooperation with our partners in the field of molecular breeding

### Rapeseed

- Changes in breeding methods to speed up progress
- Further development of marker technology

### Overarching topics

- Expansion of research and development to enable optimization of varieties by genetic engineering
- Expansion of research into the use of plants as regenerative raw materials (use for energy and for obtaining high-quality constituents)
- Establishment of breeding and research programs for new types of plants in KWS' portfolio
- Expansion of breeding activities in Russia
- Expansion and strengthening of data processing
- Realignment and strengthening of industrial property rights activities



Breeding varieties requires a diversity of methods in diagnosing new characteristics and growing plants

### Sustainable solutions

Our breeding programs for new varieties have made progress in many fields in the reporting period:

- Improvement in the competitiveness of Rhizomania-resistant sugarbeet varieties
- KWS is also producing winter beet in a very long-term research project. However, this requires regulation of the time of flowering and an improvement in the beet's tolerance to cold and frost. Consequently, it will be 10 to 15 years before the beet created using this research approach will be ready for the market.
- Progress in the performance of corn varieties, in particular for Southeastern Europe, as well as for France and certain maturity zones in the U.S.; dominating performance of corn varieties for the German market; progress in breeding corn varieties for ecological agriculture.
- Progress in the performance of young rapeseed breeding material on the basis of special hybrid breeding methods

### Farmers trust our varieties

This breeding success is reflected in the number of annual distribution approvals for new KWS varieties granted by the relevant authorities in the individual countries. In fiscal year 2006/2007, 108 sugarbeet, 112 corn, 26 cereal and 21 varieties of other crops (a total of 267 worldwide) were registered. In fiscal year 2007/2008, 114 sugarbeet, 90 corn, 56 cereal and 6 varieties of other crops (a total of 266 worldwide) were registered.

A point of particular note was the listing of the corn variety KURATUS with genetically engineered resistance to the European corn borer by the German Federal Office of Plant Varieties in 2006. In 2007, KWS' first genetically improved sugarbeet, a Roundup®-tolerant variety, was introduced for commercial cultivation in the U.S. market. By 2008, this variety already accounted for 60% of our net sugarbeet sales in North America.

#### More information:

 Company Profile, Future Prospects, Customer Consulting, Promotion of Science and Research

 [www.kws.de/produkte](http://www.kws.de/produkte)  
[www.kws.de/gentechnik](http://www.kws.de/gentechnik)

# Research on Ecological Agriculture

Organic farming operations make special demands regarding the seed and varieties of our crops. To meet these needs, KWS has run its own 480-hectare organic farm for testing purposes since 2002.

Breeding trials, national variety trials, experiments in seed treatment and demonstration fields are integrated in the customary crop rotation of the Wiebrechtshausen monastery estate. Regular field days, such as the Organic Sugarbeet Day or Organic Rapeseed Day, and other informational events permit an intensive dialogue with our customers who farm organically. Ecological agriculture currently accounts for around 4% of cultivated areas in the EU 27.

KWS is developing alternative seed technologies in cooperation with research partners, since the seed used in ecological agriculture must not be dressed. We have our own breeding programs for corn and cereals in this area. The main breeding objectives are suppression of weeds and resistance against seed-borne diseases. Organic farming differs from conventional agriculture in that nitrogen is available later in the vegetation period. To a greater extent than in conventional agriculture, the focus in organic farming is not only on yield potential, but also yield stability.

A research project on breeding methods conducted together with the University of Hohenheim revealed that organic trials were just as meaningful and informative as conventional trials with corn. However, the different demands made of varieties in ecological and conventional cultivation result in different grading of the varieties in terms of yield. Regardless of this difference, organic and conventional breeding can benefit greatly from each other in characteristics not related to yield. That is because organic varieties must possess additional positive characteristics that give them greater yield stability even on conventionally farmed fields.

## Development of varieties for ecological agriculture

In March 2007, KWS' 5133 ECO became the first corn variety also selected under ecological farming conditions to be registered by the Federal Office of Plant Varieties. It is distinguished by good weed suppression because of its low sensitivity to cold and speedy juvenile development.

The extensive positive experience we have gained since 2003 in selection for organically farmed areas, and not least the breeding successes we have been able to achieve in a very short time, have led us to intensify breeding for ecological agriculture.



KWS' Wiebrechtshausen monastery estate in the Northeim district, where organic farming trials are conducted

More information:

 [www.kws.de/oeko](http://www.kws.de/oeko)

## Objectives

### Strategic objective

Breeding of further characteristics in corn:

- Producibility under organic conditions
- Tolerance to deeper sowing to prevent seed being eaten by crows
- Adaptation of energy corn varieties to organic agriculture

# Energy Plants Offer Diverse Opportunities

Bioenergy is one of the most important sources of renewable energy for the end products electricity, heat and fuel. With its research and breeding activities in the field of energy plants, KWS is making a major contribution to securing the supply of energy in the future and protecting the climate. Our research work on energy plants focuses on producing biomass.

KWS develops energy plants that

- Can be produced sustainably and with sparing use of resources
- Offer farmers an ecologically and economically sensible alternative and
- Increase the efficiency of processing methods.

Our current varieties of rapeseed, cereals, corn and sugarbeet are excellently suited for producing biodiesel and bioethanol. Crucial criteria in producing crops for these uses are their oil or sugar and starch content in conjunction with a high yield per unit area.

The main factor influencing cost-effectiveness is the yield potential of energy plants. That is why our research activity into energy plants focuses on increasing yields of biomass. Unlike the breeding of crops for grain, it is crucial here to increase the total dry mass yield so as to optimize the quantity of gas per hectare. The highest energy yields per unit area are achieved by fermenting biomass from whole plants to produce biogas. In addition, the nutrient cycle is supported by returning the fermentation residues to the fields as fertilizer.

In a special breeding program for **corn**, we are increasing mass growth by strengthening its tolerance to cold and by shifting the time at which it matures. Its hardiness, performance under dry weather stress and physiological factors in biomass accumulation are to be improved.

**Sugarbeet** also has enormous potential for producing biogas. In addition, modified cultivation and harvesting methods

can sharply increase the yield over production for sugar. Of the energy plants, sugarbeet achieves the highest dry mass yields and, of all the crops, ferments fastest into biogas, delivering high concentrations of methane gas.

**Sorghum** has very good drought tolerance, a short vegetation period and a very high water use efficiency of just 200 liters per kilogram of plant dry mass produced. It needs only 600 millimeters of precipitation a year for a good yield and would be an alternative in the dry eastern part of Germany. However, the weather in Germany is too cold for most sorghum varieties. Evaluation of various sorghum origins began in 2005.

## Activities in the reporting period

Sunflowers have outstanding fermentation properties due to their oil content. In May 2007 the variety METHASOL, which is especially well suited for use in the biogas sector, was entered in the European variety list.

The 2nd KWS Energy Plant Colloquium in November 2007 provided an opportunity to learn more about the latest findings of science, research and practice on the subject of biogas. The presentations given at the colloquium are available in the Internet at [www.kws.de/energie](http://www.kws.de/energie).

The Institut für Energetik und Umwelt GmbH in Leipzig has done a study on the energy and climate efficiency of biofuels on behalf of KWS. This study can also be downloaded from [www.kws.de/energie](http://www.kws.de/energie).

## Challenges in the bioenergy sector

Bioenergy's potential is far from being exhausted, and there is a considerable need for research. There are still significant differences in energy yield and thus in the climate balance for the individual methods. One major challenge in using bioenergy as part of achieving a sustainable supply of energy is to increase efficiency throughout the value chain. As a plant breeding company, KWS' goal is to cooperate closely with energy producers and plant and machinery



Producing biogas from biomass is the focus of the research activities we began in 2002

manufacturers to improve the plant varieties bred up to now and the methods for extracting energy. This will necessitate intensive research and development in the coming years, something that requires stable overall political conditions.

In the agricultural markets, there is competition between using areas to cultivate energy plants and to produce food and fodder and regenerative raw materials. It is our conviction that these diverse uses of plants can and must coexist in the future. That demands efficient use of the limited agricultural areas available and thus a continuous increase in the yield performance of plants.

**More information:**

 Plant Breeding Advisory Board, Future Prospects, Promotion of Science and Research

 [www.kws.de](http://www.kws.de)

Medium-term objectives for energy plants		
Focal areas	Measures	When?
<p><b>Corn</b> Increase in corn dry mass yields from 180 dt/ha to 300 dt/ha (corresponds to 10,000 m<sup>3</sup> of methane)</p>	<ul style="list-style-type: none"> <li>- Crossing of cold tolerance and short-day genes to increase mass growth step by step</li> <li>- Improvement in yield stability by means of hardiness and dry weather tolerance</li> <li>- Physiological improvement in biomass accumulation</li> </ul>	2012
<p><b>Sorghum</b> Development of a variety that can also be grown in Northern and Eastern Germany</p>	<ul style="list-style-type: none"> <li>- Improvement in cold tolerance</li> <li>- Improvement in resistance to diseases</li> </ul>	2012
<p><b>Rye</b></p>	<ul style="list-style-type: none"> <li>- Increase in dry mass yield to 160 dt/ha</li> </ul>	2012
<p><b>Winter beet research project</b></p>	<ul style="list-style-type: none"> <li>- Improvement in tolerance to cold and frost</li> <li>- Regulation of the flowering time to avoid bolters</li> </ul>	2020

## Future Prospects



Impact of extreme weather conditions on plants: corn in a drought (left) and sugarbeet hit by hailstones (right)

Climate change, a shortage of food and the finite nature of fossil fuels are now global challenges that no country or company can solve on its own. Modern plant breeding is a key technology in the 21st century, and it will play a major role in supplying food and raw materials to a world population that will soon touch seven billion.

### Rising demand for agricultural products

Continuous population growth, above all in Asia and Africa, means that the demand for food continues to grow in absolute terms – even as agricultural areas decline worldwide. As prosperity grows, there is rising demand for meat, especially in Asia. However, producing one kilogram of meat takes seven times that much plant fodder. Crop failures due to the weather have caused worldwide cereal inventories to shrink to 20% of the annual consumption level of recent years. As a consequence of such shortages, the prices of most agricultural products have risen sharply at times. This situation is worsened by the regional effects of climate change.

To increase global agricultural production, plants must also be bred for marginal and tropical locations. The situation in disadvantaged regions and for small farmers can be improved by the transfer of knowledge and methods or by public-private partnerships. Above all, this calls for international agricultural research and funding by the international community.

### Climate change means different cultivation conditions in agriculture

Climate change will probably lead to severe fluctuations in the weather, with the result that there may be an increase in extreme conditions such as heat, wind and large quantities of precipitation. Consequently, a variety must have a combination of many new properties, such as tolerance to drought, wetness and cold, hardiness and resistance to new diseases and pests. As part of our breeding programs, we are already continuously breeding crops that are adapted to climatic changes in many of their properties. For new breeding objectives such as better water use efficiency, however, it is first necessary to investigate the physiological bases of plants and develop new examination and testing methods that enable effective selection.

One of the greatest tasks in combating climate change is to reduce CO<sub>2</sub> emissions. By breeding energy plants, KWS makes a major contribution to protecting the climate, since CO<sub>2</sub> emissions are to be cut significantly through the use of bioenergy. Increasing yields saves scarce resources such as water or fertilizer. In addition, areas that are not used for farming and in which a great deal of CO<sub>2</sub> has been absorbed can be kept the way they are. This not only protects nature, but also does not burden the CO<sub>2</sub> balance.

### Breeders need genetic variety

Biodiversity covers the wide range of ecosystems, the wide range of species in these ecosystems and the genetic diversity within the species. The rapid climate changes that are forecast will probably leave little time for evolution's natural process of adaptation and will speed up the loss of diversity. It is of great importance in plant breeding to conduct intensive research into the genetic resources currently available, describe them and preserve them long-term in gene banks if necessary. KWS is involved in various projects for evaluating cereals and corn. Above all, however, political efforts and decisions are urgently needed so that genetic resources can be kept accessible to all interested parties everywhere in the world.

