

Seeding the future

Sustainability Report 2009|2010

Sustainability

We understand sustainability as thinking and acting in terms of generations – as we have for more than 150 years.



Continuity

Responsibility

Responsibility toward humankind and nature is what guides all our day-to-day activities.

Innovation

Annual breeding progress of 1–2% is required to ensure the supply of food and raw materials from plants.

Employees

Freedom, fairness, trust and respect are values that KWS' employees practice in their day-to-day interactions.

Environment

We are committed to the careful use of natural resources and to thinking and acting in terms of ecological cycles.

Society

Only a good social environment can help society make advances.

Sustainability at a Glance

Responsibility	
1856	The owner-led family business begins breeding plant varieties. KWS has supplied farmers with seed and offered generations of employees and their families a promising livelihood for more than 150 years.
20	years ago, KWS initiated an intensive dialogue with stakeholders by founding the "Plant Breeding Advisory Board."
Innovation	
€98 million	spent KWS on product development in fiscal 2009/2010. Our R&D budget has risen by an average of 6% per annum over the past 10 years.
274	KWS was awarded 274 distribution approvals worldwide for sugarbeet, corn and cereal varieties in fiscal 2009/2010.
40,000	A special testing method developed by KWS' scientists makes it possible to determine the sugar content of beets grown in 40,000 trial plots while they are being harvested.
Employees	
2009	KWS won the "Family-Friendly Business" award from the German Ministry of Family Affairs.
2009	KWS established the "Breeders Academy," a practical training program for junior staffers in the field of plant breeding.
84	KWS is offering 84 trainees in industrial, business administration and agricultural vocations the chance to launch their careers in the current year.
Environment	
€750,000	KWS will provide €750,000 over the next five years for a project to preserve and evaluate plant genetic resources in Peru – its contribution to the International Year of Biodiversity.
80%	of the company's energy needs will be met by biogas as of the fall of 2010.
80%	of KWS' waste will be recycled in fiscal 2009/2010.
Society	
3	Since 2006 KWS has presented 3 school grants as a way of helping to fund scientific, artistic or climate protection projects under the patronage of the state government of Lower Saxony.
€222,000	In fiscal 2009/2010 KWS made €222,000 available as part of its cultural and social commitment in the Southern Lower Saxony region.

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Foreword by the Chief Executive Officer



Philip von dem Bussche
Chief Executive Officer

Dear Readers and Friends of KWS,

I am pleased to present you with KWS SAAT AG's second Sustainability Report under the slogan "Seeding the Future." The objective of this report, which is published every two years, is to provide you with details of our fields of operation and strategies relating to corporate responsibility. In our efforts to widen its scope, the report now includes further German subsidiaries and information on all of the Group's four segments: Sugarbeet, Corn, Cereals and Breeding & Services.

Plants are a renewable source of raw materials and food. Starting from the various types of plants, we develop varieties that are ideally suited to their specific cultivation conditions and uses. As a seed company, we therefore make a major contribution to tackling global challenges, such as climate change, a shortage of food and the finite nature of fossil fuels.

We are committed to climate protection and energy efficiency in our core business – as evidenced by our expansion of energy plant production and conversion of our operating processes to renewable sources.

Energy from biomass, or bioenergy, is one of the most important renewable sources of energy when it comes to producing power, heat and fuel. By breeding energy plants, we support agricultural concepts for power generation. KWS' corn and sugarbeet have proven their particular value in this field. Various types of cereals, rapeseed and sorghum round out our portfolio of energy plants.

In order to optimize our energy concept and ensure a long-term, climate-friendly supply of power for our greenhouses and seed processing operations, we intend to meet around 80% of our energy needs at Einbeck with biogas by the end of 2010. And so we come full circle: Energy plant varieties bred by KWS and grown by farmers are processed and returned to the company as biogas.

In the face of the global challenges facing us, 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. Biodiversity, the wide variety of different plants in agriculture, is vital to breeding success. In 2010, the International Year of Biodiversity, KWS launched a related cooperation project with Peruvian corn breeders.

Acquiring junior staffers has always been a key concern of ours. In addition to the specific vocational training and apprenticeships we offer, in fiscal 2009/2010 we initiated the "Breeders Academy" with the aim of training young people specifically in the field of research and breeding. The two-year basic and intensive training programs for plant breeders, which complement the participants' university education in this area, are very practice-oriented and geared toward the types of crops we breed.

We are pleased that our commitment to a family-friendly KWS was rewarded in June 2009, when the then German Minister of Family Affairs, Ursula von der Leyen, presented our company with an award in the "Family-Friendly Company Southern Lower Saxony 2009" contest in the category for companies with more than 100 employees. We have a great interest in ensuring that our employees remain satisfied and loyal to KWS – after all, they play a vital part in securing our long-term business success.

"Seeding the Future" – that means sustainability and future orientation in all we do. And that naturally includes putting sustainability at the heart of all our business processes – from research and breeding, production and distribution to customer consulting. We will continue to devote our efforts to our company and its future, optimize our products and services, protect the environment and remain an attractive employer for the members of our workforce.

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

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

Yours Philip Bussche

Philip von dem Bussche
Chief Executive Officer

Company Profile

Seeding the Future – Since 1856

KWS SAAT AG, which is headquartered in Einbeck, Lower Saxony, is a leading, independent seed company for agricultural crops. It has more than 40 subsidiaries and associated companies worldwide and operates in some 70 countries.

We can look back on a 150-year tradition of delivering top-quality, high-yielding products – the key to our success – past, present and future. Our product portfolio comprises sugarbeet, corn and cereal seed, as well as oilseed and potatoes. Our core markets are in the moderate climatic zone, with the main ones being Europe and North America.

We regard plant breeding as a process of improving the properties of plants for agricultural production to the benefit of our customers, users of our products, consumers and the environment. Plants are an inexhaustible source of food and raw materials. That is why we are committed to the responsible use of our natural resources.

The cornerstones of our everyday business activities

The KWS brand embodies values that have grown and been lived over many years that generations of KWS employees have established and evolved in dialogue with our customers. In our company's long history, customers have built a deep trust in our products and employees. To this day, the majority stake of the family shareholders enables us to gear the company's strategy to the long term.

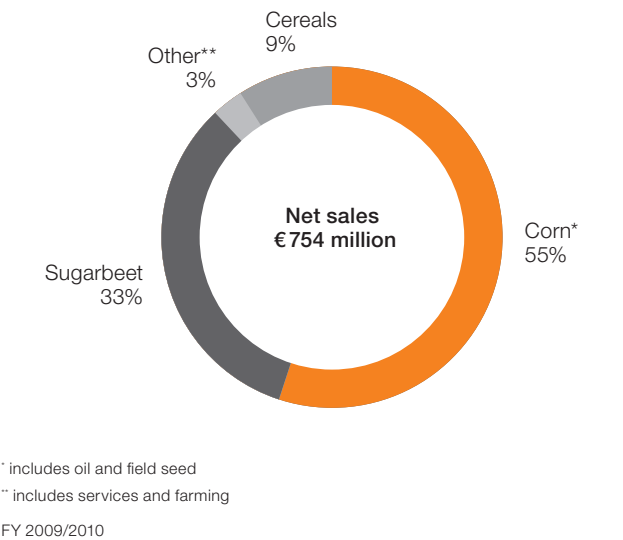
The cornerstones of our everyday business activities include:

- 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.

Fiscal year 2009/2010

In fiscal 2009/2010, the Group employed 3,492 people and generated net sales of €754 million. We are the world's No. 4 in seed business for agricultural crops. This is the result of sustained growth in net sales at an annual average of 6% over the past ten years. This gratifying performance proves that KWS is able to achieve sustainable, largely organic growth, despite growing insecurity in global agricultural markets. The foundation for this: Farmers know that, in times of very low producer prices, the quality of seed is a production factor with a major influence on yields and thus on the farmers' potential income.

The KWS Group – Sales by segment



Above-average investment in research and development

Plant breeding, with its high-yielding yet resistant varieties, has become the key factor in the agricultural production process. Continuous improvements in yields are expected from agriculture around the world, yet global cultivation area is limited to around 1.5 billion hectares – or just over 2,000 m² per person to provide the food, fodder and renewable resources we need. However, approximately 50% of the world's harvests are destroyed by disease, insect pests and negative weather influences. KWS is tackling this challenge, fully aware that it takes around ten years to develop a single variety in plant breeding. In terms of strategy,

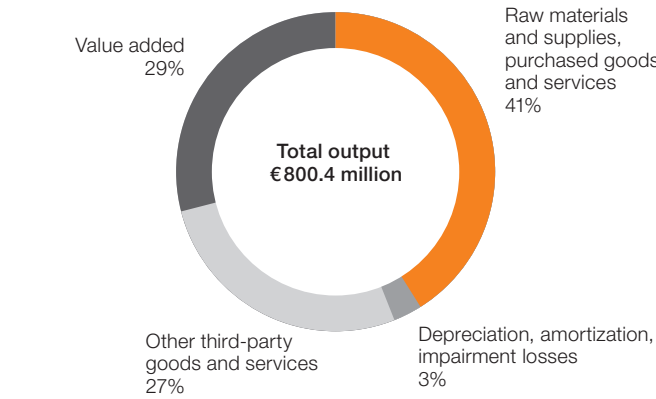


Around 1,000 people work at our headquarters in Einbeck.

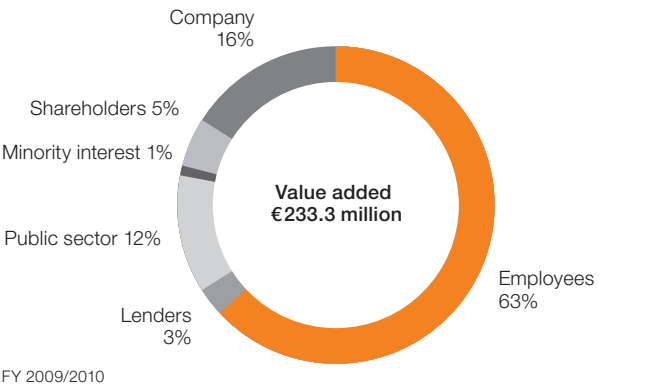
that means that we have to keep our product development efforts at as high a level as possible. Consequently, we have increased our R&D budget by an average of 6% per annum over the past ten years so that farmers can achieve an increase in yields of 1–2% a year. If we want to keep our earnings and thus our value creation for our stakeholders (see the charts) at a constantly high level, we have to earn additional R&D expenditures from organic growth in the market.

Our operating income (EBIT) has also grown by an average of 6% per annum in the recent years, despite a steadily growing research and development (R&D) budget and capital expenditure – in particular on developing new markets – that is always above depreciation. It was 82.4 million in fiscal 2009/2010. Our future goal is likewise to achieve average sales growth of at least 5% and a double-digit EBIT margin.

Creation of value added



Distribution of value added



Sustainability – Management with a Sense of Responsibility

Responsibility toward humankind and nature is an obligation for KWS and a guiding principle of its day-to-day interactions with customers, shareholders, employees and consumers. All major aspects, such as product responsibility, environmental protection and social concerns, are addressed. This is also reflected in KWS' principles, which have proven their value in creating a shared understanding of our visions and objectives in our everyday work.

Implementation

The basis of our approach is for all functional areas of KWS to act responsibly in compliance with existing national and international legal regulations and guidelines. 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 on five mainstays:

- Systematic risk management
- A comprehensive compliance system
- An Integrated Management System for quality and the environment
- A commitment to act responsibly toward humankind and the environment
- Communication with and transparency toward stakeholders

In the future, a Sustainability Committee made up of key function holders at KWS and the Executive Board member responsible for the Integrated Management System will address all aspects of sustainability and related annual objectives.

Compliance

The compliance system, which KWS implemented a number of years ago, consists of extensive rules and regulations that give KWS' employees worldwide guidance on acting lawfully and ethically. The system also has many control mechanisms.

The central point of contact for all matters relating to compliance is the Corporate Law & Compliance department. It advises the business segments throughout the KWS Group on legal matters, on regulations and rules of conduct and controlling their observance, and also develops measures to enable that. An independent attorney can be reached at all times through our compliance hotline. The Chief Compliance Officer informs employees about the latest issues and developments in training courses, at information events and workshops and with a Compliance Newsletter.

The "Code of Business Ethics" and the policies based on it are crucial as a guide for employees in their everyday work. The sanctions to be expected if these policies are not abided by are expressly pointed out. The KWS Group's "International Anti-Corruption Policy" defines the constraints on accepting and giving presents and donations, issuing invitations and paying for trips. As a publicly traded company, KWS strictly ensures that insider information is not used for stock trading and regulates this aspect in an insider policy.

Topical issues and recent events

Since compliance is such a wide-ranging and complex issue for an international company, a separate department was set up in September 2009 to focus on it along with Corporate Law.

At the beginning of 2010, KWS conducted a compliance risk assessment and used its results to define focal topics. They include data privacy, combating corruption and the prevention of anti-competitive practices.

An independent auditing firm also conducts regular compliance audits and examines the implementation of its recommendations in subsequent audits.

Risk and Opportunity Management

A responsible approach to risks is a crucial factor in KWS' success, while our ability to identify opportunities quickly and leverage them over the long term ensures that we remain successful. That is why KWS systematically analyzes and assesses both risks and opportunities.

Risk management

KWS has chosen a pragmatic risk management approach that reflects its organizational structure. The system monitors, controls and documents the main risks, in particular market changes, technology trends and changes in general political conditions. It is based on strategic planning and investment controlling, continuous operational controlling and the quality and process monitoring systems and is complemented by external audits performed by experienced specialists.

Assessment of opportunities

KWS identifies opportunities by means of unceasing observation of the market and intensive dialogue with customers, business partners and scientific institutions. The main opportunities arise from the rising global demand for food, fodder and energy. The world's growing population and increasing prosperity in individual regions influence this global trend.

Risk management network



Topical issues and recent events

We extensively expanded our risk management system in fiscal 2009/2010. It now meets the more stringent requirements of the German Accounting Law Modernization Act (BilMoG) by ensuring that all significant risks are systematically identified every year, examined, assessed as to the likelihood of their occurring and their potential impact, documented, controlled and monitored. In the course of this expansion, more than 100 significant risks and means of controlling them were described. They were assessed with their individual likelihood of occurrence and potential level of damage. Their relevance is evaluated on the basis of their effect on the KWS Group's operating income (EBIT) or specific qualitative indicators. The individual risks or process sections are assigned to persons who conduct controls and persons responsible for controls. In addition, manual and automated controls are set up for the identified risks. The persons who conduct controls and are responsible for them use a newly established workflow to report to the risk manager, Executive Board and Supervisory Board on the controls and their results and, if applicable, on the measures that have been initiated.

More information:

● www.kws.de/ir (Corporate Governance)

Dialogue with Stakeholders

Internal and external dialogue is of great importance in implementing sustainability at KWS. We communicate what we do. As a result, our business activity is clear and transparent at all levels and in all areas – for customers, consumers and others as well. KWS' dialogue is characterized by maximum openness and trust in its partners.

Topical issues and recent events

Green genetic engineering

Genetically modified plants are now cultivated on a global area of 134 million hectares, a figure that is growing year by year. Despite that fact, the public discussion on green genetic engineering remains controversial, at both the national and European levels. We are therefore engaged in an intensive social dialogue, guided by our maxim of creating the greatest possible transparency.

Since the spring of 2008 the company has conducted open-air trials of genetically modified sugarbeet that is tolerant to the herbicide Roundup® at various locations in Germany (Wetze in Lower Saxony and Dreileben in Saxony-Anhalt). These trials were impeded by a small group of opponents of green genetic engineering in 2009 und 2010. Nevertheless, it was possible to harvest the beet in all three years of the trial. At the same time, we take every opportunity for dialogue with this technology's opponents and do not avoid discussion.

In 2008 Ilse Aigner, Federal Minister of Agriculture, and Professor Dr. Annette Schavan, Federal Minister of Research, launched the Genetic Engineering Round Table, comprising representatives from science, business, associations and churches, to discuss the issue with different focal areas in four sessions by the summer of 2010. They involved topics such as the role agricultural research can play in feeding the world. Representatives from KWS and members of its Executive Board took part in the meetings.

Our CEO of many years and current Chairman of the Supervisory Board, Dr. Dr. h.c. Andreas J. Büchting, was awarded the Arthur-Burkhardt-Prize in April 2010 in honor of his achievements in modern plant breeding in conjunction with his transparent communication of the related findings to society.

Plant breeding up close

In 2009 and 2010 KWS took part in a show garden project for genetically modified plants in Üplingen, Saxony-Anhalt. In a comparison of plants grown with and without the use of genetic engineering, interested members of the public were able to learn more about the effects of diseases and pests on potatoes and corn and see the influence of weeds on the growth of sugarbeet plants. Such projects offer a direct, vivid means of helping people grasp and form a differentiated opinion on green genetic engineering.

Dialogue Forum

In May 2009 KWS initiated a Dialogue Forum in the Leine-Solling region, where KWS provides up-to-date, comprehensive information on the most important questions for the region and the company's developments. At the same time, KWS hopes to get to know the viewpoints and opinions of participants in the Dialogue Forum so as to include them in its considerations and decisions. Three further events have now been held. A description of the work and the results of the meetings in connection with the issues of green genetic engineering and biogas can be found on the Internet sites. This series of discussions is to be continued. The results of the Dialogue Forum gave rise to a scientific colloquium for beekeepers held at KWS in January 2010. More than 90 beekeepers, scientists and national experts discussed the latest results of biosafety research, the potential effects of genetically modified plants on bees and honey, and legal considerations.

New newsletter

The new newsletter "KWS in Dialogue – News for Decision-makers" has become a much respected source of information among representatives of business, politics and public life since it first appeared in fiscal 2008/2009. Seven issues on the subjects of bioenergy, open-air trials, biodiversity, genetic engineering, climate change and plant breeding have since been published. The mailing list now numbers more than 500 recipients.

More information:

● www.kws.de/nachhaltigkeit (Dialogue with Stakeholders)

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 body advising KWS, is one of the most important institutions in our dialogue with stakeholders.

Twice a year, questions and problems relating to the use of new technologies in agriculture are discussed 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. The objective is to include different social needs and perspectives, including decidedly critical views, in expanding the company's knowledge and in its decision-making.

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.

Topical issues and recent events

The Advisory Board convened three times in the period under review.

November 2008: Plant breeding and biodiversity – The conflict between preserving and using genetic resources

Different approaches to preserving biodiversity are needed in the various regions and global centers of origin of important crops. The discussion focused on ethical questions, for example the conditions under which genetic resources from less developed regions of the world can be used. As a result of this meeting, the company strengthened its activities in biodiversity projects (see page 21 of this report for more information).

March 2009: Plant protection and breeding – New challenges for the future

Farmers suffer lower harvests and thus economic loss as a result of pest and diseases attacking the crops they grow. These factors impact the quantity and quality of the food produced and supplied in global markets.

The pesticide industry and plant breeding will have to adapt to changes in the regulatory framework in the coming years, including a decline in research into active substances used to combat plant diseases and pests and the patents applied for and granted. Plant breeding companies have the responsibility to continue modifying their breeding programs for improving resistance to plant pests and diseases to reflect these developments.

November 2009: Protection of intellectual property in breeding: from economic requirements to ethics to social acceptance

Plant variety right is the key tool by which plant breeding companies can protect their new varieties. 95% of intellectual property is covered by the plant variety right. Patent law offers the possibility of protecting new methods and key technologies. Both types of protection are important and necessary, and coexistence between the two must be ensured. Ideally, every breeder could use all genetic variations without restriction in the form of an open source model. At present, plant breeders in Europe are permitted to use all approved varieties to develop new ones under what is called the breeder's exemption.



Subject of the Advisory Board's next meeting: "Agricultural production is a global challenge"

More information:

● www.kws.de/nachhaltigkeit
● www.kws.de/gentechnik

Agriculture supplies a growing number of people with food, fodder, renewable resources and energy. High-quality seed and our crops' high-performing varieties are at the beginning of every value chain in farming. We strive to deliver products that can be used for all kinds of agriculture: conventional farming, farming with genetically optimized plant varieties, and organic farming.

Research and Breeding

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 for us. Our mission is to support all farmers with custom solutions and offer ideal varieties and expert advice for their operations.

Our strong commitment to research and development is the foundation of our business success. 1,448 employees worldwide work in R&D, over 100 of them in applied biotechnology. The increase in yields for farmers who use the varieties KWS breeds is between 1% and 2% a year.

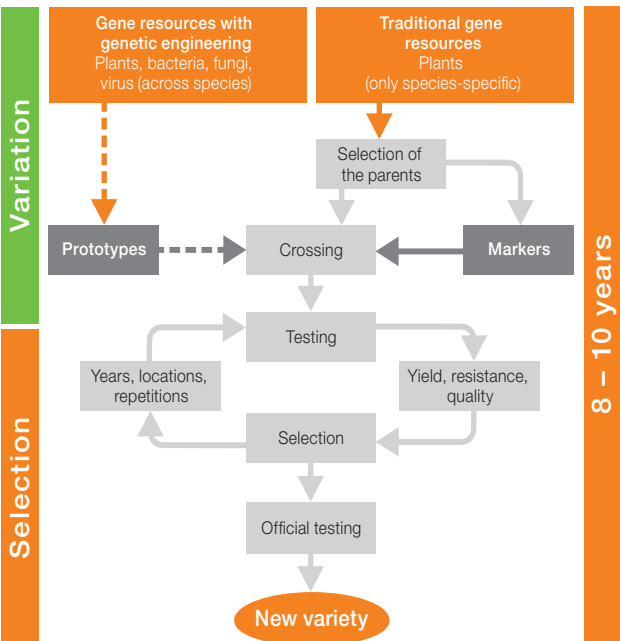
Development of varieties for modern, sustainable agriculture

The concrete breeding objectives for our varieties are oriented toward farmers' needs and must allow for the conditions at the location and the regional climate. The goal is to achieve as high a yield as possible by developing properties such as low-nutrient and drought tolerance and resistance to diseases. We also take into account the quality requirements of processors and consumers and their demands for healthy food and fodder.

The breeding work done on the plant depends on the type of pollination (self-pollination or cross-pollination) in accordance with defined methods that are updated to reflect the latest scientific and technical knowledge. Partnerships with public and private research institutes worldwide are a core element of our R&D activities.

The range of breeding methods has been continuously expanded and refined over time. Systematic influencing of genetic material by crossing selected parent plants and subsequent selection of their progeny began around 150 years ago. In the meantime, the mix of methods used in modern plant breeding has grown significantly. Of great importance for us is genome research, which analyzes characteristics at the molecular level. New methods of molecular marker technology (diagnostics) and genetic engineering can be derived from the results of genome research. These methods complement each other and are not interchangeable (see figure). We use these genetic engineering methods in breeding openly and transparently, well aware of our responsibility.

Breeding scheme – how a variety is obtained



Organization of research and breeding
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. The breeders are assisted in developing varieties by service units, such as a chemical laboratory, departments for phytopathology or data processing to enable statistical analysis of the trials.

Market-oriented project planning and control
The KWS Group runs its own breeding programs for sugarbeet, corn, cereals, rapeseed, sorghum and energy plants and repositioned itself in potato breeding with its 50:50 joint venture Van Rijn – KWS B.V. effective July 1, 2008. 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 segment management, which defines current market requirements and forecasts demand for varieties.

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 performance trends are compared with the annually reviewed breeding objectives from the segments 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.

This breeding success is reflected in the number of annual approvals for the distribution for new KWS varieties granted by the relevant authorities in the individual countries.

Topical issues and recent events

KWS has increased its research budget by an average of 6% per annum over the last ten years, one of the largest figures reported by any international seed company. KWS' expenditure on research in fiscal years 2008/2009 and 2009/2010 totaled around €89.5 and 97.5 million respectively, a year-on-year increase of 8.9%. KWS' success in R&D is reflected in the number of distribution approvals for new varieties in the last two years. In fiscal year 2009/2010, 120 sugarbeet, 109 corn, 35 cereal and 10 varieties of other crops (a total of 274 worldwide) were registered.



Every bag conceals a different genotype

Successes in breeding resistance
The focus in sugarbeet breeding is not only on increasing yields, but also on continuously improving resistance to major diseases and pests. Significant progress has been made in this regard in recent years. Successes include nematode-tolerant varieties that have a very high performance potential whether they are infested by nematodes (threadworms) or not. Farmers are now able to plant varieties that are tolerant to the Rhizomania virus and nematodes without having to sacrifice yields. There are also similar developments underway in relation to the fungus Rhizoctonia. Generally speaking, resistance breeding is especially important where pesticides run up against their limitations. In the near future, increasingly resistant varieties may also reduce the amount of pesticides that need to be used.

Development of winter beet
KWS is also developing winter beet in a very long-term research project. However, this requires regulation of the flowering time and an improvement in the beet's tolerance to cold and frost. Consequently, it will take 10 to 15 years until the beet created using this research approach will be ready for the market.

Another long-term project is one involving analysis of the genes from various wild beet populations that could increase breeding progress.

Growing importance of corn

Corn has the world’s largest cultivation area of all the crops in KWS’ portfolio – and that area continues to grow, among other things because corn is used as a raw material for producing bioenergy. KWS’ varieties dominate the German market. The company also conducts regional development programs in France, Southeastern Europe, South America and the U.S. so as to be able to provide farmers in those regions with varieties that are adapted to the location, have the appropriate maturity groups and offer a high yield potential. KWS’s current breeding activities also include programs aimed at increasing corn’s resistance to abiotic (dry and cold stress) and biotic factors (e.g. fungal diseases such as Fusarium and Helminthosporium). One further focus is the breeding of corn varieties for organic farming.

Breeding quality wheat

What counts in wheat breeding is to offer varieties that are high-yielding and healthy in every quality category, from “baking quality” to “fodder.” That is true for barley, too, although the key aspect in this case is its brewing quality. Rye is typically grown in locations with poorer conditions, so yield stability is especially important.

Greater use of biotechnology and genetic engineering

KWS strives to use biotechnology methods to a greater extent in all its breeding programs. Marker technology is already making a crucial contribution to enabling early identification of desirable plant traits by means of genome analyses. The resultant increase in the efficiency of breeding processes supports pinpointed channeling of resources and thus indirectly helps protect the environment.

KWS has an in-house Biotechnology Competence and Research Center that has been a key provider of breeding services for 26 years and is responsible for the company’s own research activities. The scientists and technical employees at this unit provide their scientific know-how in the



Analysis of genetic properties with cutting-edge diagnostics in the lab

form of cell service, molecular genetic analyses and the application of genetic engineering methods to the various segments of KWS.

Apart from biotechnology methods that do not result in any change to the genome (e.g. marker technology), we also pursue genetic engineering approaches, primarily for sugarbeet and corn. The most successful genetic engineering project to date was the development of the Roundup Ready® sugarbeet, which has been on the American market since 2007. Genetically modified varieties now account for 28.3% of the KWS Group’s net sales. Through its American subsidiary BETASEED, KWS offers farmers in the U.S. and Canada this genetically modified, herbicide-tolerant sugarbeet seed, and demand for it remains unbroken. These beets are now grown on around 500,000 ha, or some 95% of the area used for sugarbeet cultivation in North America. By growing these varieties, farmers can control weeds – one of the biggest challenges in sugarbeet cultivation in North America – in a more environmentally friendly way. In January 2008, four interest groups in the U.S. initiated legal action against the US Department of Agriculture (USDA) regarding the approval procedure for herbicide-tolerant sugarbeet in the U.S. Although the court denied the request for an injunction on growing Roundup Ready® sugarbeet, it made approval for this variety contingent on submission of environmental impact statements by the relevant authorities. The U.S. Secretary of Agriculture has announced that further cultivation will initially be enabled under an interim arrangement.

The main goal of newer genetic engineering approaches is to increase plants’ resistance to diseases, pests and negative environmental influences. In this way, the use of pesticides can be reduced and yield stability increased. In 2010, KWS and BASF Plant Science began working together to develop sugarbeet with a greater yield and better resistance to stress. As of 2020, plans call for new varieties to be available for the global market and to enable farmers to increase yields by 15%.

Determining quality in breeding

In 2009 KWS’ researchers developed a new method of analyzing the constituents of sugarbeet varieties based on measurements in the near-infrared spectrum of natural light. The main parameter in determining the quality of sugarbeet varieties is sugar content. This can now be ascertained directly during harvesting thanks to near-infrared spectroscopy (NIRS). The NIRS technology has been installed on the new sugarbeet lifter PUMA. PUMA will be used in the future to assess the sugarbeet bred on up to 40,000 trial plots. The costs of the customary methods of determining sugar content in laboratories, which necessitate storing sugarbeet beet samples at –20°C, the use of chemicals and subsequent purification of waste water, can thus be eliminated. In addition, NIRS technology is also used for determining the quality of the constituents of corn, cereals and oil and field seed.