### Plants – an inexhaustible source of food and raw materials

Agriculture must adapt to these changes, use limited resources such as water and land efficiently and sparingly, and keep on increasing its productivity. We develop varieties and plant types that are ideally suited to their specific cultivation conditions and use.

By the end of 2009, KWS will invest around €20 million in expanding research capacities at its Einbeck location. With this investment, we are making a major contribution to the area's economic strength. An intensive search for suitable specialists with the necessary qualifications will be needed to fill more than 50 new jobs in the field of research & development.

Depending on the breeding objectives, cutting-edge breeding methods such as marker technologies and genetic engineering must be developed further and used commercially to support plant breeding and make it as efficient as possible. We believe that the growing acceptance of green genetic engineering in social discourse and large-scale use of genetically optimized varieties in the medium term are now indispensable in solving future challenges.

#### More information:

 Plant Breeding Advisory Board, Promotion of Science and Research

 [www.kws.de/produkte](http://www.kws.de/produkte)

### Centers of crop diversity



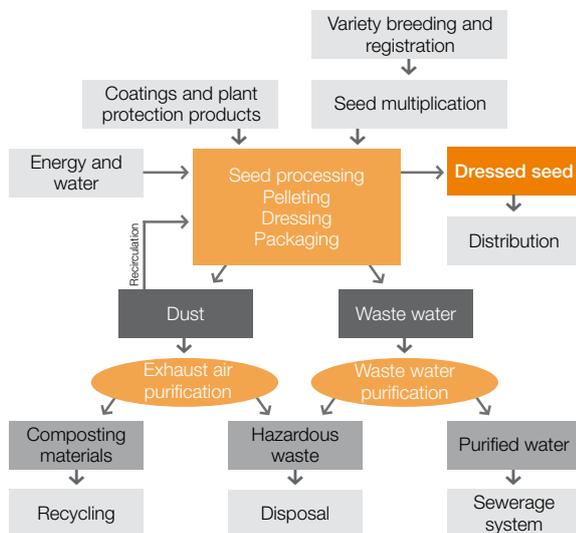
On his expeditions to collect seeds in the 1920s, the Russian geneticist Nikolai Vavilov observed that the genetic variation of crops is concentrated in a small number of "centers of diversity." His theory on the centers of origin of crops was of extraordinary importance to international research.

# Sugarbeet Seed Processing

## From seed to the finished product

KWS' mission is to ensure that every farmer has sufficient top-quality seed at all times. High seed quality is the result of a complex multiplication and processing procedure. It is carried out in an intensive network of detailed processes, the organization of which is supported by the integrated management system.

## Sugarbeet seed production



## Cleaning

Immediately after being harvested (mid-July to August) in the Southern European multiplication regions, the seed is cleaned to at least 99% and transported to Einbeck. The seed has a filling ratio (seeds with well-developed germs) of over 92%.

## Seed processing

In an automatic processing plant, the seed is graded and the different seed fractions are individually polished so that the resultant seed is largely spherical. Empty seeds and those with only incompletely developed germs are separated from the seed flow by means of air separators and gravity tables.

At the end of this cleaning process, only around 20% of the once harvested seeds continue their way through the processing plant. They all contain fully developed germs. Only optimally polished seeds with fully developed germs ensure a high percentage of field emergence even under difficult environmental conditions.

## Pelleting

The next step is to create the so-called "gray pill" by coating the polished seed with a water/glue mixture. All of the organic/mineral dusts produced in this process are collected and once again added to the pelleting product – around 86 tons in each of the last two fiscal years.

## Dressing

Active substances are applied to the gray pellet by means of fluidized bed equipment: fungicides to prevent fungal diseases and insecticides to protect against pests. The orange color of KWS is then applied to prevent abrasion of the active substances and direct skin contact with the fungicides and insecticides.

## Packaging

The dressed seed is then packed in folding boxes (1 U = 100,000 pellets) on the basis of the thousand grain weight. A new packaging plant was put into operation last year, among other things to minimize the number of folding boxes that have to be scrapped during the process.

## Key production figures

The steps involved in seed processing require energy in the form of electricity, heat and water, as well as other auxiliary materials and supplies. The consumption quantities correlate with the quantity of seed to be processed and its quality in the years it was harvested. Since we expanded our multiplication areas in fiscal 2007/2008 and produced a greater quantity of seed, more energy was used in seed processing that year. However, consumption per unit of seed has not changed substantially in the two fiscal years.

## Protecting the environment and saving resources in seed processing

All our process technology and coating recipes are the result of many years of development. KWS runs its own development department for seed technology so that it can keep on optimizing the quality of seed processing and field emergence for a large number of new varieties. During product development, the organic and mineral components used for the coating in pelleting are continuously examined to minimize the quantities of materials used and save resources. KWS makes certain that only approved substances that meet the necessary criteria for approval in extensive testing by the manufacturer and the approval authorities are used for pesticides and fungicides. This ensures that the effects on the environment that dressed seed can have

are constantly minimized. The quantity of the active substance in the pesticides and fungicides applied by farmers is a minimum of approximately 20 g/ha of sowing area and a maximum of around 120 g/ha of cultivated area.

The form of seed dressing we have developed allows farmers to reduce the number of times they have to treat their crops with pesticides and fungicides during the growth period and the quantity they have to use per hectare; it thus also helps reduce the quantity of such agents applied worldwide.

In addition, we also develop alternative seed treatment methods in seed technology. The seed we supply to organic farmers does not contain pesticides and fungicides – i.e. it is not dressed – and these treatments are intended to ensure a good start to plant growth after it has been sown.

The German Seed Marketing Act stipulates that the active substances used and warnings and application instructions have to be specified on the label of every package of seed. In addition, KWS has made all the active substances available as a list to all the Emergency Poison Contact Centers so that help can be provided as quickly as possible.

Biological waste is produced in the course of these various processing stages. It is recycled or disposed of, depending on its composition and contamination with pesticides and fungicides.

The strategic goal for the next two fiscal years is to plan, create and commission a new suspension dosing plant to further optimize consumption of pesticides and fungicides and improve work safety for our employees who work with these active substances.



High seed quality is the result of a complex processing procedure – control of the gravity tables

**More information:**

 Environmental Protection at the Company

 [www.kws.de/produkte](http://www.kws.de/produkte)

**Key figures for sugarbeet seed production**

	Unit	FY 07/08	FY 06/07
<b>Energy and water</b>			
Energy consumption (electricity)	MWh	2,948	2,374
Energy consumption (heat)	MWh	17,662	16,344
Water consumption	m <sup>3</sup>	39,256	38,716
Evaporation	m <sup>3</sup>	2,848	3,042
Waste water	m <sup>3</sup>	36,408	35,675
<b>Waste*</b>			
Biologically degradable waste	t	3,055	1,991
Waste from production for thermal recycling	t	66	82
Hazardous waste for disposal	t	189	122

\* Figures do not include industrial waste and recyclable technical materials – only production waste for sugarbeet (see the section Waste and Recycling)

# Customer Consulting

## Expertise – Knowledge – Service

Farmers expect breeders to deliver more than high-performing varieties and quality seed – they want expert advice on varieties and cultivation for their specific farm. KWS' goal is to meet these demands and to set standards as a seed specialist for farmers in providing consulting to customers on the cultivation of sugarbeet, cereals, corn and oil plants. The following uses an example to provide a description of our sugarbeet consulting activities for the Germany market.



Pelleted sugarbeet seed – 100,000 pellets are enough for one hectare

Our consulting services are built on two cornerstones:

- Our comprehensive understanding of customer needs and an analysis of their specific problems (advisors)
- Our up-to-date knowledge in all matters relating to cultivation of the crops we offer as a result of close contact with science and the practical world (Agro Service)

On this basis, we can work with the farmer to develop customized concepts for solving problems by choosing suitable varieties and cultivation techniques. In addition to optimizing the existing situation, KWS also works to give its customers greater freedom of action. That is why our Agro Service is intensively committed to “future projects/far-sighted projects” – in the field of bioenergy, for example.

KWS' Agro Service team is based in part in Einbeck and partly at the breeding station at Seligenstadt. Both locations are periodically assisted in their work by interns, for example as part of the trainee program of the German Agricultural Society (for junior management in agriculture). To live up to its function as an interface, the Agro Service team nurtures close dialogue with external partners from science and practice (among other things by taking part in events and conducting joint projects).

A nationwide network of nine KWS advisors also ensures that customers are provided with advice on their specific needs at their farm. They are very familiar with the location, the region and its structural conditions and thus expert contact persons for farmers when it comes to selecting the right varieties for a specific farm and cultivating sugarbeet.

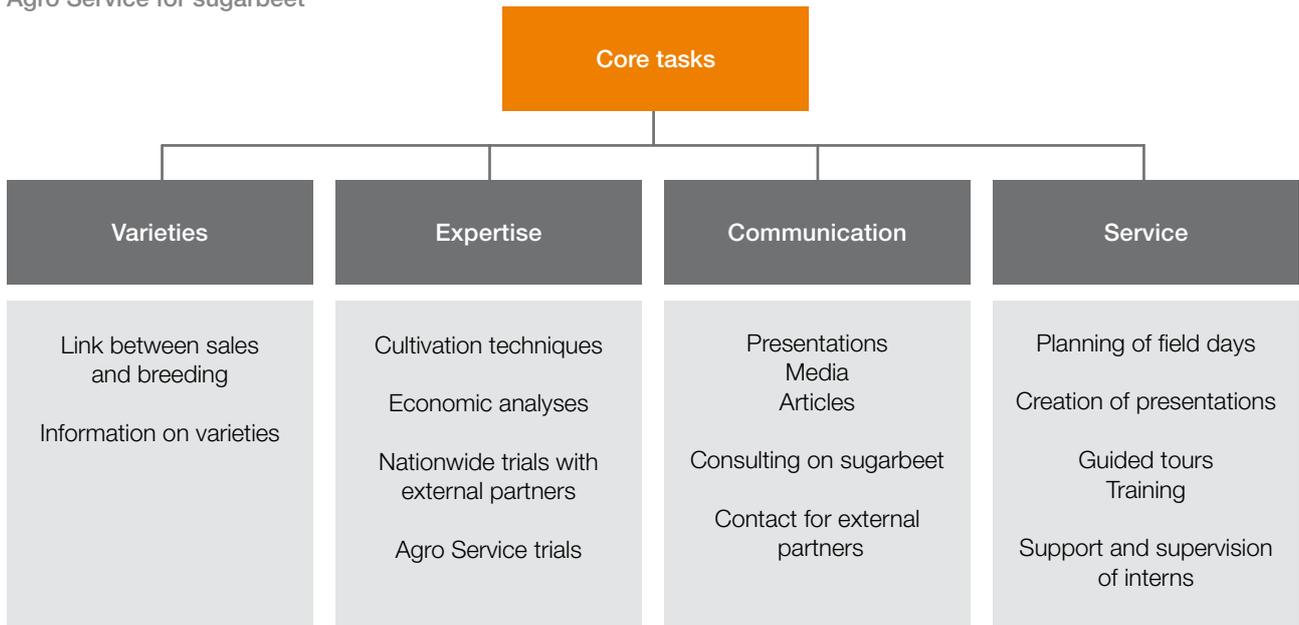
## Agro Service – the link between science and practice

Our Agro Service regards itself as a link between science and practice in the field of sugarbeet cultivation. The Agro Service team gathers and prepares information on varieties in an understandable way and supervises trials at the locations in Klein Wanzleben, Seligenstadt and Wetze, thus helping KWS to continue to expand its consulting expertise in the area of cultivation.

At the heart of the work of these trial locations are long-term trials in which almost all common methods of working the soil in sugarbeet cultivation are investigated over many years (from methods involving intensive tilling with the use of plows or ridge cultivation of sugarbeet, mulch tillage and straw mulching to extensive methods like direct sowing with no tilling).

The main task of KWS' Agro Service is to transfer technical, sugarbeet-specific information to our customers. This is done through presentations, articles, field days or training, for example. For instance, about 12 longer articles were published each year in agricultural trade journals in the reporting period.