Large number of cooperation projects

In addition to KWS’ own and bilateral research activities, KWS’ scientists are also cooperating in a large number of research projects with several partners (universities and public and private research institutes). One example is GABI (Genome Analysis in the Biological System of the Plant), a genome research initiative funded by the German Federal Ministry for Education and Research. It is organized in the WPG association (Wirtschaftsverbund Pflanzengenomforschung GABI e.V.) and brings together 30 companies from the fields of plant breeding, pesticide production, the processing industry and biotechnology, including KWS SAAT AG and subsidiaries and associated companies. Together with research partners from universities, Max Planck Institutes and other large research establishments such as IPK Gatersleben (Leibniz Institute of Plant Genetics and Crop Plant Research), research has been conducted since 2000 into the genetic and molecular processes of the most important agronomic properties, including yield and resistance to diseases. This work has created the basis of further research (e.g. the first genomic DNA sequence of sugarbeet) and also addresses concrete questions (e.g. the cold tolerance of corn). The findings are systematically used to develop varieties. This continuing cooperation between industry and academia has evolved into a successful model of a public-private partnership.



A lifter with NIRS technology means sugar content can be determined directly when sugarbeet is harvested.

Establishment of breeding stations – tapping new markets

It is especially important for a global seed company like KWS to take regional circumstances into account when breeding new varieties. The inauguration of the new breeding station in Lipetzk, Russia, on July 8, 2010, is a good example of how the company addresses these requirements. Sugarbeet, corn, cereals, rapeseed, potatoes and sunflower are grown in one of KWS’ largest stations, some 400 km south of Moscow. KWS has thus laid the groundwork for supplying Russia’s agricultural industry with even higher-yielding varieties adapted to local conditions. In addition to Eastern Europe, the Chinese seed market plays a major role in KWS’ strategic planning. KWS has nurtured good business relationships with China since the 1970s and in 2010 established a new subsidiary for breeding corn there.



Keeping an eye on how the new harvest is coming along.

Strategy for international patent and variety protection for all units

It is becoming more and more important for the company to protect breeding and research results, in particular so as to ensure it remains competitive. Obtaining patents and property rights for varieties is therefore embedded in an international strategy covering all units. The Industrial Property Rights department, which is responsible for patenting and plant variety right, ensures that proprietary rights are applied for, defended and enforced. It also monitors third-party property rights so that the risk of infringements can be ruled out at an early stage. KWS plays an active part in the discussion regarding the right balance between intellectual property protection and broad-based access.

Less need for pesticide by breeding resistant varieties

A core concern of KWS' research is to reduce the use of pesticides in agriculture by breeding resistant varieties. However, pesticides are vital in the early phase of breeding work to develop environmentally friendly varieties. Thanks to careful and selective use of chemical and biological preparations, mother and father components are produced as inbred lines in the nursery. As a result of this special breeding method, these purebred lines exhibit the phenomenon of inbreeding depression, due to which they are often weak-growing and prone to many diseases. In the next stage, these inbred lines are crossed to produce hybrid varieties that have excellent performance and resistance properties and can contribute later to reducing the use of pesticides in large-scale cultivation in the market.

More information:

- www.kws.de (Innovation)
- www.kws.de/gentechnik
- www.kws.de/produkte

Organic Farming

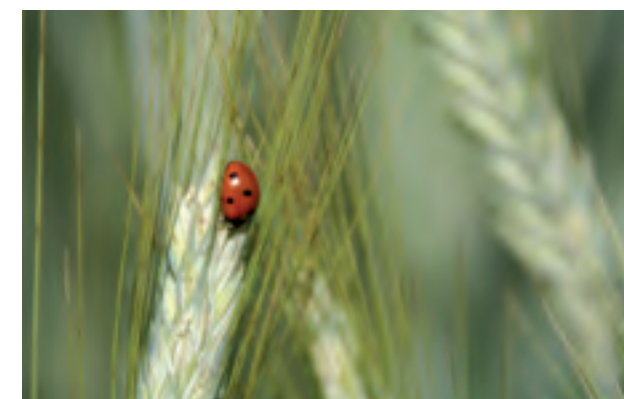
Organic farming operations make special demands regarding the seed and varieties of our crops. Organic farming differs from conventional agriculture in that nitrogen is available later in the vegetation period. A key aspect of breeding varieties for organic farming is therefore nutrient efficiency. Other main breeding objectives in this field are competitive ability against weeds and resistance to seed-borne diseases.

KWS currently markets organic seed for sugarbeet, field and oilseed, corn, field peas and cereals. Since 2002 KWS has had its own organic farm for conducting trials on an area of 480 ha. This farm is a member of the growers association Anbauverband Naturland, and its operations are run in compliance with the applicable guidelines and controlled regularly. Breeding trials, national variety trials, experiments in seed treatment and planting considerations and demonstration fields are integrated in the customary crop rotation of the Wiebrechtshausen monastery estate. Regular field days, such as the Organic Sugarbeet Day, Organic Rapeseed Day or Organic Potato Day, and other informational events permit an intensive dialogue with our customers who farm organically. KWS is developing alternative seed technologies in cooperation with research partners, since the seed used in organic farming cannot be dressed using synthetic chemical agents.

Topical issues and recent events

Use of organically farmed areas for breeding

Since 2008 we have also been breeding corn varieties in trials on organically farmed areas so as to be able to select plants for their suitability in organic farming under these cultivation conditions.



Preservation of field peas

Since 2010 KWS has conducted selection trials with field peas on these areas to enable it to offer varieties that offer high long-term performance for this crop, which is such an important element of organic farming. Grain legumes play a major role in ecological crop rotation. They have the special ability to fix nitrogen via their root system and its nodule bacteria and thus to improve the supply of nutrients to the plants. Nitrogen is one of the basic nutrients required for plant growth and is provided in organic farming by means of this cycle.

Specialist events

In 2009 KWS launched a regular event for organic farming in order to establish close and intensive dialogue on current issues between the company and customers in the organic farming sector. The kickoff event addressed the subject of "Plant Breeding: Perspectives for Organic farming." Many organic farmers, representatives of growers associations, state institutes and chambers of agricultural commerce took up the invitation. The second event is planned for 2011, when the focal issues will include quality assurance in seed production and the status of and perspectives for legume breeding.

Project days for school classes

For two years now, the family of our site manager has offered project days for primary schools with the assistance of the Lower Saxony Country Women's Association in Northeim. This initiative was extended to include students from Northeim Gymnasium (High School) in the summer of 2010.

More information:

- www.kws.de/nachhaltigkeit
- www.kws.de/oeko

Energy Plants

Renewable energy is growing in importance as a result of the finite availability of fossil fuels and efforts to reduce greenhouse gas emissions. Energy from biomass, or bio-energy, is one of the most important renewable sources of energy when it comes to producing power, heat and various fuels.

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. KWS develops energy plants that are grown in a resource-saving and sustainable manner, offer farmers an ecologically and economically sensible alternative and can increase efficiency in downstream processing methods.

Success criteria for energy plants

The quality and specific properties of the plants used are crucial factors in the energy efficiency and cost effectiveness of energy production. The focus of KWS' research activities and longstanding breeding programs for energy plants is to increase the yield of biomass as the raw material for biogas. In particular corn, sugarbeet, rye and sorghum from KWS' portfolio have proven their value in the breeding program for energy plants.

Topical issues and recent events

2008 saw the beginning of a perceptible expansion in the biogas sector in Germany and other European countries, mainly in Italy, but also in the Czech Republic, and greater use of this technology in Austria. The number of biogas plants in Germany probably peaked in 2010 at 5,800. Energy plants for producing biogas are now grown on an area of 650,000 ha in Germany (source: Agency for Renewable Resources – provisional estimate for 2010). In particular KWS' energy corn hybrids help support agricultural concepts for energy production. KWS promotes expansion of this market sector with its intensified breeding activities



“Feeding” the biogas plant with biomass

for new crops such as sorghum, corn and sugarbeet. In addition, KWS made it a point to participate in related trade shows in Germany, such as Agritechnica 2009 and BioEnergy in 2008, 2009 and 2010.

In 2009 KWS commissioned a special mobile plant for washing beet and removing stones when sugarbeet is harvested for the production of biogas. For the first time, more than 60 tons of beet an hour can now be washed, with complete destoning of the harvest. Stones and earth clinging to the beet are left behind in the field and thus do not impair the fermenting process in biogas production. In addition, 17 vehicles in KWS' fleet of company cars have been converted to biomethane in the past two years.

Challenges in the biogas sector

The strong growth in the biogas sector has fueled increasing discussion in the past two years on how the use of plants and residues for energy can be integrated better in the various agricultural production systems (e.g. production of cash crops and fodder and livestock farming). Biogas production must also continue to increase in efficiency, not least so that it no longer has to depend on government subsidies. Moreover, while corn is now the predominant crop for producing biomass, farmers would like to use other rotation crops. KWS alternatively offers varieties of several crops that have been specially bred for biomass production and continues to work at increasing yields per hectare. Further increases in efficiency will be achieved by optimization of the fermentation process, the best possible composition of the substrates used in fermentation, and direct feeding of biogas into networks. We believe that these are means of enabling biogas technology to be used efficiently and in harmony with the existing main functions of agriculture to improve climate protection.

More information:
● www.kws.de/energie

Biodiversity

Diversity – a prerequisite for breeding success

Biodiversity – biological diversity – denotes the wide range of life on earth and the variability among living organisms from all sources. It also includes the diversity of life's smallest building blocks: genes. The essential part of biodiversity for plant breeding – plant genetic resources (PGR) – is defined by the Food and Agriculture Organization (FAO) of the United Nations as any genetic material of plant origin of actual or potential value for food and agriculture. Preservation of, access to and use of PGR are vital to plant breeding. The inestimable value of biodiversity was recognized by the United Nations Conference on Environment and Development and enshrined in 1992 in the Convention on Biological Diversity (CBD). To address the special aspects of agriculture, the FAO negotiated the International Treaty on Plant Genetic Resources for Food and Agriculture, which came into force in 2004. One particular intention of it was to regulate access to and benefit-sharing from the use of PGR.

Commitment to preserving plant genetic resources

However, political efforts and decisions are urgently required so that plant genetic resources can be accessed by anyone with an interest, anywhere in the world. That is why KWS has been active at various political levels for years. KWS has been contributing to gene banks and making new, approved varieties available to all plant breeders (the breeder's exemption mechanism in variety protection) and has thus been helping to preserve and promote the use of genetic material for many years.

Topical issues and recent events

KWS projects in Peru and Ethiopia

Above all, preservation of PGR is of great importance in the world's biodiversity centers. That can be ensured by various mechanisms – in-situ (in the field) and ex-situ (in gene banks). However, developing countries in particular lack the necessary funds and capacities for that.

Since KWS is a plant breeding company and thus extremely reliant on the preservation of and access to PGR, we are wholeheartedly committed to these goals. KWS launched a project in Peru in 2010, the International Year of Biodiversity. Local scientific institutions can apply for projects to improve corn and quinoa, crops of especial



Corn – genetic variety of forms and colors

importance to Peru. This program is designed as a “Corporate Social Responsibility Initiative” of KWS and has three focal goals: preservation and evaluation of PGR, improvement of breeding performance, including advice in breeding methodology, and training of students and experts in plant breeding. KWS will contribute its own know-how and advise the Peruvian scientists in organizing the project. A budget of € 150,000 p.a. is available for the next five years. Scientific training is ensured by a cooperation with the endowed chair for “Crop-Plant Biodiversity and Breeding Informatics” at the University of Hohenheim.

A similar project that also focuses on these topics is to be launched for cereals such as wheat and barley in Ethiopia at the end of 2010. The first preparatory talks and planning in April 2010 went well. A project fact-finding commission is to be set up this year. By conducting practical projects, KWS also demonstrates how the International Treaty on Plant Genetic Resources for Food and Agriculture can work and be effective.

More information:
● www.kws.de (Innovation, Future perspectives)

Seed Production

Focusing on what customers want

The goal of our production concept is to offer our customers high-quality sugarbeet, corn and cereal seed to grow varieties tailored to their specific location. The great diversity of these crops and the varieties bred from them in KWS' portfolio are great challenges for seed production and the safeguarding of production. The production process in the seasonal cycle is divided into three stages:

Sales and multiplication planning

Production of certified seed begins with planning the varieties and quantities, in some cases as long as two to four years before they are sold to the farmer. The volumes of each variety that could potentially be cultivated in the individual markets and countries are assessed and production requirements calculated. This planning is continuously reviewed with great care and updated throughout the production process for the different crops and their varieties so that the quantities of seed required for them can be provided in a high quality and at the same time overproduction avoided.

Field production

Multiplication planning is followed by field production – tailored to the individual crops (sugarbeet, corn and cereals) – at locations with a suitable climate in cooperation with a large number of agricultural partners in Europe. The agreements with these seed multipliers contain stipulations on the production conditions and quality of seed. Each of the three crops requires more or less intensive, specific cultivation planning based on their method of pollination (self-pollination or cross-pollination). Statutory minimum distances from neighboring areas on which the same crop is grown must be observed so as to avoid interbreeding with related plants as a result of crossing during flowering. The plants are intensively monitored and tended throughout the vegetation period. After being harvested, the seed is processed.

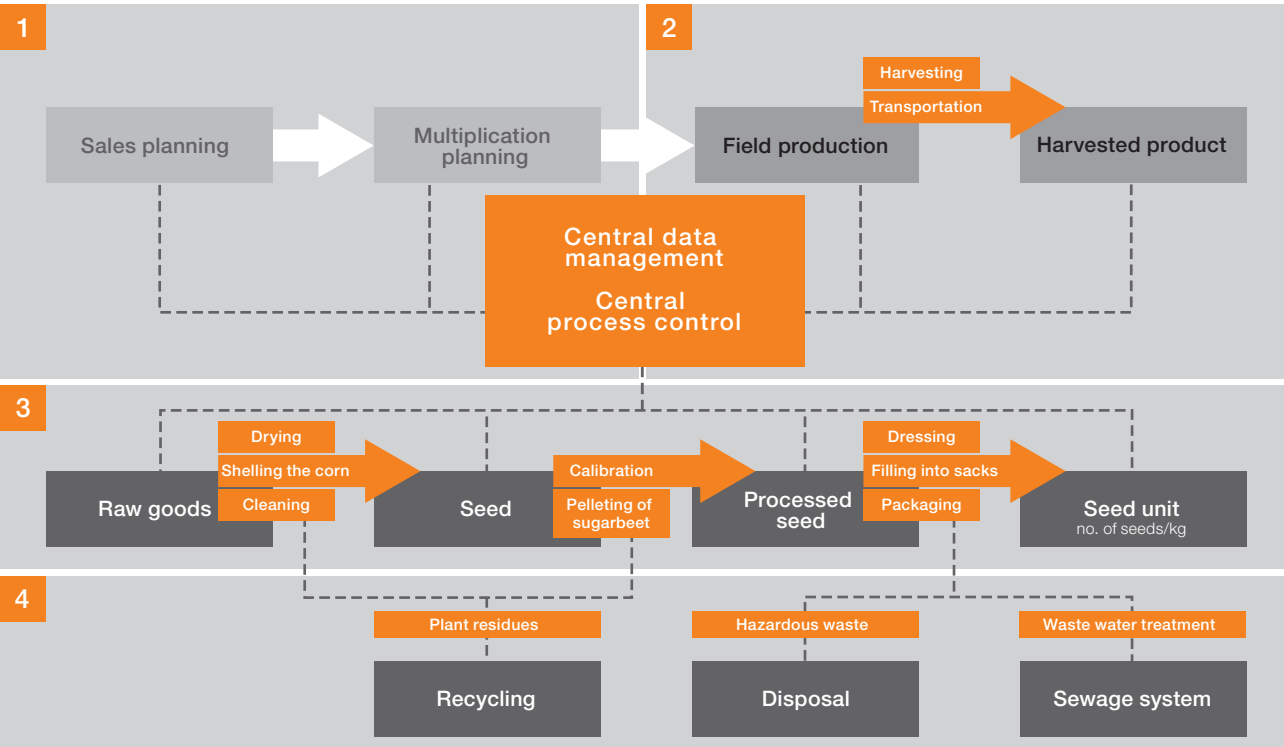
Seed processing and production

Seed is processed Europe-wide, also in cooperation with a large number of production partners, companies from the KWS Group and external service providers. The complex processes of multiplication and processing and extensive data management are controlled by KWS' headquarters in Einbeck and supported organizationally by the Integrated Management System. Despite the decentralized production structure, goods movements can be influenced at any time thanks to a transparent information system. The raw goods themselves are processed in accordance with the nature and size of the seed. The technical processes are therefore adapted to the different form of sugarbeet, corn and cereal seed and designed to treat the seed carefully so that its germination capacity is not impaired. For example, the sowing rate per hectare is 3 kg for sugarbeet, 30 kg for corn and up to 160 kg for cereals such as wheat and rye. The individual seed lots are dried after harvesting, cleaned and dressed as desired by the farmer with pesticides (fungicides/insecticides) to protect the seedlings against fungal diseases and against being eaten by pests in the soil. The seed is then packaged and shipped to the customer. Biological waste is produced in the course of the various processing stages. It is recycled or disposed of, depending on its composition (pesticide residues). The waste water from processing is purified before being fed into the sewage system.



Vessel for preparing pesticide suspensions

Sugarbeet, corn and cereal seed production



1. Sales and multiplication planning as the basis for next year's production 2. Europe-wide field production – the primary product in field production is field-dried seed or ears 3. Seed processing and production 4. Recycling/disposal

Optimization of the use of pesticides

KWS runs its own development department for seed technology so that it can continuously optimize the quality of seed processing and field emergence for a large number of new varieties. That also includes using pesticides as a seed dressing. This enables farmers to reduce the quantity per hectare and the frequency with which pesticides have to be applied during the growth period. In addition, we also develop alternative seed treatment methods in seed technology. The seed we supply to organic farmers does not contain pesticides – i.e. it is not dressed – and these treatments are intended to ensure a good start 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 if needed.

Topical issues and recent events

Seed processing requires 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. We processed a total of 58,765 tons of sugarbeet, corn and cereals seed in fiscal 2009/2010. As part of this, 365 tons of pesticides were applied as dressing agents and 714 tons of packaging were used in the form of folding boxes and sacks. More key figures on energy and water consumption are provided in the section "Environmental Protection at the Company" beginning on page 38.



Sugarbeet seed processing

Sugarbeet seed is processed centrally at Einbeck. The process was explained in detail in the last Sustainability Report, and a description of it can be found at our Sustainability Internet site. The following provides an overview of the most recent key developments in the reporting period.

Topical issues and recent events

Reduction of pesticides

The suspension dosing plant was put into full operation in December 2009 and proved its worth in its first campaign. Pesticides and water are mixed in it to produce a suspension, the seed dressing agent that is later applied to the seed. The plant helps minimize the amount of pesticide used on the seeds, as smaller quantities can be applied in the form of a suspension. At the same time, the CIP (cleaning in process) method improves cleaning because it reduces residues. The water used to rinse the seeds is clarified and the clear phase is repeatedly used for cleaning, so that only the residues are passed to the waste water purification plant. There are no reliable comparative figures from productive operation as the plant was used for the first time during this year's campaign. Apart from these environmental aspects, work safety for employees was also significantly improved.

In the area of pesticides, the active substance carbofuran (an insecticide), which is classified as very toxic, is no longer used because the statutory period for its approval has expired. Lawmakers have extended approval for the fungicide TMTD. No new active substances have been used.

Safer storage

Inclusion of a water-repellant layer in the packaging has increased the storage stability of sugarbeet seed. Losses in quality due to the fact that some farmers stored the seed in unfavorable conditions led to recalls in scattered regions last year. The objective of the new layer is to ensure that the seed's quality does not deteriorate, even under poor storage conditions, and so that farmers can store the products more reliably.

Outlook

Further improvements are planned for the next two years: an examination of further environmentally friendly ways of disposing of and recycling waste from sugarbeet seed processing and refurbishment of the special waste air purification system for dusts that are produced during processing and contain pesticides.



Corn seed processing

The various uses of corn as food and for producing energy and the large diversity of varieties and maturity groups in KWS' portfolio are great challenges in seed production and the safeguarding of production.

The decentralized, widely varying production structures result from the fact that the varieties to be produced require specific locations, from efforts to safeguard against risks and from our philosophy of delivering seed "from the region, for the region." The main objective of the latter is to reduce transportation and related costs as well as carbon dioxide emissions.

In hybrid corn seed production, the ears are first field-dried after being harvested. They are gently dried at the locations where they are processed so that they have the ideal moisture content required for stable storage. The energy required for this process can vary – in some cases considerably – from year to year, depending on the weather in a year and the prevailing harvesting conditions. Drying is followed by machine shelling to separate the corn from the cobs. After this process stage, the raw goods pass through various cleaning steps.

In the final processing step, the calibrated seed is dressed as requested by the customer. Seed dressing is an integrated plant protection method to enable selective control of pest and diseases using minimal quantities of pesticide. Unlike sugarbeet seed, corn seed is not pelleted. Active agent formulations are therefore not applied to a coating, but directly on the seed. Only around 5 mg of active substance per m² are applied in the case of fungicides. The layer of active substance on the seed allows the young corn plants to emerge and protects them against fungi. As a result, dressing helps safeguard yields by protecting seedlings and young corn plants. Seed dressing is a method of protecting plants that is unrivalled in terms of low and efficient use of active substances.

The seed is then packaged in units of 50,000 seeds based on the thousand grain weight.

Topical issues and recent events

Review of seed-dressing qualities as a result of the mass death of bees

In May 2008 there were incidents of mass bee deaths in Southwestern Germany. Dusts from insecticidal dressing for corn seed, above all neonicotinoids, were blamed for



Examination of the abrasion resistance of corn seed dressing agents (Heubach test)

this. As a consequence, approval for the related active substances and products was suspended (= ban on application). Strict requirements, affecting the seed industry and users alike, were also imposed on the remaining insecticidal corn dressings (only methiocarb is currently permitted). As things now stand, seeds dressed with insecticides may be marketed in most of Europe only if the dressing's abrasion resistance has been verified for a specific lot using the Heubach test. Standardized measurement methods and methods to minimize abrasion were developed together with the responsible authorities and technical analysis institutes. In addition, KWS undertook a voluntary review of its own seed-dressing qualities and formulations and also invested in laboratory equipment and trained personnel for conducting Heubach tests. The seed samples are analyzed using cutting-edge technology in our chemical lab or by partners with the relevant equipment in accordance with the standards prescribed by the Julius Kühn Institute (the German Federal Research Institute for Cultivated Plants) and the Federal Office of Consumer Protection and Food Safety.



Cereal seed processing

KWS LOCHOW GMBH is the cereals specialist in the KWS Group. The company breeds and produces seed for rye, wheat and barley at various breeding stations and locations in Germany and, through subsidiaries, in other European countries.

The quality of the seed we process is examined in our own officially accredited laboratory. We regularly compare the quality of our seed with that of our suppliers and strive to become the quality leader. We eliminate quality defects – including those of our suppliers – by means of suitable measures.

We choose seed multipliers on the basis of regional and quality-related aspects. An isolated location is a key criterion for selecting hybrid rye multipliers because minimum distances from other rye cultivation areas must be observed. The stipulations are defined in production agreements and monitored.

Topical issues and recent events

A major challenge is the current restructuring of business with multipliers. The number of contractual partners is to be reduced and standards of quality well above those demanded by law are to be agreed on with the remaining ones and overseen in our accredited seed testing laboratory. However, this improvement in quality means higher prices, which in turn entails the risk of losing market share. Moreover, farmers are now less willing to invest in high-quality, professionally produced seed. If breeding performance is no longer rewarded adequately, however, it will become more and more difficult to offer farmers new, high-yielding varieties or achieve progress in breeding.

More information:

- www.kws.de/zuckerruebe
- www.kws.de/mais
- www.kws-lochow.de

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.

Our consulting services are built on two cornerstones:

- A comprehensive understanding of customer needs and an analysis of their specific problems
- Up-to-date knowledge in all matters relating to cultivation of the crops we offer; this knowledge is the result of close contact with science and the practical world.



The German Agricultural Society's field days in June 2010

Regional customer consulting and support

Extensive knowledge of our customers' operational requirements is vital so that they can be given advice that addresses their needs. We support our customers nationwide with a closely knit network of local consultants. Our consultants have very precise knowledge of the local conditions in their region and are expert contact persons when it comes to choosing the right variety for a farm's specific location.

That also means that farmers can be given optimal advice, for example on the fertilizers and pesticides they should use, tailored to their farming system.

The regional consultants have their own network of trials in which the varieties have to prove their suitability for the specific region under practical conditions. These trial locations are also often used for field days, which enable farmers to get a first-hand picture of the varieties grown there. One example is the German Agricultural Society's field days, where up to 20,000 experts collect information on the latest trends in crop farming. KWS presents its entire portfolio of crops with selected varieties there and gives farmers the chance to "talk shop" with the company.

We also provide our customers with printed information on varieties and advise them at trade shows and other events.

AgroService – the link between science and practice

Other vital elements in ensuring successful consulting are up-to-date know-how in all matters relating to cultivation of the varieties and extensive knowledge of the company's own products. A team of AgroService and expert advisors are available to help regional consultants in this task.

In order to ensure extensive knowledge of the varieties and identify and further develop successful products, AgroService maintains its own system of exact trials: a network of many locations where the new products are compared with the varieties currently on the market. Knowledge gained from this trial system helps the consultants recommend varieties for the specific farm. Another important task is to share scientific information on specific plants with our customers. This is done by means of brochures, presentations and field events, for example.

The AgroService team

KWS' AgroService team in Germany is spread over several locations. Our experts are based not only at headquarters in Einbeck, but also in Klein Wanzleben and at our breeding station in Seligenstadt. To facilitate interfacing and knowledge transfer, the AgroService team nurtures intensive sharing of information with scientific institutions and agricultural offices, chambers and associations (among other things by taking part in events and staging joint projects). Internal dialogue is ensured by collaboration in numerous workgroups, for example. One of these is the EnergyService workgroup, in which AgroService experts from all units coordinate and further develop their technical work in the field of bioenergy.



Agro Service – advice on growing energy corn

What drives us – fuel from bioenergy

Bioenergy from renewable resources is vital to our society's sustainable development. Apart from bioethanol produced from sugarbeet, biogas generated from that source has huge growth potential. Energy beet ideally complements the established biogas substrates corn and rye and can help improve the efficiency and environmental impact of the related processes.

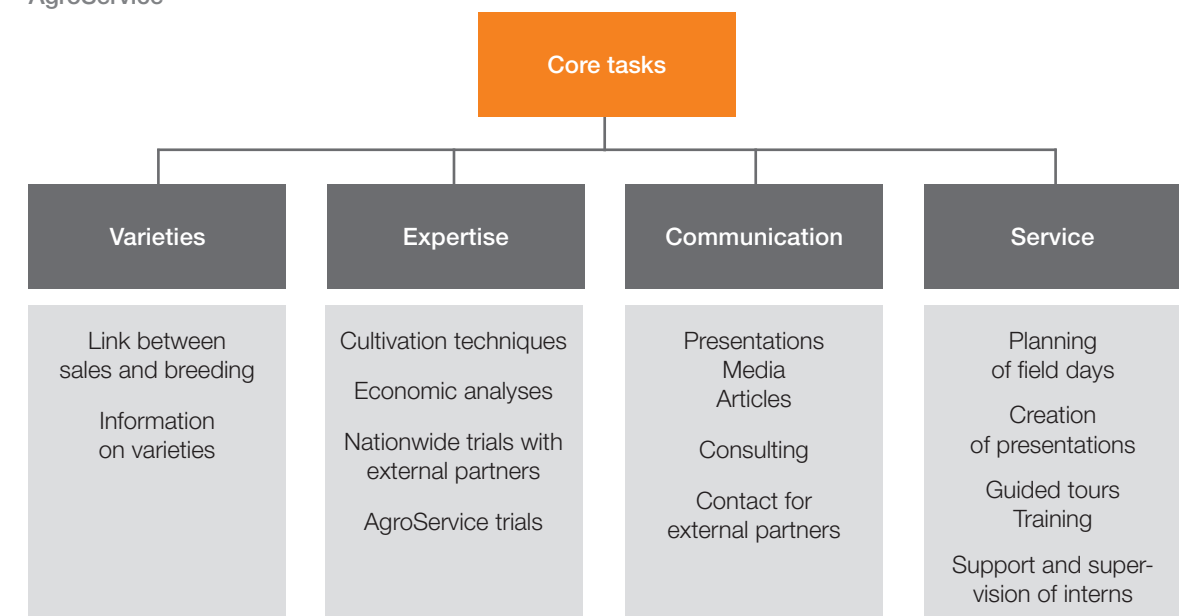
One of AgroService's key research activities lies in the integration of energy beet in a varied system of energy crop rotation. As part of AgroService's integration in KWS' EnergyService, we pursue an end-to-end approach for the production of biogas using all types of crops as substrates.

Getting down to the fundamentals – preserving soil fertility

The earth 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.

The preservation of soil fertility and tilling systems are core issues in our AgroService's research and consulting work. Innovative tilling systems are tested in field trials to ascertain interaction between the soil and plants. We use their results to derive recommendations for farmers on cultivating crops.