Our Agro Service also has an educational function. It regularly offers junior employees the chance to acquire extensive knowledge about sugarbeet by working as a trainee and to prepare for an occupation in agriculture by assuming a broad range of tasks.



On-site consulting regarding cultivation – healthy sugarbeet reap high yields

**Something fundamental ...**

the ground. For farmers, it is far more than just a piece of land they stand on. For them and for us, it is the foundation of life. Its soil brings forth our plants and lets their roots take hold. It stores nutrients, water and warmth and is a habitat for a wide range of flora and fauna. Seed is embedded in the soil so that growth can begin.

Tilling systems and the preservation of soil fertility are core issues in our Agro Service’s research and consulting work. Innovative tilling systems offer special opportunities, in particular for sugarbeet. One related topic is energy efficiency: if the tilling depth is reduced by just 1 cm in plowing, around 100 m<sup>3</sup> or 150 tons less earth per hectare have to be moved. Reduced tillage can make the soil more resistant to compaction by creating a firmer surface, increase infiltration of rainwater and protect against erosion. However, reduced tillage also has its special challenges – in particular for sugarbeet. The soil warms more slowly and is no longer as conducive to embedding the seeds. KWS’ applied research pursues the goal of accompanying implementation of these methods into practice.

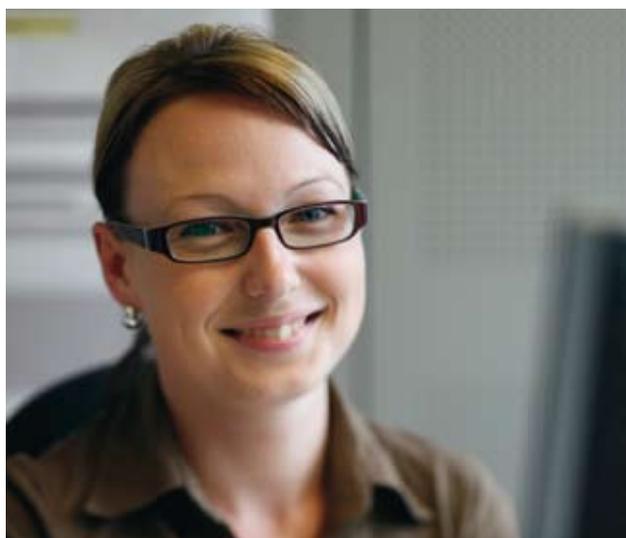
KWS’ Agro Service has been able to gather very important results and experience relating to reduced tillage at its trial locations in Wetze (Southern Lower Saxony, now in its 15th year) and Klein Wanzleben (in the Magdeburger Börde plain). Thanks to intensive know-how transfer (interns and scientists regularly meet at the trial locations), a major contribution has thus been made to establishing these methods. More than 30% of all sugarbeet in Germany is now cultivated using such methods.

**More information:**

 [www.kws.de/produkte](http://www.kws.de/produkte)

## Employees – The Key to Success

KWS' continuous growth and intensified research initiatives, coupled with demographic change, mean that the company must focus to a greater extent on recruiting employees. We constantly endeavor to win excellent employees for KWS and to keep them, in particular in research & breeding. There is also the need to arouse the interest of agricultural science students in training as plant breeders.



Kept on after successful training

KWS' efforts are directed toward training its own junior staff and recruiting young professionals. In this regard, it is clear that the Group's international structure must be reflected increasingly in these activities. As many potential junior employees as possible must also be addressed at locations abroad.

KWS' strategy in the area of training is to fill as many jobs as possible with people who have completed their training at the company so as to ensure seamless internal processes and give young people a start to their vocational career.

### Human resources planning

KWS recruits employees on the basis of its qualitative and quantitative needs. These needs are defined by the various company departments and approved as part of our human resources planning process. On the basis of this planning, the HR department initiates its concrete recruiting activities. The department in question has the final say in hiring a candidate.

The HR department bears primary responsibility for our training activities. The areas of scientific, industrial and business administration training each have their own person in charge of training; this person supervises the content and organization of the individual curricula. They also guarantee the highest levels of technical expertise and act in close coordination with departments that might hire the trainees so as to ensure qualified and systematic training.

### Personnel structure by function

in %	FY 07/08	FY 06/07
R&D	53.2	51.6
Production	14.4	15.8
Distribution	12.0	12.3
Administration	20.4	20.3
	<b>100</b>	<b>100</b>

### Number of trainees

	FY 07/08	FY 06/07
Industrial	8	6
Agricultural	43	43
Business administration	24	23
	<b>75</b>	<b>72</b>



Trainees learning how to use new software

### Giving young people a secure future

Our recruitment activities expressly include cooperation with universities. The endowed chair for “Crop-Plant Biodiversity and Breeding Informatics” at the University of Hohenheim, for example, promotes KWS’ visibility among students. KWS’ presentations at the two trade shows at the universities of Hohenheim and Weihenstephan work toward the same goal. KWS’ strategy is to train its own young employees as far as possible. However, the company also works to live up to its social responsibility and help give young people a secure future through its training.

That is why KWS has been training young people for years – in numbers well in excess of what it actually needs. Some trainees are also given the opportunity of completing part of their training abroad so that they can gather international experience.

KWS currently offers training in the following vocations: technical assistants and laboratory technicians in the field of agricultural research, electronics engineers for operations technology, industrial mechanics and industrial clerks. A total of 75 trainees were employed at KWS in fiscal year 2007/2008.

Training as an information technology clerk and as a marketing communications clerk will be added in fiscal 2008/2009.

### Qualified employees – junior staff in generations

Recruiting highly qualified new employees is a continuous task that is necessary to secure KWS’ long-term commercial success. In order to increase networking with representatives of international universities and KWS’ visibility as an employer, we have created the functional area “Human Resources Recruiting,” which will coordinate and expand all KWS activities vis-à-vis universities.

Since KWS’ international character is not yet reflected in recruiting, this function will have the task of contacting interesting international universities in order to acquire young employees from them as well. Apart from the external labor market, we also want to make the most of the option of filling more jobs internally with people from other international locations. Consequently, future vacant positions will be advertised increasingly in the intranet for foreign subsidiaries; that will increase international exchange within KWS and doubtless generate further synergy effects associated with sustainability.

#### More information:

-  Key Economic Figures, Company Profile, Promotion of Science and Research
-  [www.kws.de/jobs](http://www.kws.de/jobs)

### Objectives

Strategic objective	Measures	When?
Filling of the advertised positions, above all trainees and scientific employees	Creation of additional recruiting capacities at Einbeck	FY 2008/2009

# Secure Jobs and Benefits

## Secure and attractive jobs

Only satisfied employees whose jobs match their abilities enjoy their work, identify with the company and display the greatest willingness to achieve. Ensuring that employees stay loyal to KWS is vital to securing our company's success. Low workforce fluctuation is of paramount importance to KWS, particularly given our long-term objectives and relatively long product development cycles in research & breeding. That is why we offer our employees secure, attractive jobs and comprehensive, modern benefits.

The success of this strategy is clear. It can be seen from the very low fluctuation rate, the ratio of persons who leave the company to the average number of employees in permanent employment. It was 1.9% last fiscal year, even lower than in 2006/2007 (2.1%). KWS compensates all its employees, including trainees at KWS SAAT AG's operations, in accordance with a framework collective agreement. This is the basis for the framework collective wage agreement and the collective wage agreement, under which employees are grouped into one of the 13 wage categories and their remuneration and non-recurring dividend-based payment are governed. Personnel costs at Einbeck were €52.0 million in fiscal 2007/2008 and €45.7 million in fiscal 2006/2007.

## Social benefits

### Sharing in the company's success

KWS' workforce has the opportunity to acquire company shares at enhanced terms and thus to participate in the company's success. In addition, employees receive an annual non-recurring payment based on the dividend of up to 55% of their gross monthly salary. As with the Christmas and vacation bonuses, all permanent employees, as well as those who are not permanent employees but have a contract of employment for at least six months, are entitled to this payment under the collective wage agreement.

### Retirement program

A new retirement program for our employees has been in force since July 1, 2008. The previous model in the form of a direct obligation to provide benefits has been replaced by a provident fund that is financed by the employer and that pays out the pension entitlements earned by employees to them directly when they reach retirement age. In addition, KWS grants a supplementary retirement provision to employees who can show that they have established a private retirement program and offers all employees advice on pension-related matters.

### Special allowances

KWS offers employees the possibility of staying at its company holiday home "Zuckerhaus" in Bad Grund, with only part of the time spent there being deducted from their collectively agreed vacation entitlement. The company agreement relating to this was revised in fiscal year 2007/2008. The previous rule was replaced by one that enables more flexible lengths of stay, which is in the interests of both KWS and its employees. Further benefits granted by KWS to employees were also modified this year – the policy on gifts was revised, for example.

### Age structure

Age in %	FY 07/08	FY 06/07
Up to 20	4.3	4.9
20–29	18.5	19.5
30–39	22.3	24.8
40–49	32.2	30.9
50–59	18.0	16.2
Over 60	4.7	3.7
	<b>100</b>	<b>100</b>

# Working Time Models and Family Welfare

## Flexibility on both sides

KWS expects a high level of flexibility, personal responsibility and willingness to perform from its employees. In particular, the large measure of seasonal work means that they have to adjust their working time to meet changing requirements. That is why flexitime has been introduced in most areas. However, there are fixed working times in production, where employees can reduce the hours they have accumulated in their time account after labor-intensive production and field campaigns. The company agreements, which contain regulations on working time, are drawn up in negotiations between human resources management and the Works Council. In the last collective bargaining agreement, the weekly working time was increased to 40 hours effective July 1, 2007; trust-based working time applies to exempt employees.

## Promoting family welfare for all needs

It is an important concern of ours to help employees reconcile work and family-related needs by offering flexitime and part-time employment. KWS regards itself as a family-friendly company, with a corporate culture that emphasizes the importance of the family. We therefore offer employees the chance to work part time, in particular during parental leave. In principle, all employees can also work from a home office if their type of activity permits teleworking. Permanent employees can apply for a child care allowance of €150 a month for each child looked after in a kindergarten or, for example, by a child-care provider.

## Regulations on semi-retirement

Around 50% of all employees are between 30 and 49. The group from 50 to above 60 accounts for around 20%. That is a sign of the high esteem held for these employees' and their many years of experience – particularly when it comes to the long process of breeding varieties. Nevertheless, KWS offers elderly employees the possibility of taking semi-retirement. Under the related company agreement, KWS increases the net compensation for this – departing from statutory regulations to the benefit of our employees – to 80%. The company agreement applies to all employees who begin semi-retirement by December 31, 2009.

### More information:

 Key Economic Figures of the KWS Group, Promotion of Science and Research

 [www.kws.de/jobs](http://www.kws.de/jobs)



Plant breeding and agriculture – a contract between generations

# Spirit of Cooperation at the Company

## “We like working for KWS”

Equality among all our employees has long been a key aspect of our corporate culture, and not just since enactment of the General Equal Opportunity Act. Equal opportunities and rights for everyone, regardless of age, sex, origin, etc., is a principle that is lived in all areas of KWS. In addition, the internal Code of Business Ethics specifies anti-discrimination guidelines and rules to ensure mutual respect among employees. “We like working for KWS” – that is the basic philosophy of our working relationship. This is reflected in the fact that the workforce at Einbeck is composed equally of men and women. As to distribution by function, 30% of women work in R&D and 10% of men in production, for example.

The most important principles for a harmonious atmosphere at the company are tolerance and a spirit of partnership. We nurture a management style based on trust, as well as open and regular communication. That is why KWS not only attaches importance to subject-specific continuing education and training, but also to strengthening and enhancing social skills so as to secure our constructive corporate culture. To enable this, we offer executives and employees seminars on communication, teambuilding and conflict resolution.

## A constructive relationship with each other

If conflicts should arise at work, they are not swept under the carpet, but rather addressed frankly and with an eye to finding a solution. In such situations, KWS employees can call on the assistance of specially trained conflict resolvers to help them find a solution. The parties to the conflict are reconciled by individual or group meetings in a suitable context. There are conflict resolvers at all technical and managerial levels. The conflict resolver can be chosen freely, from among people inside and outside the company.

Under our company agreement on the spirit of partnership at work, every employee is obligated to contribute to harmony at work and a good working atmosphere. Respect toward each other, and also toward persons outside the company, is defined in the agreement, as are sanctions in the case of mobbing, discrimination or sexual harassment, for example. No such cases have been reported to date to the points and persons of contact in the event of such occurrences, such as the Works Council conflict resolvers and company doctor.

### Distribution of the sexes by function

Share of women in %	FY 07/08	FY 06/07
R&D	30.6	30.0
Production	4.6	5.0
Distribution	5.3	5.2
Administration	8.8	9.2
<b>Total share of women</b>	<b>49.3</b>	<b>49.4</b>

### Share of men in %

R&D	22.5	21.6
Production	9.9	10.7
Distribution	6.7	7.1
Administration	11.6	11.2
<b>Total share of men</b>	<b>50.7</b>	<b>50.6</b>
	<b>100</b>	<b>100</b>

# Involvement of Employees

## Open communication between all levels

A crucial factor in KWS' commercial success is the ability of all of our employees to identify with our corporate principles. A fundamental aspect of this is open and regular communication between departments, between supervisors and team members, and between management and employee representatives.

The interests of our employees are safeguarded by the elected Works Councils and the persons entrusted with representing young people and trainees. Among other things, they negotiate company agreements with management and conduct a permanent, and sometimes critical, dialogue. According to the principles of our corporate culture, the working relationship between the employee representatives and management is characterized by a constructive climate of trust. The Works Council and management inform the workforce of important developments at regular all-hands meetings. If required, such meetings are called at short notice so that employees can be kept informed. Employees also have various means of contributing their own ideas and wishes to the company.

## Creativity in all areas

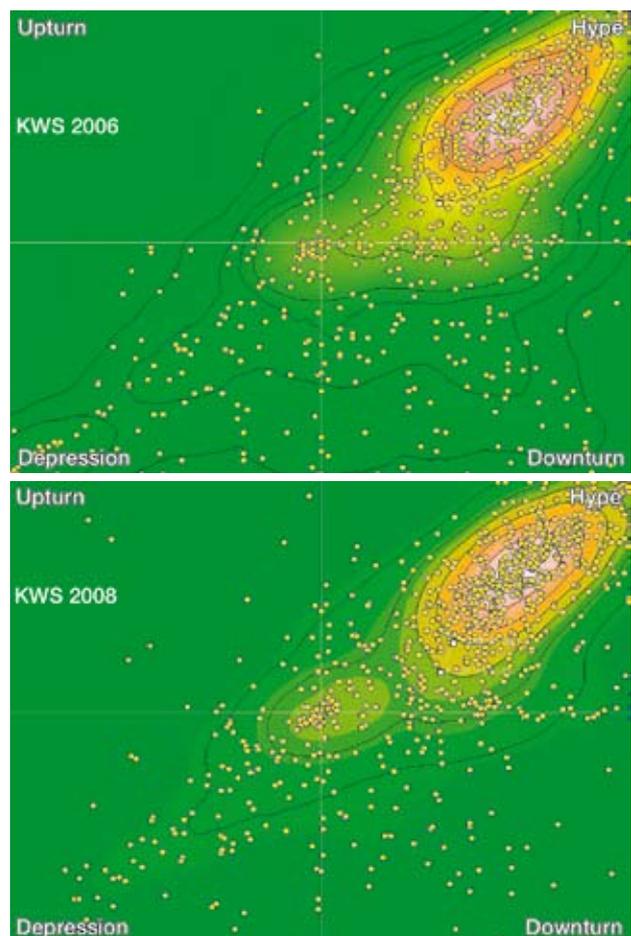
A major contribution to our company's continuous improvement is the employee suggestion system. 56 suggestions for improvement were submitted in 2007, of which 50% were put into practice. The adopted suggestions receive non-cash and cash rewards, with the latter being presented to employees by the Chairman of the Executive Board in person. Especially good suggestions are also rewarded by our "Suggestion Hammer," a challenge trophy presented every quarter to employees with a winning suggestion.

## Annual performance and career development reviews

Apart from in the employee survey, KWS personnel can also comment on their work situation in the annual performance and career development review. At this one-on-one meeting, employees and managers can speak frankly about objectives and whether they have been achieved, as well as constructively discuss critical issues and questions in order to eliminate conflicts proactively. Performance and career development reviews were held with 73% of the workforce. This ratio is to be improved, a goal that is also backed by the Executive Board, which will sharpen awareness of the necessity for this instrument in a suitable way.

## Climate at the company

This year, an employee survey was conducted for the second time with the aid of the Company Climate Monitor. 80% of the workforce took part in the online survey and were able to give an assessment of their current work situation and state their future expectations. There was greater participation in this survey than in the last one, and employees gave a more positive assessment of their situation at work. In the 2006 survey, the Company Climate Monitor revealed dissatisfaction in a certain area. Various measures were taken to improve the company climate in that respect. Group and individual meetings were held and personnel development instruments such as coaching were used. This area performed much better in this year's survey – a positive indication of the effectiveness of our HR management tools.



Satisfied employees are our most valuable asset – the Company Climate Monitor

# Personnel Development

## Forging talent

Personnel development at KWS is geared toward helping our operational units meet their targets. To enable this, personnel development initiatives are geared to the strategic planning of our operational units. Our aim is to foster the personal potential of employees, as well as their professional expertise and social skills, throughout their working life. Consequently, suitable training and continuing education measures are selected and implemented in joint coordination to promote the individual talents and resources of every employee.

## Structures for determining needs

Controlled strategy processes, systematic human resources planning and the annual performance and career development reviews are key elements of our organizational structure. The need for structural development measures for the overall organization and individual further training measures is defined here and this information forwarded to Human Resources. That means personnel development acts as a service provider that advises employees so as to reveal all their potential at the content-related, methodological and structural levels.

To strengthen personal responsibility, employees and their supervisors are primarily responsible for carrying out the measures.

## Approaches in personnel development

In the area of personnel development, KWS has implemented the measures of general continuing education, development of young employees and management development.

### Continuing education

As part of general continuing education, KWS offers a seminar program that is open to all employees. From a list of 36 seminars, they can choose courses agreed on with their supervisor in the performance and career development reviews. Subjects not covered by the seminars are offered by external training providers. The focus of general continuing education in fiscal year 2007/2008 was on foreign languages, agriculture for non-farmers and communication. There was keen interest in these offerings: The number of days spent on courses was around 2,000 in each of the last two fiscal years. In fiscal 2007/2008, the range of training for trainees in particular was expanded.

### Development of junior personnel

Core elements of our development of junior employees are currently offered by the 24-month trainee program, which gives university graduates the chance to assume professional responsibility and get to know KWS. Twice a year, we also offer an Orientation Center, at which a detailed analysis of the strengths and weaknesses of participants and a personalized development plan are created.

### Expansion of international management

Management development also focuses on the strategic and international contexts. For example, a three-day event for upper management on the subject of change management and three international management training courses were staged in the reporting period. Another new tool aimed at collecting innovations and further fields of development takes the form of "learning journeys," which are held by members of upper management and in which benchmarking is carried out with companies that are comparable to KWS but in other sectors.



International workshop – joint development of good ideas



We all work for an orange company – success for you and me (refrain of the international company song)

### Personnel development offerings

The boom in agriculture and a relatively small overall supply of qualified experts in Germany means that it is becoming more and more difficult for KWS and its competitors to recruit and keep well-trained employees. The task of personnel development here is thus to increase the attractiveness of KWS as an employer through further initiatives and offer-

ings and internationalize recruiting to a greater extent. We regard the program we have implemented to develop junior workers as a suitable instrument for selectively developing high potentials following the trainee program. In the future, the trainee and junior staff development programs will be expanded to our foreign subsidiaries so that we can recruit more high potentials from abroad.

#### More information:

 Employees – The Key to Success

### Days of continuing education

Employee category	FY 07/08	FY 06/07
White-collar employees	1,184	1,253
Exempt employees	220	304
Trainees	258	155
Blue-collar employees	357	348
	<b>2,019</b>	<b>2,060</b>

# Work Safety and Health

## A long tradition of health and safety

Early identification, understanding and action to ensure work safety and the health of its employees have always been of great importance at KWS. A system to enable this was introduced at the company in 1974. The organization of work safety is directed by the member of the Executive Board responsible for it, taking into account statutory regulations and using the integrated management system. In addition to various examinations and monitoring by external supervisory authorities, the internal organization ensures clear responsibilities, provision of personnel and resources and continuous further development of the system.

All supervisors are accountable for their respective sub-area. They must take all necessary steps relating to work safety and health protection. In this context, they also ensure regular inspection and maintenance of plant and technical equipment and regular training of employees and issue appropriate safety instructions.

All employees are consequently able to make a proactive and preventive contribution to work safety and health protection. They report risks and make suggestions on optimizing work processes in this regard.

## Avoidance of occupational accidents: a constant challenge

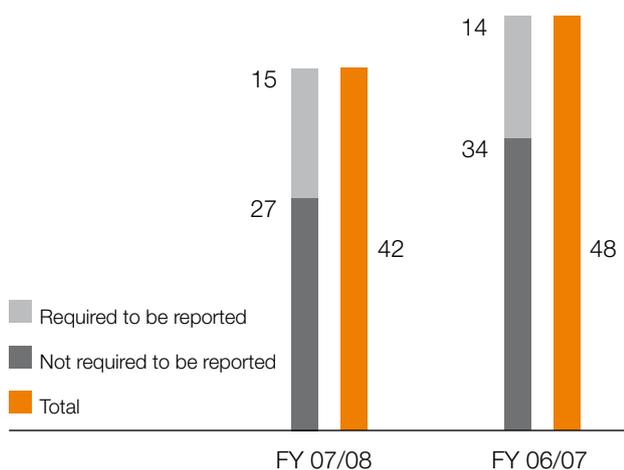
In the reporting period, the number of occupational accidents that were required to be reported did not change significantly compared with the previous year. The proportion of accidents that did not have to be reported has fallen. The main causes of accidents – 25% – were slipping, stumbling and falls in their various forms.



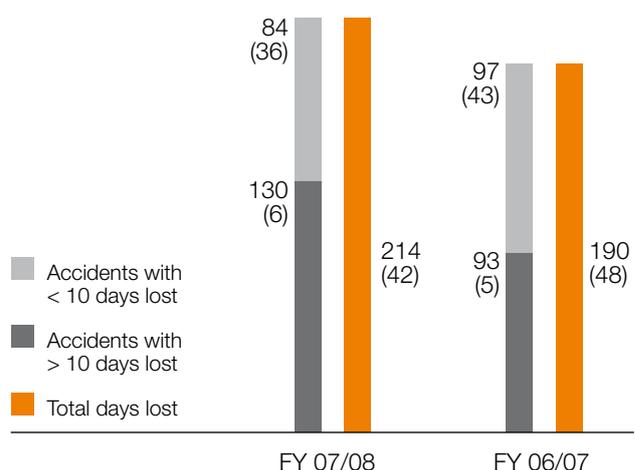
A means of avoiding accidents: a rounded sickle tip

The accident rate in fiscal year 2007/2008 was 8 accidents per 1 million working hours, or 15 accidents per 1,000 employees. 80% of the accidents were caused by incorrect personal conduct. Reducing accidents by means of instruction in work safety, by superiors acting as an active role model, and by sensitizing employees is a constant concern at KWS. The training program is geared precisely to this goal. Agricultural activities harbor a higher risk of injury due to the amount of manual work, and the accidents have different degrees of severity. We differentiate occupational accidents by those that entail a loss of more or less than 10 days and are working systematically to ensure that the number of accidents entailing more than 10 days lost does not increase.