AgroService



Employees

It is our deep-rooted conviction that only satisfied employees whose jobs match their abilities and who enjoy their work display great willingness to achieve and identify with the company. The success of KWS is founded on its employees' satisfaction and loyalty. Freedom, continuity, fairness, respect and trust are values that we practice in our day-to-day work and that are entrenched in our corporate culture. KWS' continuous growth, intensified research initiatives and demographic change all mean that the company has to invest more in acquiring and retaining employees. Our Human Resources department is composed of the units Controlling, Support, Payroll, Personnel Development, Recruiting and Compensation Management.

Recruiting

Hiring highly qualified new employees, particularly in research and development, is a daily task that is essential to ensuring our long-term business success. KWS focuses on training its own junior personnel and recruiting young professionals. There is also a need to arouse the interest of agriculture students in training as plant breeders.

Personnel planning process and recruiting

KWS' Human Resources department is responsible for personnel planning and recruitment. It works with the other departments to define what employees are needed and the qualifications they must have. Based on these results, specific recruitment activities are initiated. To help us fill positions, we use our own career website to attract potential new employees to vacancies at our company worldwide.

Training junior personnel

A key part of fulfilling our HR strategy and ensuring smooth work process is our training of our own junior staff and filling many posts with young people who have completed their training at our company. This helps launch them in their vocational career. At the same time, KWS fulfills its mission of helping give young people a secure future by offering them comprehensive training opportunities and, in doing so, endeavors to fulfill its social responsibility. For years KWS has been training young people in numbers well in excess of what it actually needs. It currently offers seven different types of vocational training in the commercial and industrial/technical fields.

Topical issues and recent events

Through the year, we employed an average of 1,426 people in Germany, including 84 people in vocational training and 28 trainees. Almost 90% of employees have permanent contracts. In the period under review, we hired 57 new employees permanently. In fiscal 2010/2011 we plan to increase the number of full-time positions by approximately 5%.

Personnel structure by function (in %)

	FY 09/10	FY 08/09	FY 07/08	FY 06/07
R&D	49.9	50.1	53.2	51.6
Production	11.4	13.6	14.4	15.8
Distribution	18.6	15.6	12.0	12.3
Administration	20.1	20.7	20.4	20.3
	100	100	100	100

Number of trainees

	FY 09/10	FY 08/09	FY 07/08	FY 06/07
Industrial	14	11	8	6
Agricultural	40	42	43	43
Business admin.	30	30	24	23
	84	83	75	72

The figures for FY 2006/2007–2008/2009 do not include AGROMAIS GMBH, KWS LOCHOW GMBH and KWS SAATFINANZ GMBH

New recruiting department

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 all KWS activities vis-à-vis universities. Cooperation with universities is an explicit part of our recruitment activities.

Core competencies support selection of personnel

The process of selecting new employees will be assisted in the future by newly defined core competences. The relevant criteria have been incorporated in a job interview guide. Our goal in compiling and using these selection criteria is to enable future employees to work successfully as a part of KWS.



The new training workshop helps trainees launch their career

Participation in university job fairs

In 2010 KWS took part in various job fairs held by the University of Hohenheim, the Technical University of Munich, Weihenstephan University of Applied Sciences and the University of Gießen. Many students took the opportunity to make contact with KWS and learn more about the company as an employer – and KWS also had the chance to identify highly qualified potential employees at an early stage.

The company will take part at job fairs at Purdue University (West Lafayette, Indiana), the University of Illinois (Urbana-Champaign, Illinois) and the University of Iowa in the U.S. in the fall. In addition, KWS will also present itself as an employer at a job fair in London.

We will be represented in our own region, too, when we once again attend Biotechnica in Hanover and the Horizons Career Fair in Göttingen in the fall.

New training workshop

Since June 2010 trainees in the first and second years of their industrial/technical apprenticeship have been able to use the company's new training workshop to learn more in a protected environment and gain key qualifications, for example in welding and soldering. KWS now offers its trainees their own technical facilities with a full range of equipment that reflects actual work processes.

More information:
www.kws.de/karriere

Personnel Development

In the area of personnel development, KWS has implemented general continuing education, development of young employees and management development. The need for individual continuing education measures is defined in annual performance and career development reviews and communicated to the personnel development unit, which acts as a service provider. The Human Resources department advises employees on continuing education so as to reveal all their potential at the content-related, methodological and structural levels. To strengthen personal responsibility, employees themselves and their supervisors are primarily responsible for organizing the measures. Our employees' willingness to continue growing their abilities is vital to success in the face of global competition, especially in plant breeding, a sector that demands intensive research and development.



Topical issues and recent events

Seminar program

Our current standard seminar program comprises 44 seminars, which we offer in-house to KWS employees with the assistance of a range of professional coaches. In the period under review, KWS' employees spent a total of 2,776 days at continuing education seminars, an average of 21 hours per employee.

Our competence model supports our strategic personnel development work to secure a supply of junior staff. Our employees' success is based on their abilities, such as entrepreneurial, social and intercultural skills, and our standard seminar program helps grow them further.

A helping hand for graduates

A trainee program helps university graduates as they embark on their career at KWS. In this two-year phase of learning, the trainees have the opportunity to assume professional responsibility and get to know the company. KWS currently employs 28 trainees, almost double the number of the previous fiscal year, demonstrating the extent to which we need junior staff and our efforts to develop them.

They can also move on from the trainee program to the Young Professional Program. It is aimed at former trainees and university graduates. In international teams, they attend workshops lasting several days, where they tackle interdisciplinary projects in small groups. To accompany this, KWS offers high potentials the chance to take part in an Orientation Center twice a year to analyze their future career prospects at KWS.

Days of continuing education

	FY 09/10	FY 08/09	FY 07/08	FY 06/07
White-collar employees	1,881	1,936	1,184	1,253
Exempt employees	197	231	220	304
Trainees	303	410	258	155
Blue-collar employees	395	540	357	348
	2,776	3,117	2,019	2,060

The figures for FY 2006/2007–2008/2009 do not include AGROMAIS GMBH, KWS LOCHOW GMBH and KWS SAATFINANZ GMBH



KWS trainees in their two-year training program

Breeders Academy

Apart from the opportunity to gather experience as trainees, plant breeders undergo a special two-year introductory and intensive training program called the Breeders Academy. University graduates who have concentrated on agricultural science in their studies and have the prior qualifications and motivation to become practical breeders, assume responsibility for sub-areas of a breeding program for different types of crops for a period of up to one year. They carry out their work in close coordination with an experienced breeder and are flanked by special theoretical continued education measures. Two young scientists are currently taking part in this program. They are now training in the UK and the U.S., after which they will move to France and Germany. This intensive practical training in the breeding of different crops is something that universities are not able to offer to the degree of specialization we need.

Grants

Since 2002 KWS has awarded grants to students taking a master's degree in plant breeding. 12 students have been supported up to now, and three of the graduates have since joined KWS as breeders.

Award for the "Learning Journey"

Peter Schöneborn, Head of Personnel Development, was awarded the title "Chief Learning Officer" by the trade magazine "wirtschaft und weiterbildung."

More information:
www.kws.de/karriere

Spirit of Cooperation at the Company

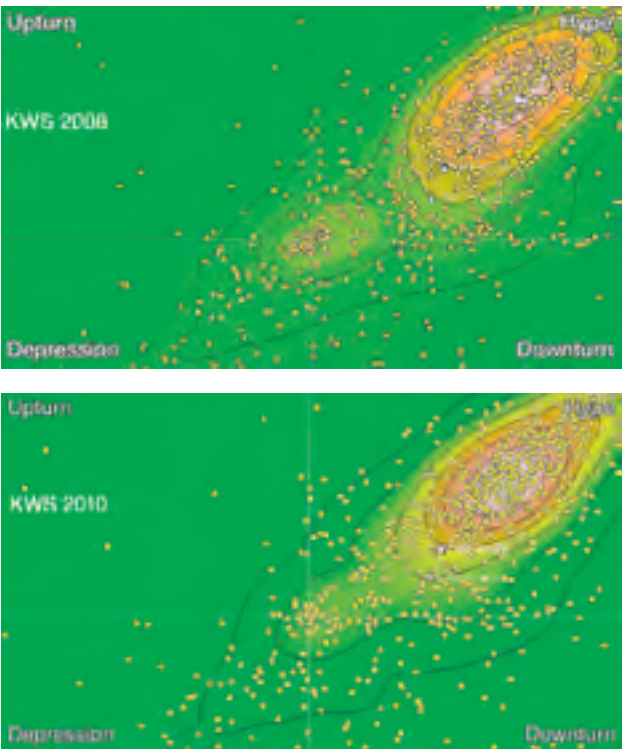
“We like working for KWS” – that is the basic philosophy of our working relationship. As an employer, we are committed to promoting a corporate culture defined by reliability, closeness, foresight, team spirit and independence. KWS employees always have the chance to help shape the company with their ideas and suggestions and to voice their needs. Our proven instruments, such as the employee suggestion system and annual performance and career development reviews support this culture of regular dialogue.

Compensation and social benefits

KWS compensates all its employees, including trainees at KWS SAAT AG's operations, in accordance with a collective agreement for the company. This is the basis for the framework collective wage agreement and the collective wage agreement under which employees are grouped into one of 13 wage categories and their remuneration and non-recurring dividend-based payment are governed. For employees' old-age pension, there is a provident fund financed by the employer or a supplementary retirement provision for employees with a private pension plan.

Corporate culture

The equality of 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, are principles that are 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. Equality between men and women at KWS is demonstrated by the fact that the workforce in just about all functional areas of the company is composed roughly equally of men and women, for example. Women have the same career opportunities as men and hold important functions at the Group, for example in Corporate Controlling, Corporate Law, Compliance, Human Resources and Environmental Management. In addition, many female scientists occupy key positions in Product Development.



Company Climate Monitor: 85% of KWS employees are satisfied.

Involvement of Employees

A crucial part of KWS' business success is the ability of all of our employees to identify with our corporate culture and objectives. A fundamental aspect of this is open and regular communication among departments, between supervisors and team members, and between management and employee representatives.

Age structure (in %)	FY			
	09/10	08/09	07/08	06/07
up to 20	3.2	5.0	4.3	4.9
20 up to 29	21.5	19.5	18.5	19.5
30 up to 39	21.3	19.0	22.3	24.8
40 up to 49	29.7	25.5	32.2	30.9
50 up to 59	19.3	21.5	18.0	16.2
over 60	5.0	9.5	4.7	3.7

The figures for FY 2006/2007–2008/2009 do not include AGROMAIS GMBH, KWS LOCHOW GMBH and KWS SAATFINANZ GMBH

Topical issues and recent events

Employees are surveyed regarding their current level of satisfaction and personal future perspectives at KWS every two years with the Company Climate Monitor. The results of the survey in the spring of 2010 revealed that 85% of our employees are satisfied and 76% are positive about their future at KWS. 72% of the workforce participated this time, once again a gratifyingly high response rate. This satisfaction is also reflected in the low turnover rate: 1.8%, which is in the normal range for our company. The high degree of loyalty toward our company is also reflected in the fact that the average length of service is 16 years.

Collective bargaining and Works Council elections

A new two-year collective bargaining agreement was concluded between the construction, agricultural and environmental workers' union Bauen Agrar Umwelt and KWS effective July 1, 2009. Employees' salaries are increasing by 5% in two stages. A higher social component was negotiated for lower wage brackets. In particular, trainees will benefit from this in the form of a monthly increase of €90 in their pay.

New Works Councils were elected at the German locations of our companies in the spring of 2010. The turnout was 72.3%. This reflects the great extent to which employees are democratically involved at our company. Works Council elections have been held at KWS SAAT AG since 1953.

Employee profit-sharing program

More and more colleagues are investing in their “own” company through our profit-sharing program, with the number rising by 46% to 322 of employees in fiscal 2009/2010. A total of 10,168 shares were ordered, or an average of 31 per participant. Employees received an allowance of 20% on the purchase price. Tax is payable on this allowance as it constitutes a non-cash benefit. The allowance is granted subject to the requirement for the shares to be held for at least four years.



Retired former KWS employees learn more about the new greenhouse complex.

Expansion of performance and career development reviews

We also want to ensure a higher level of participation in the performance and career development reviews. 70% of the workforce had such reviews with their superiors in the past fiscal year.

Creative suggestions for improvement

Our employees submitted 127 suggestions for improvement in 2009, of which 40% were put into practice. One especially good proposal – relating to technical improvements to harvesters in research and development – was rewarded with the sum of €9,000.

Dialogue with retirees

Retired former KWS employees are regularly invited back to the company, making it possible to keep them up-to-date about changes there and let them gain their own first-hand impressions. KWS' family atmosphere encourages reunions with former colleagues and discussions about the times they had together. Their work in past years is the foundation for our company's success today. In 2010 well over a hundred colleagues accepted an invitation from management and the Works Council to come and see the company again.

Family, Leisure and Work

Flexibility on both sides

KWS regards itself as a family-friendly company, one with a corporate culture that emphasizes the importance of the family. All employees should feel comfortable in their working environment. The above-average length of service at KWS – around 16 years – is proof we succeed in that. And we feel it important to allow employees to achieve a work-life balance attuned to their needs by being able to reconcile work, family and their private life. One way of ensuring that is with flexible working times, which we offer in many areas of the company.



The "Zuckerhaus" in Bad Grund – KWS' vacation home for more than 60 years

Flexitime and part-time work

In particular, the large measure of seasonal work means that employees have to adjust their working time to meet changing needs. That is achieved by means of flexitime in most areas. This requires that employees have a high level of flexibility, personal responsibility and a willingness to perform. 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.

Promoting family welfare for all needs

We also offer our employees the chance to work part time, in particular during periods of parental leave. They can also work from a home office if their type of activity permits teleworking. We additionally grant families an allowance of € 150 a month toward a spot in a kindergarten or the cost of child care. KWS offers elderly employees semi-retirement. Under the related company agreement, KWS increases the net compensation for this – departing from statutory regulations to the benefit of employees – to 80%.

In June 2009 the then German Minister of Family Affairs, Dr. Ursula von der Leyen, presented KWS with the "Family-Friendly Company Southern Lower Saxony 2009" award in the category for companies with more than 100 employees. The cash prize was donated to Einbeck's parish Münstergemeinde St. Alexandri to enable it to provide qualified, reliable care for primary school pupils during vacations.

Distribution of employee gender by function

Share of women (in %)

	FY 09/10	FY 08/09	FY 07/08	FY 06/07
R&D	29.2	29.4	30.6	30.0
Production	4.2	4.4	4.6	5.0
Distribution	7.6	6.3	5.3	5.2
Administration	9.1	9.1	8.8	9.2
	50.1	49.2	49.3	49.4

Share of men (in %)

	FY 09/10	FY 08/09	FY 07/08	FY 06/07
R&D	20.7	20.7	22.5	21.6
Production	7.2	9.2	9.9	10.7
Distribution	11.0	9.3	6.7	7.1
Administration	11.0	11.6	11.6	11.2
	49.9	50.8	50.7	50.6

The figures for FY 2006/2007–2008/2009 do not include AGROMAIS GMBH, KWS LOCHOW GMBH and KWS SAATFINANZ GMBH



The next generation is ready to get to work ...