Occupational accidents



Occupational accidents by number of days lost



Figures in ( ) specify the number of accidents

**Occupational risks in plant breeding**

Our work, and plant breeding in particular, is characterized by intensive manual work in trial fields and greenhouses. Over the past 20 years, KWS has been able to achieve extensive improvements by means of a wide range of measures. For a long time, the use of sickles in harvesting individual plants represented a particular risk to our employees, for example. The use of innovative materials for producing gloves, the use of light gloves that are kind to the skin and protect against cuts, and rounding the sharp tip on sickles has led to almost a complete elimination of accidents from cuts in recent years. Nevertheless, there is hardly any other area of work that is so negatively influenced by the weather and uneven ground conditions, with the result that it accounts for the highest share of accidents in percentage terms (25–30%) resulting from people slipping, stumbling and falling compared with other areas.

In 1988, we switched from using 80 kg sacks to cardboard containers in our internal logistics operations for sugarbeet seed. This measure reduced the physical strain on people transporting the seed.

We are pleased by the great interest our employees show in participating in the courses and practical exercises we offer in various areas, including driving fork-lifts, securing loads, first aid or how to use fire extinguishers.

As part of health protection at the company, we offer physiotherapy courses every year in cooperation with health insurers. The company doctor is available to give employees personal consultation every week and, together with the

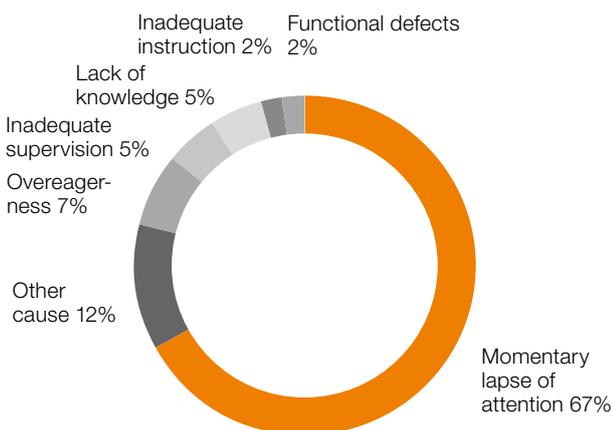
Human Resources department, organizes the medical check-ups prescribed by law and the occupational accident social insurance funds. This fiscal year, there has been great participation in the skin protection campaign staged by the Agricultural Occupational Accident Social Insurance Fund.

**The company fire department – an effective institution with a long tradition**

From humble beginnings in 1974 as a group charged with extinguishing fires and providing first aid for the company disaster protection organization, it has turned into a highly effective fire department and medical service. Its continuation is ensured through regular training of its members and maintenance and modernization of its vehicles and technical equipment.

Its range of tasks and responsibilities has grown more diverse over the past years as a result of the internal and external technical assistance it provides. Four company paramedics are now responsible for all first-aid deployments on the company grounds. Their main focus is on acute cardiovascular complaints – and four portable defibrillators are available specifically for these situations. KWS’ company fire department also supports units in the Einbeck region on their deployments. Due to its many years of good cooperation with external aid services such as the German Red Cross, the Federal Agency for Technical Relief and the volunteer fire department and its proven excellent level of training, it was named and certified as a company fire department in December 2006 by the head of the police department.

**Causes of accidents in fiscal year 2007/2008**



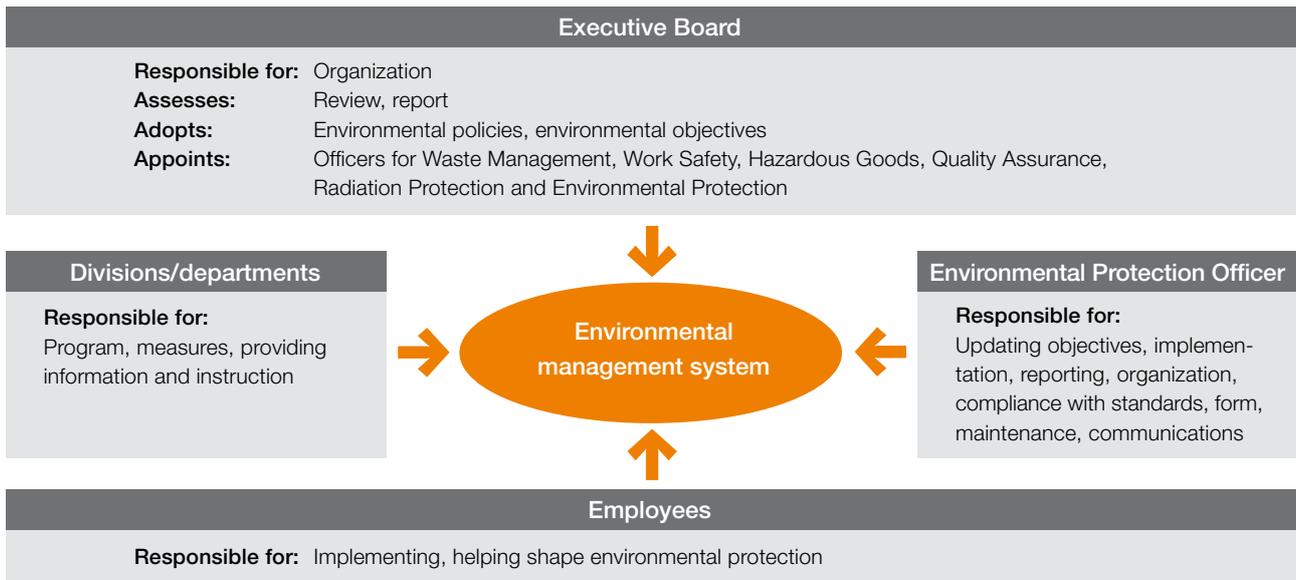
**More information:**

- Our Sustainability Approach
- [www.kws.de/nachhaltigkeit](http://www.kws.de/nachhaltigkeit)

Objectives		
Strategic objective	Measures	When?
Identification of possible focal areas of risk	Seminar for creating assessment of risks	FY 2008/2009
Health protection	Medical check-ups in accordance with accident prevention regulations	FY 2008/2009
Prevention of accidents for external tradesmen	Optimization of instruction by introducing a visitor management system	FY 2008/2009

# Environmental Protection at the Company

## Environmental management



### Protection of the environment and sparing use of resources: our guiding principle

In conjunction with its corporate principles, KWS has adopted an environmental policy centered on the sparing use of natural resources. As an agricultural company we depend on functioning biological cycles. Protection of the environment is a fundamental concern of ours and a continuous obligation in our day-to-day work. Our management system and policies, in conjunction with the implementation and fulfillment of statutory regulations relating to the environment, form the foundation for all our strategic and operational measures in protecting the environment.

### Management system for quality and the environment

Since 1994, KWS has used an integrated management system that documents all relevant regulations and processes for the company in an electronic manual at three levels (core processes, process directives and work instructions). Regular internal and external audits by a certification company at the various business segments and an annual review by the Executive Board assess the efficiency and working order of this system. The system is continuously developed on the basis of results of these audits and reviews, recommendations and quality and environmental objectives that are redefined every year.

The basic principle here is to ensure that all the requirements are fulfilled or exceeded. These requirements are implemented on the basis of the standards DIN EN ISO 9001:2000 (quality) and DIN EN ISO 14001:2004 (environment). A team of 21 internal auditors from different professional disciplines and departments examine the system in 20 to 25 audits a year.

### Checking the working order and certification of the management system

The working order of KWS' integrated management system was regularly audited by the technical inspection agency TÜV CERT in every year from 1995 to 2007. In 2008, it was audited by the certification company SGS-ICS. The certificate was again awarded for three more years in March. In the certification audit, the processes for determining training needs, the seminar program for employees, the process for planning R&D activities and organization of waste management were singled out as being especially well-structured and transparent. The intranet site for environmental protection was cited as an example of the company's comprehensive communications.

The key focus in the past two years was auditing the delegation of entrepreneurial and operator duties relating to work safety and environmental protection. 10% of employees at the Einbeck location have assumed such duties.



Documenting the proper operations – daily records

As part of this, it became clear that further training was needed in fulfilling and accomplishing obligations relating to environmental protection and work safety. This will be reflected in our further training program to a greater extent in the future and training courses or series of seminars will be offered on these issues by the Human Resources department.

### Integration of all employees in environmental protection

Measures to protect the environment are associated with an internal KWS environmental logo that was created a number of years ago in an employee creativity contest. In the coming fiscal year, the information base in the intranet for the areas of environmental protection and work-related conduct will be expanded and reshaped.

On June 5, 2009 – European Environment Day – we will hold an in-house exhibition on the environment. It will present tips and information on the subject of avoiding and reducing waste, work safety, handling hazardous substances and consumption of energy and water in everyday working life.

### Investments in technical plants

Capital spending measures with a total volume of €2.37 million are planned for 2008/2009 to optimize seed processing and energy and heat generation and for equipment to keep the air clean and ensure work safety. Some €380,000 was invested in environment-related plants and equipment at Einbeck in the past two fiscal years.

### Requirements from developments in environmental protection law

Regulation (EC) No. 1907/2006 on the Registration, Evaluation and Authorization of Chemicals (REACH) came into force in the EU on July 1, 2007. As a user of chemicals, KWS has now initiated a dialogue with its vendors and suppliers in order to ensure that the more than 750 chemicals it uses are registered and are still available. The planned switch-over to the Globally Standardized System of Classification and Labeling of Chemicals will be a major challenge in the management of hazardous substances in the coming years.

Lawmakers plan to enact a multi-part Environmental Code as of 2009. The goal is to bundle areas of environmental law and make it easier to enforce for authorities and business enterprises; whether this succeeds depends on the further course of the deliberations.

#### More information:

-  Our Sustainability Approach, Sugarbeet Seed Processing, Protection of the Environment and Sparing Use of Resources in Processes, Waste and Recycling
-  [www.kws.de/nachhaltigkeit](http://www.kws.de/nachhaltigkeit)

### Objectives

Strategic objective	Measures	When?
Improvement in communication on environmental matters	Expansion of the information base for environmental protection issues and work-related conduct	FY 2008/2009
Further development of environmental management	Implementation of entrepreneurial duties: establishment of a series of seminars for employees	FY 2008/2009 until 2010/2011

# Protection of the Environment and Sparing Use of Resources in Processes

Energy, natural resources (such as soil, water and air) and a whole host of auxiliary materials and supplies are used in all phases of variety breeding, seed production and the operational and technical processes this involves. The focus here from the point of view of sustainability is to save energy, avoid all types of emissions, use resources sparingly, sustain an internal cycle and use auxiliary materials and supplies that do not pollute the environment. The measure and guide for this is our environmental policy, to which KWS and its employees are committed. The framework is formulated as a principle for our everyday actions in light of the way we see ourselves:

- We will continue to develop our environmental protection programs.
- Employees promote the enforcement of the policy with commitment, creativity and motivation and contribute their own ideas and voluntary measures.
- We are committed to responsible and sparing use of the natural resources soil, air and water. This includes preservation of the diversity of species and their genetic resources and sparing use of energy and mineral resources.
- As far as is economically possible, we implement the most environmentally-friendly solution in terms of recycling and the principles of integrated environmental protection in our daily work.

The organization of these processes in research & breeding, seed processing, the use of substances, provision of energy and water and disposal of waste and waste water is regulated in the integrated management system.

## Protection against emissions / provision and use of energy

Energy is generated at the Einbeck location by boiler plants and block-type thermal power station modules. The boiler plants are run with fuel oil or gas and the block-type thermal power station modules with gas. The block-type thermal power station modules cover basic electricity and heat requirements and are operated to supply heat on demand. The boiler plants are available to cover the need for heat at peak times and to supply heat if the block-type thermal power station system fails. Electricity is also obtained in parallel from the public power network. The annual need for energy depends on the quantity and quality of the seed to be processed and current research projects (for greenhouses, climatic chambers and cooling systems). Energy consumption was 35,862 MWh in fiscal year 2007/2008 and 30,280 MWh in 2006/2007. The difference in consumption and resultant emissions is primarily the result of the energy required to process the varying amounts of seed in the two years and to run the greenhouses.

## Measurement and reduction of emissions

Operation of the plants and systems is subject to official permission and is regulated in the integrated management system. As an amendment to the Technical Directions on Air Quality Control, new emission thresholds for carbon monoxide, nitrogen oxides and sulfur oxides for the block-type thermal power station came into effect on October 30, 2007. After replacing a few catalyzers, the thresholds were adhered to without any further technical changes.

### Energy consumption

	FY 07/08	FY 06/07
<b>Direct energy consumption (MWh)</b>		
Gas	34,369	29,282
Fuel oil	1,493	998
<b>Total energy consumption</b>	<b>35,862</b>	<b>30,280</b>
<b>Indirect energy consumption (MWh)</b>		
Purchased electricity	6,594	6,920
Own electricity production	9,630	8,742
<b>Total electricity consumption</b>	<b>16,224</b>	<b>15,662</b>

### Emissions

	FY 07/08	FY 06/07
<b>in t</b>		
Carbon dioxide	7,302.7	6,145.7
Nitrogen dioxide	4.2	3.5
Sulfur dioxide	0.3	0.2
Carbon monoxide	1.9	1.6
	<b>7,309.1</b>	<b>6,151.0</b>



Filter systems keep the air clean; plant dusts are recycled or disposed of

The long-distance heat piping system was restructured in the older production buildings and equipped with energy-efficient regulators. A boiler plant was equipped with a burner that saves energy and produces fewer emissions. In addition, a new controller for the boiler plants was installed. €258 thousand was spent for these purposes.

**Use of regenerative energies at KWS**

We generate warm water for the staff facilities on the company grounds with a solar collector system. The possibility of using regenerative energies is examined from economic aspects in every project that requires energy and this source of energy is selected where feasible. A particular concern of ours is to further develop production of energy from regenerative raw materials (e.g. biogas) and supply the company with such energy.

A biogas plant will be constructed in the Einbeck area next year. KWS has supported the planning process. We intend to procure biogas from this plant or other biogas plants for generating electricity and heat in our block-type thermal power station system. We also intend to increasingly switch to biogas in our fleet of agricultural vehicles and company cars.

**Measures to keep the air clean – use of filter systems**

Plant dusts are produced by abrasion in cleaning and processing seed intended for breeding processes or for distribution. They are removed from the exhaust air stream by dust extraction systems and recycled externally as biologically degradable waste or recycled internally by being added to the seed during pelleting. The application of fungicides and insecticides to the seed when it is treated with active substances also produces plant dusts contaminated with these agents. This waste air is processed in a second special purification system. Special filters are used to clean the waste air and ensure that it complies with legal thresholds. The dusts produced in this cleaning process are hazardous waste and are disposed of in a special incineration plant.

## Use of water and waste water treatment

### Water for growing plants

Water is a necessary factor in growing plants in greenhouses and in the trial areas. The company uses its own well water for this. 18,907 m<sup>3</sup> were used in fiscal year 2007/2008 and 16,680 m<sup>3</sup> in 2006/2007. The quantity depends on the scope of the annual breeding and trial programs. The plants in the trial fields are also supplied after being planted in spring with surface water from adjacent rivers. 400 m<sup>3</sup> a year was taken from them in the reporting period; permission to take water from them has been granted.

### Water in operational processes

Rainwater from the company's own cistern (1,000 m<sup>3</sup>) is used for the sprinkler and sanitary facilities. Water consumption in the sanitary facilities fed with this gray water is around 3,300 m<sup>3</sup> a year. Consumption of drinking water was 5,957 m<sup>3</sup> (fiscal year 2007/2008) and 7,127 m<sup>3</sup> (fiscal year 2006/2007).

The consumption of well water by the cooling systems was reduced in 2006/2007 by optimizing the water circulation system. Water consumption fell by 46% from 7,533 m<sup>3</sup> to 4,098 m<sup>3</sup> in fiscal 2007/2008.

### Processing of waste water from production

Process waste water containing pesticides and fungicides is produced when seeds are dressed for breeding and distribution purposes; it is processed in an internal waste water treatment plant before being passed into the municipal sewerage network. We perform our own regular measurements in our chemical laboratory to ensure that the prescribed waste water thresholds (AOX, CSB, pH value, TOC) are observed. The quantity of waste water fed into the sewerage system has not changed significantly in the course of four years. This is an indication that, although the quantity of seed treated with active substances has increased, pes-



Taking a sample of waste water from production

### Sources of water

in m <sup>3</sup>	FY 07/08	FY 06/07
Well water	62,261	62,929
Used for:		
· Seed production	39,256	38,716
· Watering	18,907	16,680
· Cooling systems	4,098	7,533
Drinking water	5,957	7,127
Rainwater (estimate)	3,300	3,300
	<b>71,518</b>	<b>73,356</b>

### Waste water by type

in m <sup>3</sup>	FY 07/08	FY 06/07
Waste water from production	36,406	35,675
Waste water from production containing pesticides and fungicides (after processing)	311	322
Administration	5,957	7,127
Sanitary facilities (rainwater)	3,300	3,300
	<b>45,974</b>	<b>46,424</b>

ticides and fungicides are being used efficiently by the breeding and seed processing units that produce waste water. Commissioning of the planned new suspension dosing plant may even enhance this efficiency. The future will show whether it is possible to achieve a process-oriented reduction in the quantities of waste water processed in connection with the fungicidal and pesticidal active substances applied to the sugarbeet seed. We see saving water and its efficient use in breeding and production as a constant challenge.

### Water and energy efficiency at work

New knowledge about ways to save energy and water was taken into account in constructing new buildings and renewing the technical plant in the past years. The resultant savings achieved in water and energy consumption at the location have not yet been fully determined using the existing meters. We are still expanding our ability to collect such data.

Greenhouses, offices and laboratories are to be erected on a larger scale for research and breeding in the coming years. The energy and water supply for these buildings is to come from regenerative sources of energy, biomass and rainwater.

### Optimized handling of hazardous substances

Hazardous substances such as chemicals, pesticides and fungicides represent a risk to people and the environment when they are handled. The way we handle them was subjected to an audit as part of a cooperative project with students of environmental engineering from Göttingen University of Applied Science. The project's objective was to give the students the opportunity to gather first-hand experience for their future professional careers. The concept they developed is to be implemented in the current fiscal year.

The hazardous substance register containing more than 750 different substances was converted to a more user-friendly database format. By setting up the database and implementing the new regulations, we now comply in full with the requirements for handling hazardous substances.



Storage of hazardous substances

#### More information:

-  Sugarbeet Seed Processing, Environmental Management, Waste and Recycling
-  [www.kws.de/nachhaltigkeit](http://www.kws.de/nachhaltigkeit)

Objectives		
Strategic objective	Measures	When?
Sparing use of fossil resources	Increase in energy efficiency: - Refurbishment of the compressed air system, including controllers, with load management (reduction in power consumption by 50,000 kWh/a)	FY 2008/2009
Sparing use of fossil resources	Switch to biogas in our fleet of company cars: - Preparation for a change in vehicles	FY 2009/2010

# Waste and Recycling

## Our daily creed: avoid and reduce waste

An elemental objective of our process management is to minimize waste and feed it back into the material cycle or to dispose of it securely to ensure sustainability. As far as is economically possible, the most environmentally friendly recycling solution is used for every waste substance. This procedure is also stipulated in KWS' environmental policy and is practiced in day-to-day work at the company.

All of KWS' employees are called upon to work in an ecologically minded manner, to ensure the principle of recycling is upheld, and to avoid waste. They are committed to actively reducing waste, even outside the workplace.



Recycling materials in research

KWS' waste management system is controlled strategically and operationally by means of the integrated management system. Its strategic orientation is developed by the Environmental Officer and the Waste Management Officer above and beyond legal requirements. It is implemented operationally by the Waste Management Officer and defined in the integrated management system, including the training, documentation and reporting obligations that have to be met. As early as the planning stage for new work processes, the Waste Management Officer examines where waste is created so that steps to avoid, recycle or dispose of it can be taken in good time.

## Collection and separation of waste

In line with its creed of "avoid, reduce, recycle," KWS conducted its first surveys of waste quantities in the early 1990s and developed its own waste separation system. Now our Einbeck location has a recycling center that separates and handles an average of 500 tons of different waste fractions each year. Paper/cardboard, metal scrap, bulky waste, transparent and colored films, electronic scrap, pallets, aluminum foils, planting trays and plant pots are collected separately and passed on to selected specialized disposal firms for recycling. These firms are examined in unannounced, unscheduled audits by the Waste Management Officer. Waste from production and biologically degradable waste is taken directly to recycling from the place where it occurs. Materials that cannot be separated are treated as industrial waste similar to household refuse and made ready for transportation to sorting plants.

## Waste for recycling

KWS' basic objective of avoiding or reducing waste cannot always be achieved satisfactorily in all areas of the company. Due to the special characteristics of seed as a natural raw material and annual variation in the size of multiplication areas for the individual sugarbeet varieties, it is not always possible to ensure that biologically degradable waste is reduced. The weather conditions during a growth period also have a major impact on the quality and size of the sugarbeet seed cluster. When the seed is cleaned, sorted into size classes and polished, this produces substantial quantities of residue and dust, which are subsequently composted.

## Industrial waste

In the reporting period, the share of industrial waste similar to household refuse increased from 192 tons (fiscal 2006/2007) to 220 tons (fiscal 2007/2008). It is thus a continuing goal and special concern of ours to remove recyclable materials from such industrial waste beforehand and ensure they are channeled to recycling.

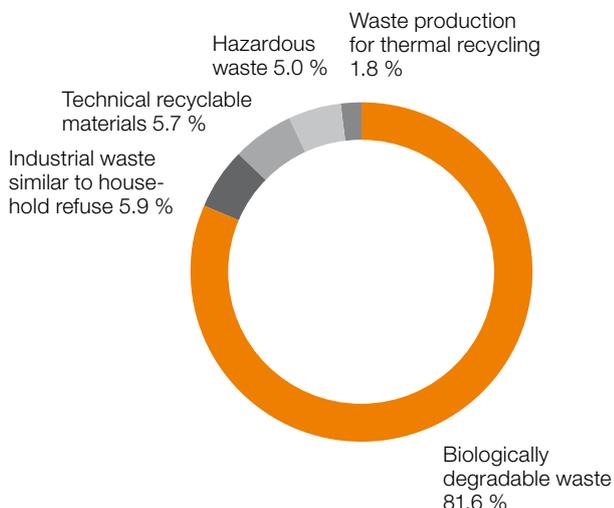


The recycling center for separation, storage and shipment

### Production waste is hazardous waste

Treatment with active substances and removal of seed that is no longer officially certified from our inventories produces waste containing fungicides and pesticides. It is transported as hazardous waste and disposed of as agricultural chemical waste in a special incineration plant. As a result of seed being removed from our inventories, this waste rose in the reporting period by 35% from 122 tons (fiscal year 2006/2007) to 189 tons (fiscal year 2007/2008).

### Waste composition in % in fiscal year 2007/2008



### Composition of the waste

Due to the above-described factors, the waste contains a large share of biological degradable substances, namely 81.6%. The shares for industrial waste similar to household refuse, technical recyclable materials and hazardous waste are 5% to 6%.

### Precautions and challenges in waste management

KWS has a department for agricultural and breeding works on the breeding plots. The coalescence separator under the washing unit for agricultural vehicles there was too small and threatened to overflow during campaigns. To rule out the risk of polluting the environment, KWS invested €25,000 in a new and larger separator in fiscal 2006/2007.

Germany's Waste Documentation Ordinance stipulates that an electronic means of furnishing proof of the accompanying documentation for hazardous waste must be in place by April 1, 2010. The software solutions offered for this are to be tested with all parties involved along the waste disposal chain by then to determine that they are suitable for practical use.

Above and beyond all statutory requirements, KWS will continue to work in all areas of the company toward minimizing waste quantities, separating waste and feeding it back into the material cycle or disposing of it securely. Our creed is now more important than ever as we strive to ensure sustainability.