Topical issues and recent events

In fiscal 2009/2010 KWS employed 288 part-time workers in Germany (19.8% of the total headcount). 38 employees (2.7% of the total headcount) worked from a home office. 42 employees (2.9%) are currently on parental leave.

In the last round of collective bargaining in the spring of 2009, the company agreement on the allowance for kindergarten or child care was extended for two further years.

Employees and their families can stay at the company's own vacation home, the "Zuckerhaus" in Bad Grund. As a result of new and more flexible regulations on how long they can board there, the number of overnight stays increased from 2,044 (2008/2009) to 2,405 (2009/2010).

The activities we began last year to enable employees to reconcile the demands of family and work, are to be expanded. A catalogue of measures specifically pertaining to parental leave and leave to care for family members has been drawn up and is currently being examined before it is implemented. They relate, for example, to the establishment of a parent-child office at the company and binding introduction of a performance and career development

review when employees take parental leave so that the future perspectives for them when they return can be assessed in good time and their potential for development identified. Further education measures are to be agreed and undertaken during parental leave, for example. More flexible working time models for employees who care for relatives are being discussed, as is the plan to offer them information to help them organize the time they are on leave. In addition, the company intends to expand the internal information it offers on child care and leave to care for relatives.

Work Safety and Health

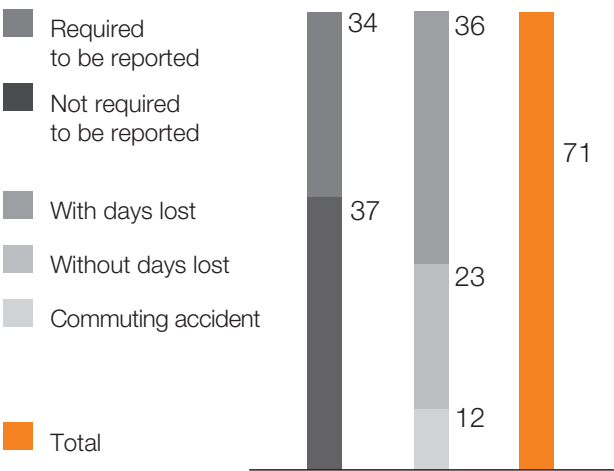
Early identification, understanding and action to ensure work safety and the health of its employees have always been of great importance at KWS. Particularly in agricultural activities, and above all in variety breeding, there is a greater risk of injury as a result of the intensive manual work involved in trial fields and in greenhouses. Moreover, weather-related influences constitute a not insignificant factor in accidents.

Work safety system

A work safety system 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 development of the system.

All supervisors are accountable for their respective sub-areas. 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.

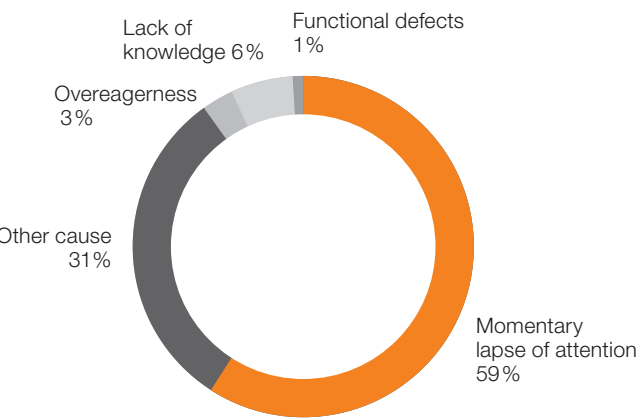
Number of occupational accidents and days lost as a result



KWS SAAT AG and KWS LOCHOW GMBH in FY 2009/2010

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. Reducing accidents by means of instruction in work safety, by supervisors acting as active role models, and by sensitizing employees is a constant concern at KWS. The training program is geared precisely to this goal. An effective fire department and medical service are key elements parts of the work safety system and health protection at KWS.

Causes of accidents



FY 2009/2010

Topical issues and recent events

In the period under review, a total of 71 occupational accidents were recorded for the subsidiaries and associated companies based in Einbeck, including KWS LOCHOW GMBH, of which 34 were required to be reported (figure for fiscal 2008/2009: 48). This increase is attributable to the inclusion of KWS LOCHOW GMBH and to the extreme winter weather conditions. Most of the accidents were caused by incorrect personal conduct, such as a momentary lapse of attention and, to a lesser extent, overeagerness and a lack of knowledge. 534 days were lost as a result of accidents, with 10 of the accidents accounting for 70% of that figure. The accident rate in fiscal year 2009/2010 was 12 accidents per 1 million working hours, or 25 accidents per



Safety instruction: How to put out a fire with an extinguisher

1,000 employees. However, this is still below the average accident rate for the agricultural occupational accident social insurance fund responsible for us. Reducing accidents by means of instruction in work safety to sensitize employees is a constant concern at KWS.

Continuing education and information events

There was greater demand for the in-house courses we offer in work safety. There was especially keen interest in our internal information events on “Health at the Office.” The issues addressed there included adjusting chairs ergonomically to prevent back problems, the right way to arrange and equip PC workplaces, and what to do in the event of a fire.

Prevention measures on pandemics

In the early summer of 2009, the World Health Organization in Geneva declared the H1N1 virus (“swine flu”), which was spreading rapidly worldwide, to be a pandemic. At its subsidiaries, associated companies and breeding stations around the world, KWS then took administrative and operational measures to protect employees against the flu and developed a pandemic prevention plan. These measures to sensitize employees played a part in ensuring that the number of illnesses demonstrably resulting from H1N1 was low at the KWS Group.

Objectives		
Strategic objective	Measures	When?
Identification of possible focal areas of risk	Optimization of safety measures as part of construction work in progress	FY 2011/2012
Health protection	Creation of KWS' first Health Report	FY 2012/2013

Environmental Protection at the Company

The Integrated Management System and environmental policies, which employees are obligated to implement under our guiding principles, in conjunction with the requirements defined by environmental protection law, form the foundation for all our strategic and operational measures in protecting the environment. Energy and water are consumed and soil, auxiliary materials and supplies are used in all phases of variety breeding, seed production and the technical processes this involves. Use of these resources is based on the principles of economy, avoidance, reduction, reuse and sustaining an internal cycle. The processes in the management system are organized in accordance with the standards DIN EN ISO 9001:2008 (quality) and DIN EN ISO 14001:2004 (environment). The working order and effectiveness of this system are examined regularly in audits and reviews and confirmed by the auditing firm's certificate.

Environmental Management

Topical issues and recent events

Checking the working order and certification of the management system

The team of internal auditors, consisting of 22 employees, received further training in audit techniques at a two-day workshop held in 2009. The annual external audits of the Integrated Management System performed by the certification company SGS-ICS confirmed its working order and did not reveal any deviations in the period under review. SGS-ICS emphasized in particular that recommendations and suggestions from the internal audits were rigorously followed up on to improve the system. The auditors also added many suggestions of their own, for example in relation to the compliance audit process, integration of risk management and internationalization of key environmental indicators.

Investments in technical plants

€3.3 million was spent to optimize seed processing for sugarbeet, energy provision, renewal of cooling systems and for equipment to keep the air clean, including repair and maintenance measures. Capital spending on environmental protection and energy efficiency totaling €6.34 million is planned for fiscal 2010/2011. Of this, €1.53 million is earmarked for expanding the block-type thermal power station to enable the use of biogas and €2.90 million for building new cooling and air-conditioning systems for breeding and research.

Requirements stemming from developments in environmental protection law

EC Regulation 1272/2008 on the classification, labeling and packaging of substances (CLP-Regulation) came into effect on January 20, 2009. Effective December 1, 2010, manufacturers of chemicals must reclassify the hazardous substances they market as to their risk potential and label them with new symbols introduced by lawmakers. Since it uses hazardous substances, KWS must make adjustments to how it manages them. A recommendation for these adjustments has been outlined in a Bachelor's thesis in the field of environmental engineering, and they will be implemented successively by June 1, 2015, in accordance with the periods of transition between the old and new law.

Objectives		
Strategic objective	Measures	When?
Internationalization of the Integrated Management System as part of the "Fit for Growth" project	Group-wide rules & guidelines and adaptation of the system to new general conditions	FY 2010/2011 until FY 2012/2013
Centralization of plant documentation	Formulation of policies and establishment of a documentation structure	FY 2010/2011 until FY 2014/2015

More information:
● www.kws.de/Umweltleitlinien

Energy and Emissions

Provision and use of energy

The energy required for heat and electricity at our locations is supplied primarily by gas and, to lesser extent, fuel oil. In addition, KWS purchases electricity from local utilities. The annual need for energy depends on the quantity and quality of the seed to be processed and on current research projects (for greenhouses, climate chambers and cooling systems). One particular concern of ours is to reduce carbon dioxide emissions and to generate power for the company's needs from renewable resources (e.g. biogas).

Energy is generated at the Einbeck location by boiler plants and block-type thermal power station modules. The block-type thermal power station modules are operated by gas; biogas will be used in the future. They meet basic electricity and heat requirements and are operated to supply heat on demand. The boiler plants are run with fuel oil or gas. Operation of the plants and systems is subject to official permission and is regulated in the Integrated Management System.



Direct and indirect energy consumption (in MWh)

	FY 09/10	FY 08/09	FY 07/08	FY 06/07
Direct energy consumption	41,221	35,553	35,862	30,280
– Gas	31,291	34,380	34,369	29,282
– Fuel oil	9,930	1,173	1,493	998
(Own electricity production)	(10,644)	(9,600)	(9,630)	(8,742)
Indirect energy consumption (purchased electricity)	8,510	6,397	6,594	6,920
	49,731	41,950	42,456	37,200

Emissions (in t)

	FY 09/10	FY 08/09	FY 07/08	FY 06/07
Carbon dioxide	9,445	9,035	n.b.	n.b.
– From direct energy consumption	7,117	7,244	7,302	6,145
– From indirect energy consumption	2,328	1,791	n.b.	n.b.
Nitrogen oxide	4.1	4.2	4.2	3.5
Sulfur oxide	0.7	0.3	0.3	0.2
Carbon monoxide	2.0	1.9	1.9	1.6
	9,451	9,041	7,309	6,151

KWS SAAT AG and KWS LOCHOW GMBH in FY 2009/2010; KWS SAAT AG in the previous FY

Since FY 2008/2009, including carbon dioxide emissions from purchased electricity
Basis of calculation for KWS SAAT AG: Energy mix of the local utility Stadtwerke Einbeck (244 g CO₂/KWh since 2008/2009; before that 280 g CO₂/KWh);
further information: for KWS LOCHOW GMBH: Energy mix from SVO (373 g CO₂/KWh), E.on edis (529 g CO₂/KWh) and E.on Mitte (271 g CO₂/KWh)

Measures to keep the air clean

Plant dusts are produced by abrasion when seed is cleaned and processed for breeding purposes 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.

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.

Topical issues and recent events

Energy consumption and emissions

The total energy consumed by KWS SAAT AG and KWS LOCHOW GMBH in fiscal 2009/2010 was 49,731 MWh, and the resultant carbon dioxide emissions were 9,451 tons. For the first time, this calculation includes the CO₂ emissions from purchased electricity. Moreover, since the last fiscal year 2008/2009 we have disclosed the carbon dioxide emissions broken down by direct energy consumption and indirect energy consumption (from purchased electricity).

Use of renewable energies

As part of an internal profitability analysis in 2009, various options were examined for producing energy for the block-type thermal power station at Einbeck. The objective was to secure the location's long-term power supply and at the same time significantly reduce carbon dioxide emissions from non-renewable sources, such as oil or gas, despite the company's growing energy needs, as well as to make it possible for gas to be replaced by lower-emission biogas. As a result of this analysis, two additional biogas-driven modules will be added to the block-type thermal power station. They are to be commissioned at the end of 2010 and will then meet around 80% of our energy needs (approx. 35,000 MWh).

Energy efficiency in buildings

A new office building for 120 employees was inaugurated at the beginning of 2010 following conversion and reroofing of an existing storehouse dating from 1948. The energy concept for this building was designed with an eye to the criteria of thermal insulation, thermo-active building systems, ventilation and heat recovery, use of daylight, optimized lighting and building automation and is intended to cut primary energy requirements by 60%. In acknowledgement of this overall concept for the building, we were presented with the 2009 "Energy-Optimized Construction – Architecture with Energy" award by the German Ministry of Economics and Technology.

In the spring of 2010 KWS commissioned a new greenhouse with an area of 6,810 m². A great deal of heating and cooling and energy-intensive lighting systems is required for the various plant cultures and trials. The energy required to heat this new greenhouse (heating load) is thus 1.5 MW, its peak cooling load is 970 kW and it



Climate control equipment in the new greenhouse

requires 1.2 MW of electricity. The use of insulating glass and intelligent control of air-conditioning mean that the building is as energy-efficient as possible.

An absorption cooling machine that produces cold water and has an output of 770 kW has been installed to air-condition the greenhouse chambers. Hot water obtained from the waste heat of the biogas block-type thermal power station is used to drive it.



The 6,800 m² greenhouse made of steel and glass – energy efficiency was the biggest challenge.

Leading by example in climate protection

For its commitment to breeding energy plants and the power savings it has initiated, KWS SAAT AG was admitted as a member of the group of CLIMATE PROTECTION COMPANIES, an initiative that is part of the climate protection, energy efficiency and innovation partnership between the German government and Chambers of Industry and Commerce (DIHK). The members of this group act as ambassadors for energy efficiency and climate protection. This initiative's objective is for companies of all sizes to set a good example and demonstrate that they can reduce carbon dioxide emissions, yet increase value added.

Modernization of refrigeration and air-conditioning systems

As of January 1, 2010, the European Union's Regulation 2037/2000/EC bans the use of certain ozone-depleting, partially halogenated hydrochlorofluorocarbons (HCFCs), such as R 22 and R-401A, in refrigeration and air-conditioning systems and permits their use as reprocessed cooling agents only until December 31, 2015. KWS will close four rooms of different sizes that are air-conditioned using HCFCs or convert them to cold water cooling.