### More information:

- Sugarbeet Seed Processing, Environmental Management
- [www.kws.de/nachhaltigkeit](http://www.kws.de/nachhaltigkeit)

### Objectives

Strategic objective	Measures	When?
Introduction of electronic proof of accompanying documentation for waste	Examination of software solutions	FY 2009/2010

## A Tradition of Promoting the Region

Our company's social commitment is shaped by two key factors that are also characteristic of how we see ourselves. First, KWS has always been an owner-led company with a tradition of family ownership; second, its plant breeding business model means that the company is located in a rural region. Here people know and communicate with each other – directly, intensively and without hierarchical barriers. An open and straightforward manner toward each other is expressed in the fact, for example, that academic titles play no role in communication at the company. The result is an extremely fertile corporate culture that is characterized by mutual trust and also has an effect outside the company – i.e. in the town and region.

With 830 active employees and many retirees in the area, our big KWS family naturally bears a social responsibility for Einbeck and the region. KWS organizes and funds projects of its own, for example the KWS School Award and exhibits by regional artists. And of course we are also involved in public projects, such as promoting the “Eickesches Haus” foundation, which is dedicated to preserving unique examples of half-timbered houses in Einbeck. We also support our employees' wide-ranging involvement in non-profit athletic and cultural associations. In fiscal 2007/2008, the money we spent on donations and sponsoring came to €105,000. Another €21,000 goes indirectly to cultural projects through the company's various memberships. These measures are coordinated by Corporate Communications, which reports directly to the Chairman of the Executive Board.



Eickesches Haus (1612) – a late-Renaissance jewel in Einbeck

### The KWS School Award

To mark its 150th anniversary, KWS presented a School Award for the first time in 2006, under the patronage of Thomas Oppermann, then the Minister of Education of Lower Saxony. Three schools won the contest thanks to their persuasive concepts for teaching the sciences, promoting an understanding of economics and supporting the personality development of their pupils. Three other schools were awarded accolades for their creative approaches and received vouchers for a visit to the XLAB, the experimental laboratory in Göttingen for school students.

Once again in 2008, we are actively assisting schools in the region in implementing educational approaches aimed at developing the above-mentioned skills. KWS is again donating a prize of €10,000, this time under the patronage of Elisabeth Heister-Neumann, who is now Minister of Education in Lower Saxony. This prize will be awarded to one or more schools that submit the most compelling educational concept in the view of a jury made up of persons of various scientific, cultural and vocational backgrounds.

### Music as a basis for science education

Numerous studies indicate that intensive access to music makes learning easier for school students in the core subjects, in particular the sciences, or even helps make these subjects accessible. As part of the 2008 School Award, KWS has therefore suggested that schools think particularly about projects in the field of music. Enthusiasm for classical music among school students is also to be kindled by an event in cooperation with the Göttingen Symphony Orchestra.

### Networking with professional institutions

The international world of plant breeding represents a modest-sized community, but one that bears immense social responsibility in terms of its tasks. KWS works hand in hand here with many professional organizations, whose work is funded in turn by membership fees. KWS paid €611,000 in membership fees in fiscal 2007/2008.



The happy winners of the School Award

#### More information:

 Dialogue

 [www.kws.de/nachhaltigkeit](http://www.kws.de/nachhaltigkeit)

## Promotion of Science and Research



IdeenExpo 2007 – Interactive plant breeding in the presence of Hans-Heinrich Ehlen (Lower Saxony's Minister of Rural Areas, Nutrition, Agriculture and Consumer Protection) and Nela Panghy-Lee (TV moderator)

Research in the public sphere is of key importance to KWS in many respects. First, young scientists are introduced to plant breeding and biotechnology and, among other things, learn scientific process techniques. Second, we have a key interest in basic research being conducted on plant breeding and the results of this research being made public. Apart from subject-specific funding of research, KWS supports the transformation of German universities into powerful and efficient educational institutions. By participating in regional initiatives to promote science, KWS lives up to its regional responsibility and helps create an interesting and well-structured environment in the region.

This promotion of science and research is coordinated by our research management team. There is close coordina-

tion as part of internal corporate communications to optimize processes and in particular to clearly define contact persons. Handling of the administrative aspect of the promotion of research is supported by Research Controlling. Scientists from KWS are appointed for larger projects and are then responsible for designing and conducting them.

### Diverse means of communication

Communication within the scientific community is of great importance to KWS. That is why we regularly support a large number of professional congresses and conferences. In the period under review, KWS again enabled a number of interns to work at our company for several weeks. We offer university graduates in different disciplines, such as agricultural science or industrial engineering, the opportunity to write their degree theses as part of their work for KWS. In cooperation with the University of Hohenheim, we award grants to support people studying agriculture. A total of €15,000 was spent on grants in fiscal 2006/2007. Likewise in 2007, we established an endowed chair for "Crop-Plant Biodiversity and Breeding Informatics" at the University of Hohenheim, with annual funding of €200,000. KWS will participate with other partners in an endowed chair for East Asian Studies at the University of Göttingen with an annual sum of €20,000 for five years. The company intends to expand its funding for science, together with the endowed chair, to a total of more than €250,000 a year. Since not all the available funds were able to be used in the past fiscal year, KWS is helping its university partners in filling the sponsored posts.

In the medium term, the company plans to establish contacts with foreign institutions, initiating cooperation projects and awarding individual grants there. In the future, we will increasingly include foreign scientists in KWS' intern program, acting on our belief that the international transfer of knowledge will become more and more important into the future.

In addition to its subject-specific support for selected areas of science, KWS is also involved in the structural debate taking place regarding the German university landscape. As a program partner of the University of Göttingen, we were involved through February 2008 in the initiative of the Donors' Association for the Promotion of Sciences in Germany relating to "The Deregulated University."

The support given by KWS to research institutions included more than funding in the reporting period. KWS also grants scientists access to some of its in-house software and bio-informatics equipment. As a result, plant researchers have the possibility to compare results, for example from genome research projects, in large databases. In addition, the results from laboratory experiments are evaluated in cooperative projects conducted in KWS' trial areas to determine whether they are applicable in practice.

### There are many reasons for promoting science

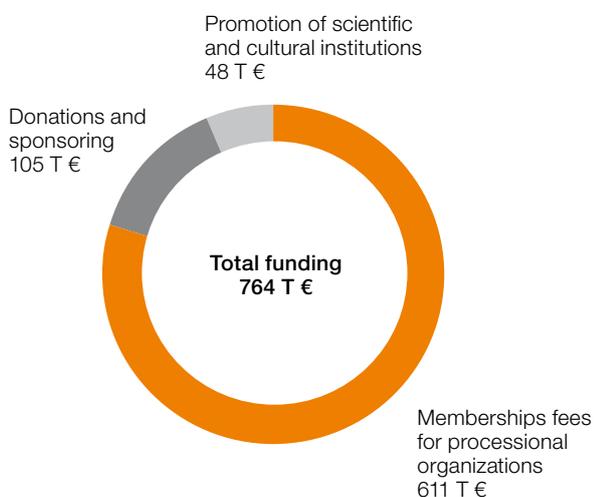
The support for science and research is not an end in itself. In the broadest sense, it helps add to the attractive nature of the scientific and regional environment in which KWS operates. Among other things, KWS tackles this task through collaboration by its employees in self-governing scientific organizations and in German (Max Planck Institute for Plant Breeding Research, Cologne, Society for Plant Breeding e.V., Quedlinburg) and international plant research. One example that can be cited is our involvement at many levels in the German plant genome research program GABI (Genome Analysis in the Biological System of the Plant). As a company, we can only provide selective help here. It is also necessary to work in a wide range of associations and other bodies to help ensure that an attractive and powerful network of expertise is established at excellent research institutions in the field of plant breeding, in particular in Germany.

#### More information:

 Dialogue with Stakeholders, Employees

 [www.kws.de](http://www.kws.de)

### Funding for science and research in fiscal 2007/2008



Objectives		
Strategic objective	Measures	When?
Encouragement of young academic talents in the field of plant breeding	- Filling of the endowed chair at the University of Hohenheim	FY 2008/2009
	- Award of grants at the University of Hohenheim	Continuously
Expansion of international cooperation	Award of a grant to a Chinese research facility	FY 2008/2009

## Organization and Report Profile

	Comments	Degree of fulfillment	Page/ reference
<b>1. Strategy and Analysis</b>			
1.1 Statement from the Chairman of the Executive Board about the relevance of sustainability		● ● ●	6–7
1.2 Impact of business activity and risks as well as opportunities for the company		● ● ●	6–7, 10–11, 22–23, AR
<b>2. Organizational Profile</b>			
2.1 Name of the organization		● ● ●	8–9, AR, www
2.2 Primary brands, products and services		● ● ●	8–9, AR, www
2.3 Operational structure of the organization		● ● ●	8–9, AR, www
2.4 Location of organization's headquarters		● ● ●	8–9, www
2.5 Countries where the organization operates		● ● ●	AR, www
2.6 Nature of ownership and legal form		● ● ●	8–9, AR, www
2.7 Markets served		● ● ●	AR
2.8 Scale of the organization		● ● ●	Front jacket, 8–9, AR, www
2.9 Significant changes during the reporting period regarding size, structure or ownership		● ● ●	AR
2.10 Awards received	No relevant awards were received in the reporting period.	● ● ●	
<b>3. Report Parameters</b>			
3.1 Reporting period		● ● ●	3
3.2 Date of publication of the most recent report	Not applicable since this is KWS SAAT AG's first sustainability report.	N/A	3
3.3 Reporting cycle		● ● ●	3
3.4 Contact person for questions regarding the report		● ● ●	Rear jacket
3.5 Process for defining report content		● ● ●	3
3.6 Boundary of the report		● ● ●	3, 6–7
3.7 Specific limitations on the scope or boundary of the report		● ● ●	3, 6–7
3.8 Organizational units included in reporting		● ● ●	3, 6–7
3.9 Data measurement techniques and the bases of calculations	The data in the report comes from internal data collection (SAP), financing accounting and controlling, from measurement and audit reports as well as from our annual environmental reporting. Consumption of rainwater was estimated from the capacity of containers.	● ● ●	
3.10 Explanation of any restatements of information	Not applicable since this is KWS SAAT AG's first sustainability report.	N/A	3
3.11 Explanation of changes to the report parameters	Not applicable since this is KWS SAAT AG's first sustainability report.	N/A	3
3.12 GRI index		● ● ●	50–54
3.13 External assurance of the report	The report is not externally assured.	● ● ●	
<b>4. Corporate Governance, Commitments and Engagement</b>			
4.1 Governance structure of the organization		● ● ●	AR
4.2 Independence of the Chairman of the Executive Board		● ● ●	AR, www
4.3 Independent members of the highest governance body		● ● ●	AR, www
4.4 Mechanisms for shareholders and employees to provide recommendations or direction		● ● ●	33, AR
4.5 Linkage between compensation for members of the Executive Board and the organization's performance (including performance regarding sustainability)	The compensation of members of the Executive Board is based on the size and activity of the company, its economic and financial situation and the level and structure of compensation for Executive Board members at comparable companies. It is made up of a fixed and a performance-related component.	● ● ●	AR

#### 4. Corporate Governance, Commitments and Engagement

	Comments	Degree of fulfillment	Page/ reference
4.6 Processes in place for the Executive Board to ensure conflicts of interest are avoided		● ● ●	AR, www
4.7 Qualifications of the Executive Board in the field of sustainability		● ● ●	6–7, Principles
4.8 Internally developed statements of mission or values, codes of conduct and principles relevant to sustainability		● ● ●	10–12, 32, 38, 40, 43, www
4.9 Procedures of the Executive Board for overseeing the organization's sustainability performance	The Executive Board has approved the publication of the Sustainability Report as part of annual reporting.	● ● ●	6–7, 10–11, 38
4.10 Processes for evaluating the Executive Board's performance with respect to sustainability		● ● ●	6–7, 10–11, 38
4.11 Explanation of how the precautionary approach is addressed		● ● ●	6–7, 38–45
4.12 Externally developed charters, principles or initiatives relating to sustainability	KWS has not joined any initiative nor committed to any initiative at present.	● ● ●	
4.13 Memberships in associations and advocacy organizations		● ● ●	12–13, 46–47, www
4.14 List of stakeholder groups engaged by the organization		● ● ●	12–15
4.15 Basis for selection of stakeholders		● ● ●	12–15
4.16 Approaches to stakeholder engagement		● ● ●	12–15
4.17 Topics and concerns of stakeholders		● ● ●	12–15, www

#### Management Approach and Performance Indicators

##### Economic Performance Indicators

Management approach: economics		● ● ●	AR, www
EC1 Direct economic value generated and distributed		● ● ●	Front jacket, 8–9, 30, 46–49, AR, www
EC2 Financial implications for the organization's activities due to climate change		● ● ●	6–7, 10–11, 20–23, AR
EC3 Coverage of the organization's defined benefit plan obligations		● ● ●	Front jacket, 30–31
EC4 Financial assistance received from government		● ● ●	AR
EC5 Ratio of standard entry level wage compared to local minimum wage		● ●	30
EC6 Policy, practices, and proportion of spending on locally-based suppliers	KWS gives preference to locally-based service providers and, where possible, purchases office materials and other goods from suppliers in the region. Due to the specific nature of many consumables and supplies, KWS depends on special suppliers.	● ● ●	
EC7 Procedures of local hiring	KWS does not restrict its recruitment to the southern Lower Saxony region. Due to the shortage of experts, especially in the field of R&D, KWS has to seek employees nationwide and internationally.	● ● ●	28–29
EC8 Investments in infrastructure and services provided primarily for public benefit		● ● ●	46–49
EC9 Description of indirect economic impacts		● ●	6–10, 12, 16–23, 28–29, 46–49, AR

Environmental Performance Indicators	Comments	Degree of fulfillment	Page/ reference
Management approach: environment		● ● ●	10, 24–25, 38–45, www
EN1 Materials used	The main material flows in terms of volume are in seed processing and cannot be specified for reasons of competition.	● ● ●	
EN2 Anteil Percentage of materials used that are recycled input materials	No recycled materials are used in production. Recycled materials are used in administration where possible.	● ● ●	
EN3 Direct energy consumption		● ● ●	40–41
EN4 Indirect energy consumption		● ● ●	40–41
EN5 Energy saved		● ●	40–41
EN6 Energy-efficient products and services	Not applicable because seed does not consume any energy in use. Improvement in the environmental impacts of seed (see the section Sugar-beet Seed Processing).	N/A	24–25
EN7 Initiatives to reduce indirect energy consumption		●	
EN8 Water consumption		● ● ●	42
EN9 Water sources affected by withdrawal of water		● ● ●	42
EN10 Water recycled and reused	Process water is not fed back into the cycle.	● ● ●	
EN11 Land in protected areas and areas of high biodiversity value	Some of KWS' trial areas are adjacent to the flora and fauna habitat Ilme. This habitat is not impaired by these areas.	● ● ●	
EN12 Impacts of products and services on protected areas and areas of high biodiversity value	Good professional practices in agriculture are used on KWS' trial areas and prevent impairment of soil and environment. A healthy soil and an intact nature are vital to efficient agriculture and therefore a main concern of KWS. The environmental impacts of seed on fields are improved continuously.	● ● ●	24–25
EN13 Habitats protected or restored	Not applicable	N/A	
EN14 Actions for managing impacts on biodiversity	Conserving genetic resources and an intact nature are vital to the success of KWS and therefore a main concern of the company.	● ● ●	10, 16–23, 40
EN15 Endangered species with habitats in areas affected by operations	Not applicable	N/A	
EN16 Direct and indirect greenhouse gas emissions		● ● ●	40–41
EN17 Other relevant greenhouse gas emissions	No other relevant greenhouse gas emissions were defined.	● ● ●	
EN18 Reduction of greenhouse gases emissions		● ● ●	40–41
EN19 Emissions of ozone-depleting substances	Not applicable	N/A	
EN20 NOx, SOx, and other significant air emissions		● ● ●	40–41
EN21 Total water discharge		● ● ●	42
EN22 Total weight of waste by type and disposal method		● ● ●	44–45
EN23 Total weight of waste by type and disposal method	There were no significant spills in the reporting period.	● ● ●	
EN24 Transported, imported, exported or treated hazardous waste	Not applicable	N/A	
EN25 Habitats significantly affected by discharges of water and runoff	Not applicable	N/A	
EN26 Initiatives to mitigate environmental impacts of products and services		● ● ●	24–25
EN27 Reclaim and recycling of product packaging	Product packaging is fed into the recycling system by the farmer. Packaging that is taken back from returns is fed into the recycling system by KWS.	● ● ●	
EN28 Fines and non-monetary sanctions for non-compliance with environmental laws and regulations	There were no fines or sanctions of this type in the reporting period	● ● ●	38–39
EN29 Environmental impacts of transportation	Environmental impacts caused by transportation and employees commuting to and from work are currently not recorded.	●	
EN30 Total environmental protection expenditures		● ● ●	38–39

Performance Indicators	Comments	Degree of fulfillment	Page/ reference
Management approach: work practices		● ● ●	28–37, AR, CoBE, Principles
LA1 Total workforce by employment contract and region		● ● ●	Front jacket, 8, 28–30
LA2 Rate of employee turnover		● ● ●	30
LA3 Benefits provided to full-time employees only	The framework collective wage agreement does not apply to interns, trainees and employees whose gross pay is at least 10% above the highest collectively agreed wage.	● ● ●	30
LA4 Employees covered by collective bargaining agreements		● ● ●	30, 33
LA5 Minimum notice periods regarding significant operational changes		● ● ●	33
LA6 Workforce represented in health and safety committees		● ● ●	36–37, www
LA7 Injuries, occupational diseases, lost days		● ● ●	36–37
LA8 Health care and counseling		● ● ●	36–37
LA9 Health and safety agreements with trade unions	There are no agreements with trade unions on specific health and safety issues.	● ● ●	
LA10 Further training measures		● ● ●	34–35
LA11 Programs for skills management and lifelong learning		● ● ●	34–35
LA12 Employee performance and career development reviews		● ● ●	33–35
LA13 Composition of governance bodies and breakdown of employees by diversity criteria		● ● ●	30, 32
LA14 Ratio of basic salary of men to women	The collective wage agreement contains all provisions on remuneration of employees. Each employee is classified into one of the 13 wage categories according to his or her activity. No distinction is made between men and women in this classification.	● ● ●	

### Human Rights Performance Indicators

Management approach: human rights	The report only covers the locations in Germany. The Code of Business Ethics containing the company's basic ethical values applies internationally and defines KWS' conduct.	● ● ●	10–11, 28–37, CoBE, Principles
HR1 Investment agreements that include human rights clauses	Not applicable	N/A	CoBE
HR2 Suppliers that have undergone screening on human rights	No suppliers are currently undergoing screening on human rights.	●	
HR3 Employee training on human rights	Observance of human rights in Germany is ensured by KWS' integrated management system and Code of Business Ethics. The latter applies to all employees in the KWS group and is submitted to them.	● ● ●	10–11, CoBE
HR4 Number of incidents of discrimination in the organization and actions taken	There were no incidents in the reporting period.	● ● ●	32, CoBE
HR5 Risk to the right to exercise freedom of association and collective bargaining in business activity	No risk exists.	● ● ●	33
HR6 Risk of child labor in business activity	No risk exists.	N/A	CoBE
HR7 Risk of forced or compulsory labor in business activity	No risk exists.	N/A	CoBE
HR8 Security personnel trained in aspects of human rights	Not applicable	N/A	
HR9 Incidents of violations involving rights of indigenous people	There is no risk potential for this as part of current business activity.	● ● ●	CoBE

Society Performance Indicators	Comments	Degree of fulfillment	Page/ reference
Management approach: society		● ● ●	10–15, ACP, CoBE, Principles, www
SO1 Programs that assess the impacts of operations on society		● ● ●	14–15
SO2 Analysis of risks related to corruption	This is defined in the Anti-Corruption Policy of KWS.	● ● ●	11, CoBE, ACP, www
SO3 Training in anti-corruption	This is defined in the Anti-Corruption Policy of KWS.	● ● ●	CoBE, ACP, www
SO4 Actions taken in response to incidents of corruption	There were no incidents in the reporting period.	● ● ●	
SO5 Participation in public policy development and lobbying		● ● ●	12–13
SO6 Contributions to politicians and political parties	No contributions were given in the reporting period.	● ● ●	
SO7 Cases of anti-competitive behavior	There were no cases.	● ● ●	CoBE
SO8 Fines for non-compliance with laws and regulations	There were no violations.	● ● ●	

### Product Responsibility Performance Indicators

Management approach: product responsibility		● ● ●	16–18, 24–25, 38, CoBE, Principles, www
PR1 Life cycle stages in which health and safety impacts of products are assessed		● ● ●	24–25, CoBE, www
PR2 Incidents of non-compliance with regulations on product safety	Regulated by the German Seed Marketing Act; no violations known.	● ● ●	CoBE
PR3 Product labeling and information required by law		● ● ●	25, www
PR4 Non-compliance with regulations concerning product labeling and information	There were no violations.	● ● ●	
PR5 Surveys of customer satisfaction	Customer satisfaction surveys are conducted at irregular intervals by means of qualified random sampling. Binding procedural instructions in KWS' management system define how complaints are handled.	● ● ●	
PR6 Adherence to laws, standards and voluntary codes related to marketing	In case of doubt, advertising material is examined by the legal department after it has been drafted. KWS undertakes to comply with the General Guidelines for Advertising Practice of the Association of German Plant Breeders (BDP).	● ● ●	
PR7 Non-compliance with laws, standards and voluntary codes related to marketing	There were no violations.	● ● ●	
PR8 Substantiated complaints by customers regarding breaches of data protection	There were no complaints.	● ● ●	
PR9 Fines for non-compliance with laws and regulations concerning the provision and use of products	There were no violations.	● ● ●	

This index states where in the present report the standard disclosures and indicators of the Global Reporting Initiative (GRI) are dealt with and includes additional comments as well as the degree to which each indicator is fulfilled. KWS applies all core indicators in its 2007/2008 Sustainability Report on the basis of the principles of materiality, stakeholder inclusiveness and sustainability context. Additional indicators are applied where they make sense in accordance with these principles.

Version G3 of the GRI guidelines, which has been in effect since 2006, distinguishes between different application levels that define the degree to which the GRI guidelines are fulfilled. According our own assessment, the present Sustainability Report complies with GRI's application level B.

### Legend

Light gray	Indicators in light gray are no core indicators of the GRI and are optional (additional indicators)	Principles	You can find the principles of KWS SAAT AG online at <a href="http://www.kws.de">www.kws.de</a>
24, 38	The page numbers refer to information within the present 2007/2008 Sustainability Report of KWS SAAT AG	ACP	The Anti-Corruption Policy of KWS SAAT AG
AR	You can find more detailed information in the latest Annual Report of KWS SAAT AG	Stakeholder	A person with a stake in KWS' business operations and their impact
www	You can find more detailed information online at <a href="http://www.kws.de">www.kws.de</a>	<b>Degree of fulfillment</b>	
N/A	This indicator is not applicable to KWS SAAT AG	● ● ●	A full response is given for this indicator
CoBE	The Code of Business Ethics of KWS SAAT AG	● ●	A partial response is given for this indicator
		●	No response is given for this indicator at present

# Imprint

This translation of the original German version of the Sustainability Report has been prepared for the convenience of the English-speaking readers. The German version is based on the Global Reporting Initiative (GRI G3).

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## **KWS SAAT AG online at**

[www.kws.com](http://www.kws.com)

The 2007/2008 Sustainability Report of KWS SAAT AG and more information are available online at:  
[www.kws.de/nachhaltigkeit](http://www.kws.de/nachhaltigkeit)

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