Objectives		
Strategic objective	Measures	When?
Sparing use of fossil resources	Conversion of further company cars to gas	FY 2010/2011
	Switch from gas to biogas at the block-type thermal power station	FY 2010/2011
	Design of a central building control system	FY 2010/11 until FY 2011/2012
	Refurbishment of the compressed air system and reduction in power consumption by 50,000 kWh/a	FY 2010/11 until FY 2011/2012

Water and Waste Water

Water is a necessary factor in growing plants in green-houses and in the trial areas. The quantities required depend directly on the scope of the annual breeding and trial programs and on the scientific questions being re-searched, so they always fluctuate. Other factors include soil conditions and distribution of the amounts of pre-cipitation at the trial locations – additional irrigation of the fields during the vegetation period between sowing and harvesting is necessary in some years. KWS LOCHOW GMBH's location in Bergen has sandy soils typical of the Lüneburg Heath region, for example.

The plants on the trial plots and in the greenhouses are irrigated with surface water, the company's own well water or drinking water. The type of water used depends on its availability at the location and the quantity required.

Well and drinking water are also required as process water in processing sugarbeet, corn and cereal seed. At KWS SAAT AG's headquarters at Einbeck, rainwater from the company's own cistern (which can hold 1,000 m³) is also used for the sprinkler and sanitary facilities.

One of our constant challenges is to save water and use it efficiently in breeding and production.

Process waste water containing pesticides results 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 sewage network.

Topical issues and recent events

Water consumption

The quantities required by KWS LOCHOW GMBH to grow cereals were incorporated in the water consumption figures for 2009/2010. More water is used here because the soil is sandier and thus does not retain water as well. Total water consumption by KWS SAAT AG and KWS LOCHOW GMBH was thus 104,668 m³ in fiscal 2009/2010 (compared with 66,579 m³ for KWS SAAT AG in fiscal 2008/2009).

Waste water

The quantities of waste water at KWS SAAT AG and KWS LOCHOW GMBH in fiscal 2009/2010 were 54,139 m³ (42,400 m³ at KWS SAAT AG in fiscal 2009/2010).



Water is a fundamental requirement in growing plants.

Sources of water (in m³)

	FY 09/10	FY 08/09	FY 07/08	FY 06/07
Surface water (for watering)	550	0	400	400
Well water	84,677	55,949	62,261	62,929
– Water from production	42,722	36,109	39,256	38,716
– Watering	34,191	13,020	18,907	16,680
– Cooling systems	6,091	6,722	4,098	7,533
Drinking water	16,355	7,130	5,957	7,127
– Watering	7,106	0	0	0
– Water from production	53	0	0	0
– Administration	9,196	7,130	5,957	7,127
Rainwater	3,086	3,500	3,300	3,300
	104,668	66,579	71,918	73,756

Waste water by type (in m³)

	FY 09/10	FY 08/09	FY 07/08	FY 06/07
Waste water from production	42,066	33,570	36,406	35,675
Waste water from production containing pesticides (after processing)	355	291	311	322
Administration	8,632	5,039	5,957	7,127
Rainwater	3,086	3,500	3,300	3,300
	54,139	42,400	45,974	46,424

KWS SAAT AG and KWS LOCHOW GMBH in FY 2009/2010; KWS SAAT AG in the previous FY

Hazardous Substances

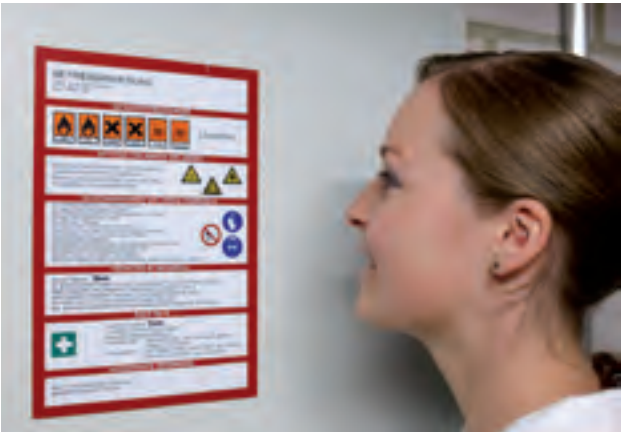
Hazardous substances such as chemicals and pesticides represent a risk to people and the environment when they are used.

Topical issues and recent events

Our hazardous substances data bank has proven its value for structured documentation of the use of chemicals and is being used more and more. The data bank will be made available to our subsidiaries and associated companies in the future and can be tailored to reflect their specific situa-tion regarding hazardous substances. The changes to meet new classification, labeling and packaging requirements for substances have already been taken into account.

Changes in the classification of substances and their label-ing as hazardous can be expected from chemical produc-ers. In view of the long transition phase set by legislators until the new law takes effect in 2015, employees will be able to attend seminars on handling hazardous substances in addition to the annual instruction they are given.

Objectives		
Strategic objective	Measures	When?
Treatment of waste water	Modernization of Einbeck's plant for treating waste water containing pesticides	FY 2010/2011 until FY 2011/2012



Operating instructions provide information on handling hazardous substances.

More information:
● Environmental Management, p. 38

Waste and Recycling

Our daily creed: avoid and reduce waste

An elemental objective of our process management is to minimize waste, separate it and feed it back into the material cycle or to dispose of it securely to ensure sustainability. KWS goes further than what is required by law in its continuous efforts to live up to this creed in all areas of the company.

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. One particular concern is, for example, to remove recyclable materials from industrial waste similar to household refuse so that they can be recycled.

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

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

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 can separate and handle up to 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 sugarbeet, corn and cereal 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 of the seeds. When the seed is cleaned, sorted into size classes and polished (sugarbeet only), this produces substantial quantities of residue and dust, which are subsequently composted.

Waste for disposal

Waste with different compositions and properties is generated in our research and production processes. It is classified in accordance with the European Waste Catalogue and disposed of at permitted plants.

Topical issues and recent events

Industrial waste

In the reporting period, the share of industrial waste similar to household refuse increased slightly from 203 tons (fiscal 2008/2009) to 209 tons (fiscal 2009/2010). Large construction projects always entail a sharp increase in waste. However, we were able to avoid that, despite such large projects in the period under review, by practicing our creed of removing recyclable materials from industrial waste similar to household refuse so that it can be recycled.

Production waste is hazardous waste

Treatment with active substances and removal of seed that is no longer officially certified from our inventories produces dusts and seeds containing pesticides. According to waste disposal law, they must be classified as hazardous waste, depending on the type of pesticide. This classification determines how they are disposed of. The pesticides contained in waste from most of the seed we treat is below the statutory thresholds specified for hazardous waste. Although a large part of it could therefore be recycled, the company has decided in compliance with its environmental policy to take the safe approach and dispose of it in a special incineration plant. Since the scope of this report has been expanded, it now includes the disposal of hazardous waste from sugarbeet, corn, cereal and rapeseed residues, with the result that the total quantity in fiscal 2009/2010 was 700 tons. Since April 1, 2010, we have documented proof of disposal of our hazardous waste electronically.

Composition of the waste

Due to the factors described above, the proportion of hazardous waste was 13.5%. Because seed is a natural substance, the waste contains a large share of biologically degradable substances: 77%. The shares for industrial waste similar to household refuse and technical recyclable materials are each 4% and that for waste from production for thermal recycling is 1.5%.



Separation of waste enables recycling.

Precautions and challenges in waste management

Our aim at Einbeck is to record where waste is produced, charge and account for it accordingly and improve separation so that less than 200 tons of industrial waste per fiscal year will be produced in the long term.

As part of the internationalization of the environmental management system, a constant concern of ours is to work toward ensuring, both in and outside Germany, that waste is minimized, separated and recycled or safely and finally disposed of.

Waste composition (in t)

	FY 09/10	FY 08/09	FY 07/08	FY 06/07
Compost materials	4,055	3,453	3,362	2,591
Hazardous waste	700	239	189	112
Industrial waste similar to household refuse	209	203	220	192
Technical recyclable materials (steel, paper, etc.)	208	507	99	227
Waste from production for thermal recycling	76	84	65	82
	5,248	4,486	3,935	3,204

KWS SAAT AG only in FYs 2006/2007 to 2008/2009

Objectives		
Strategic objective	Measures	When?
Reduction of industrial waste to less than 200 tons a year	Better waste separation	FY 2010/2011

- More information:
- www.kws.de/Umweltleitlinien
 - Seed Production, p. 22
 - Environmental Management, p. 38

Transport Logistics

Focusing on what customers want

As a company with global production and customer networks, the KWS Group transports huge volumes of seed. Logistics supports the supply of material to our international production, research and distribution networks and organizes transportation to around 100 countries.

Seed business is by its nature very seasonal and thus places very high demands on the quality, flexibility and service of transport logistics. Our focus is on what our customers want and need. We view our entire supply chain – procurement, production and distribution – as a holistic system. Transport logistics throughout the seed value chain is thus analyzed and optimized end-to-end. All our material is transported by external service providers, either by ship, truck, rail or air. As part of the long-term value added partnerships we have established and continue to build with our logistics service providers, we constantly review transportation processes and improve the various methods of shipment we use with an eye to enhancing efficiency. We expressly give close consideration to using rail as a means of transport.

Organization of logistics processes

The logistics process for the procurement, production and distribution of seed is organized worldwide by KWS' Logistics department in Einbeck, which primarily coordinates transportation, creates the necessary shipping documents and awards contracts to logistics partners. Procurement logistics for seed in the sugarbeet segment comes from Italy and France to Germany. After the seed has undergone customized processing and treatment, its global distribution is controlled centrally from Einbeck. The procurement, production and distribution logistics process for the corn segment is handled directly by the subsidiaries and associated companies and coordinated by the central Logistics department in Einbeck.

Tenders for and assessment of transportation services

We procure transportation services under regular invitations to tender and review these services regularly as well. They are constantly monitored and evaluated on the basis of agreed key performance indicators, such as transit time and quality, and a supplier assessment.

KWS obligates its logistics providers to use low-emission vehicles in transporting goods by road.

International supply chain network

KWS is aware of the complexity and sensitivity of its local and international supply chain. Teamwork across borders and cultures within the chain is crucial to ensuring that goods are available in our seasonal business. To foster this teamwork, KWS' central Logistics department holds annual workshops with international colleagues.

Employees from the Logistics department regularly attend training on exports, export control and customs, as well as language courses – subjects that are important given the international nature of the supply chain network. External courses are also held to enhance awareness for sustainability and "green" logistics, an issue that will continue to grow in significance in the future.

Topical issues and recent events

The transports of KWS SAAT AG and KWS MAIS GMBH (excluding subsidiaries) in fiscal 2009/2010 totaled 151,520,652 tonne-kilometers, resulting in a total of some 10,000 tons of CO₂ emissions.

A new joint invitation to tender for the shipment of rye and sugarbeet seed from Italy to Germany resulted in greater use of intermodal transport (truck/rail). We not only achieved operational synergies, but were also able to handle 200 truck transports with this rail solution and cut CO₂ emissions by 89 tons. We also reaped benefits, especially financial ones, from further invitations to tender for air transport, parcel shipment, storage and road haulage contracts.



Logistics center for organizing seed transport



Seed on its way to the farmer – punctual delivery in time for the sowing season is a must.

At the Corn Segment, the harvest was earlier than in fiscal 2008/2009, so we were also able to process and ship the seed earlier. In sales distribution, we took care to minimize stock transfers in view of our decentralized processing structures.

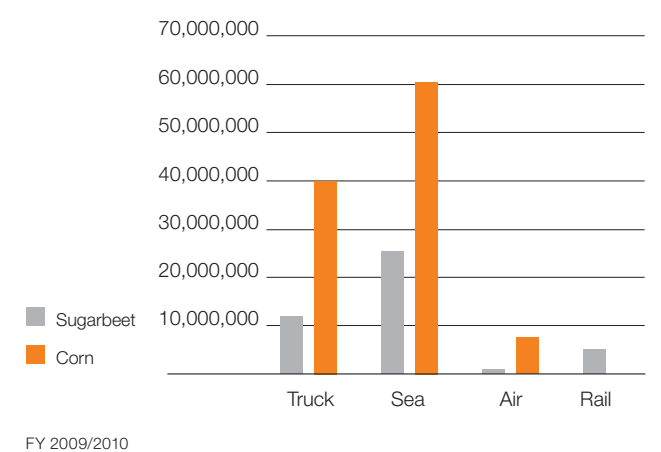
Extreme situations:

El Niño and the earthquake in Chile

The El Niño phenomenon resulted in a cool, rainy summer in Chile 2010 and delays in the corn harvest. In addition, the powerful earthquake on February 27, 2010, impeded the harvesting process there and seed transport to Europe very significantly.

As part of our policy of information transparency, our customers were notified promptly of the reasons for delays in delivery and we offered them alternative varieties. In close coordination between customers, distribution, production and logistics, it was possible to adjust the volume of air cargo to address the situation. A total of 565 tons of seed were transported by air from Chile to Europe.

Seed quantities transported (in tonne-kilometers) by the Sugarbeet and Corn Segments



Social Commitment

Since it was founded in 1856, KWS has been an owner-led company with a tradition of family ownership. There are traditionally close ties with the people who work for KWS and live in the rural region where it is based, and we strive to strengthen and promote the social environment at our locations. Our commitment to charitable works, culture and sport and our support of science and research are particularly important to us. Through this commitment, the company helps strengthen the region of Southern Lower Saxony around its headquarters in Einbeck, making it more attractive, offering young scientists and their families a livelihood and driving forward basic research work.

Promoting the Region

As part of its efforts to promote the region, KWS initiates many projects of its own, takes part in public projects and supports our employees' wide-ranging involvement in non-profit athletic and cultural activities. All these measures are coordinated by Corporate Communications, which reports directly to the Chief Executive Officer.

Topical issues and recent events

Promoting the region

In fiscal year 2009/2010, KWS spent a total of €75,000 for regional donations and sponsoring. Another €16,000 goes regularly and indirectly to cultural projects through the company's various memberships. Since the beginning of 2010, KWS has supported the newly established regional marketing company Einbeck Marketing – Gesellschaft für Wirtschaftsförderung, Stadtmarketing, Veranstaltungs- und Tourismusservice mbH with €30,000 a year. The Head of the Financial Accounting department is currently the Chairman of the marketing company's Supervisory Board.

“Technology Meets Classic and Rock”

For 90 years, the Göttingen Händel Festival has been an outstanding international event and a valuable element of Southern Lower Saxony's cultural life. In 2009, KWS had the privilege of hosting a concert for the third time since 2006 – in the unique atmosphere of the Wiebrechtshausen Monastery Chapel. In 2010, the Christian rock festival “Rock in the Monastery for Youngsters and Young Adults” was also held on the Wiebrechtshausen estate. This event and the summer camp planned for 2011 are the lead-up to the “Temporary Youth Monastery,” which has been initiated by the parish and is to be established in the medium term in Wiebrechtshausen to give young people the chance to familiarize themselves with Christian issues in a rural envi-

ronment. KWS supports this youth work by providing these opportunities to hold events and with local organizational efforts.

Responsible for coming generations

Music enables access to and is a basis for science education. That is why, in 2008, KWS specifically promoted young people's concerts by the Tangobücke e.V. and the local secondary school, among other things with another



The Händel Festival at KWS' Wiebrechtshausen monastery estate

concert by the Göttingen Symphony Orchestra in Einbeck. In addition, KWS would like to encourage an interest in science among youngsters while also helping them develop their personality. That is why the company invested about €105,000 in a participation in the IdeenExpo (Ideas Exhibition), took part in Lower Saxony's Future Day and selectively sponsored scientific projects at schools. KWS also helped fund the “Miniphaenomena” at a primary school in Einbeck and again invited entries for its School Award 2010 with the subject “Climate Protection – It's Our Responsibility,” this time throughout all of Southern Lower Saxony.

Responsibility for your neighbor

KWS supports projects organized by church groups, non-profit organizations or associations in Southern Lower Saxony, in particular ones that support humanitarian objectives, encourage dialogue between generations or support the disadvantaged, such as events by the “Marie” Young People's Church, the regional hospice movement, the Einbeck chapter of Amnesty International and Einbeck's Children's Café. In February 2010, a major earthquake shook the continent of South America, especially Chile, where it also hit employees at our breeding station in Rancagua. KWS employees around the world spontaneously started a fundraising drive for their colleagues. The company also made a donation, with the result that a total of €10,000 was collected to help alleviate the damage caused by the quake.

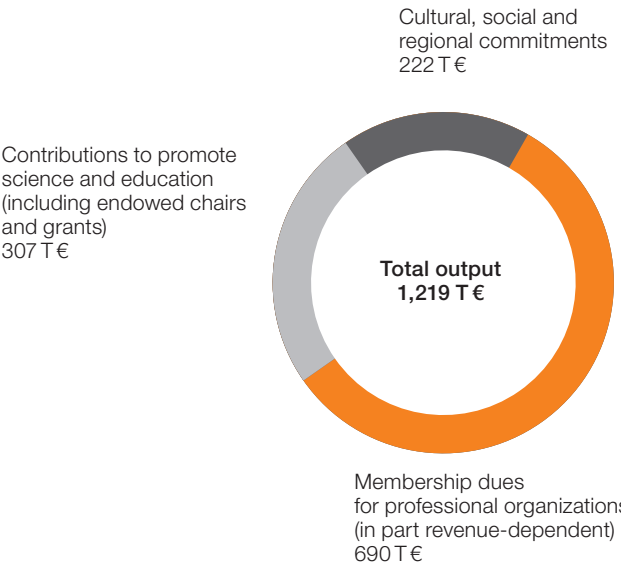
Support for athletics

KWS supports both leisure-time and top-flight sports in the region. For instance, it contributes to the prize awarded by the Southern Lower Saxony business community at the Hardenberg Burgturnier Show-jumping Tournament and supports the roller-skating world champions from the RSV Einbeck club. KWS also funds many other activities, such as youth tournaments, in particular for young people.



IdeenExpo 2009: Christian Wulff (former Minister President of Lower Saxony, now German Federal President), Annette Schavan (Federal Minister of Education and Research) and Philip von dem Bussche (KWS' Chief Executive Officer) testing their muscles on the “KWS Energy Bikes.”

Expenditures for social causes (in € thousand)



FY 2009/2010

Promotion of Science and Research

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 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.

Topical issues and recent events

Many and varied means of promotion and support

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 various disciplines, such as agricultural science or industrial engineering, the opportunity to write their degree theses while working for KWS.



Further development of the biogas beet: Presentation of the allocation notice by the Agency for Renewable Resources (FNR) in April 2010: Dr. Hinrich Harling (KWS), Philip von dem Bussche (KWS), Dr. Andreas Schütte (FNR) and Dr. Andreas von Felde (KWS)

In cooperation with the University of Hohenheim, we award grants to support people studying crop science. A total of € 15,000 was spent on these grants in fiscal 2008/2009. The annual funding of the endowed chair for “Crop-Plant Biodiversity and Breeding Informatics” established at the University of Hohenheim in 2007 is €200,000. We also support concrete bilateral projects. 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.

We have nurtured diverse contacts with foreign institutions for many years. Cooperative projects on specific subjects are occasionally arranged. In the past two years, we awarded grants for the first time to young Chinese scientists as part of our longer-term cooperation with the University of Tongji in Shanghai. KWS supports knowledge transfer by means of a guest professorship, which is held by an employee from KWS. In the future, we will increasingly include foreign scientists in KWS’ intern program, acting on our belief that the international transfer of knowledge is becoming more and more important.

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 those in 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.

Outline of the Report’s Principles

Fundamentals of our sustainability reporting

This Sustainability Report 2009/2010 is the second of its kind to be published by KWS SAAT AG. The goal of our reporting is to provide information on our activities and strategies in the area of entrepreneurial responsibility.

This year, our reporting on sustainability comprises an Internet site on the subject (www.kws.de/nachhaltigkeit) and a printed report. The Internet site forms the center of our reporting. It details our strategic and organizational approaches for individual areas and describes our management systems. We also give an account of current trends, measures and events and present our objectives and key performance indicators there. The printed report summarizes the content of the Sustainability Internet site and focuses on current developments, key performance indicators and objectives in the period under review. Links at relevant points in the printed report refer readers to the Internet site for additional information.

Our reporting is based on the internationally recognized specifications of the Global Reporting Initiative (GRI). In its own estimate, KWS achieves the highest GRI application level (level A).

Consolidated companies and period under review

The consolidated companies covered by our sustainability report are KWS SAAT AG, PLANTA Angewandte Pflanzen-genetik und Biotechnologie GMBH, KWS MAIS GMBH, AGROMAIS GMBH, KWS LOCHOW GMBH and KWS SAATFINANZ GMBH.

The reporting therefore focuses on KWS and its German subsidiaries. Deviations are indicated at appropriate points. In addition, we now report on all of the Group’s four segments: Sugarbeet, Corn, Cereals and Breeding & Services. In the long term, KWS intends to extend reporting to the whole group, with the consolidated companies included expanded step-by-step to cover additional subsidiaries abroad.

The period reviewed in the report covers the fiscal years 2008/2009 and 2009/2010. The fiscal year begins on July 1 of each year and ends on June 30 of the next year.

Collection of data and information

This report takes up the topics of the previous one and also addresses further current issues. These were identified by means of a materiality analysis and prioritization. The information and data were compiled using specific IT systems. Our power utility’s current emission factor was used to calculate carbon dioxide emissions from energy consumption. The carbon dioxide emissions from transportation processes were determined using the LOTOS Guide from the Technical University of Hamburg-Harburg (version dated June 2009).

KWS SAAT AG's Sustainability Report is based on the internationally recognized specifications of the Global Reporting Initiative (GRI). The following index contains references to the points where the required disclosures are dealt with

and shows the degree to which each indicator is fulfilled. In its own estimate, KWS achieves overall the highest GRI application level (level A).



Organization and Report Profile

		Comments	Degree of fulfillment	References
1.	Strategy and Analysis			
1.1	Statement from the Chief Executive Officer about the relevance of sustainability		...	P. 6–7
1.2	Impact of business activity and risks as well as opportunities for the company		...	P. 6–7, 11–13, 18

2. Organizational Profile

2.1	Name		...	P. 8
2.2	Primary brands, products and services		...	P. 8, AR p. 32–43
2.3	Operational structure		...	AR p. 85
2.4	Location of headquarters		...	P. 8
2.5	Countries where the organization operates		...	P. 8, AR p. 85
2.6	Nature of ownership and legal form		...	P. 8, AR p. 22
2.7	Markets served		...	P. 8, AR p. 32–43
2.8	Scale of the organization		...	P. 8, 58
2.9	Significant changes regarding size, structure or ownership	There have been no changes.	...	AR p. 22
2.10	Awards received		...	P. 12, 31, 34, 41

3. Report Parameters

3.1	Reporting period	July 1, 2008, to June 30, 2010	...	P. 51
3.2	Date of publication of the most recent report	July 1, 2006, to June 30, 2008	...	P. 51
3.3	Reporting cycle	Every two years	...	P. 51
3.4	Contact person for questions regarding the report		...	P. 58
3.5	Process for defining report content		...	P. 51
3.6	Boundary of the report		...	P. 51
3.7	Specific limitations on the scope or boundary of the report		...	P. 51
3.8	Organizational units included in reporting		...	P. 51
3.9	Data measurement techniques and the bases of calculations		...	P. 51
3.10	Explanation of any restatements of information	No information was restated.	...	P. 51
3.11	Explanation of changes to the report parameters		...	P. 51
3.12	GRI-Index	Presented here	...	
3.13	External assurance of the report	The key economic figures were audited by the auditing firm Deloitte & Touche GmbH.	...	P. 52, AR p. 87

Legend:

Degree of fulfillment		References	
...	A full response is given for this indicator	www	Corporate Website of KWS SAAT AG at www.kws.de
..	A partial response is given for this indicator	AR	2009/2010 Annual Report of KWS SAAT AG
.	No response is given for this indicator at present	CoBE	The Code of Business Ethics of KWS SAAT AG

		Comments	Degree of fulfillment	References
4.	Corporate Governance, Commitments and Engagement			
4.1	Governance structure of the organization, including committees	Declaration on corporate governance in the 2009/2010 Annual Report of the KWS Group	...	AR p. 17–21, www (Investor Relations / Corporate Governance)
4.2	Independence of the Chief Executive Officer	See the comments under 4.1.	...	AR p. 17–21, www (Investor Relations / Corporate Governance)
4.3	Independent members of the Executive Board	See the comments under 4.1.	...	AR p. 17–21, www (Investor Relations / Corporate Governance)
4.4	Mechanisms for shareholders and employees to provide recommendations or direction	See the comments under 4.1.	...	AR p. 17–21, www (Investor Relations / Corporate Governance)
4.5	Linkage between compensation for members of the Executive Board and executive employees and the organization's performance	See the comments under 4.1.	...	AR p. 17–21, www (Investor Relations / Corporate Governance)
4.6	Processes in place to ensure conflicts of interest are avoided	The bylaws of the Executive Board and Supervisory Board stipulate that their members must disclose conflicts of interest immediately. All members of KWS SAAT AG are governed by the Code of Business Ethics.	...	www (Investor Relations / Corporate Governance)
4.7	Qualification and experience of members of the Executive Board	See the comments under 4.1.	...	AR p. 17–21 www (Investor Relations / Corporate Governance)
4.8	Internally developed statements of mission or values, codes of conduct and principles	The corporate principles, environmental policies and Code of Business Ethics apply to the whole of KWS SAAT AG.	...	P. 10–11, www (About us / Principles; environmental policies), CoBE
4.9	Procedures of the Executive Board for overseeing and controlling the organization's sustainability performance	See the comments under 4.1. The Executive Board approves publication of the Sustainability Report.	...	www (Investor Relations / Corporate Governance)
4.10	Processes for evaluating the performance of members of the Executive Board	The Supervisory Board annually conducts the efficiency review recommended by the German Corporate Governance Code.	...	www (Investor Relations / Corporate Governance)
4.11	Explanation of how the precautionary approach is addressed		...	P. 14–21
4.12	Externally developed charters, principles or initiatives	Admission to the Climate Protection and Energy Efficiency Group of the German Business Community	...	P. 41
4.13	Memberships in associations and advocacy organizations		...	www (Sustainability / Social Commitment / Memberships)
4.14	Stakeholder groups engaged by the organization		...	P. 12–13
4.15	Basis for selection of stakeholders		...	P. 12–13
4.16	Approaches to stakeholder engagement		...	P. 12–13, 32–33
4.17	Topics and concerns of stakeholders		...	P. 12–13

Management Approach and Performance Indicators

Economic

		Comments	Degree of fulfillment	References
Management approach			...	AR p. 49–51
EC 1	Direct economic value generated and distributed		...	P. 59
EC 2	Financial implications for the organization's activities due to climate change		...	P. 6–7, www (Innovation / future perspectives; Investor relations / Risk management / Risks for future development)
EC 3	Company retirement pension		...	P. 32–33, 59
EC 4	Financial assistance received from government		...	AR p. 80, www (Innovation / R&D management)
EC 5	Local minimum wage		...	P. 32
EC 6	Locally based suppliers	KWS gives preference to regional service providers and suppliers. It often relies on special suppliers for consumables and supplies.	...	
EC 7	Local hiring	KWS does not restrict its recruiting to the regions around its locations. Due to a shortage of expert candidates, KWS has to seek employees nationwide and internationally.	...	
EC 8	Investments in public infrastructure		...	P. 48–50
EC 9	Indirect economic impacts	KWS promotes the rural infrastructure in regions where it has subsidiaries, associated companies or breeding stations.	...	P. 30–31, 32–33, 48–50

Environmental

		Comments	Degree of fulfillment	References
Management approach			...	P. 38
EN 1	Materials used	The main quantities of materials are used in seed processing.	...	P. 22–23
EN 2	Percentage of materials used that are recycled input materials	Some of the plant dusts produced by abrasion when sugarbeet seed is processed are added to the seed during pelleting.	...	www (Products / Sugarbeet / Seed production)
EN 3	Direct energy consumption		...	P. 39–41
EN 4	Indirect energy consumption		...	P. 39–41
EN 5	Energy savings and energy efficiency		...	P. 20, 39–41
EN 6	Energy-efficient products and services	Not applicable because seed and the plants that grow from it do not consume any energy.	...	
EN 7	Initiatives to reduce indirect energy consumption		...	P. 39–41
EN 8	Total withdrawal of water		...	P. 42
EN 9	Water sources		...	P. 42
EN 10	Water recycled and reused	The process water required in seed processing contains pesticides and is purified and treated before being passed to the sewage system. Internal recycling is carried out to a limited extent.	...	P. 42–43
EN 11	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.	...	
EN 12	Impacts of products and services on protected areas	Good professional practices in agriculture are used on KWS' trial areas and are intended to prevent impairment of soil and environment to a large extent. A healthy soil and an intact nature are vital to efficient agriculture and therefore a main concern of KWS. The environmental impact of seed on fields is steadily reduced.	...	P. 18, 23
EN 13	Habitats protected or restored	Not applicable because KWS does not cause any impairment of habitats.	...	

		Comments	Degree of fulfillment	References
EN 14	Strategy, objectives and actions for managing biodiversity	Conserving genetic resources and an intact nature are vital to the success of KWS and therefore a main concern of the company.	...	P. 21
EN 15	Endangered plant and animal species	Not applicable because KWS' business activity does not contribute to endangered plant and animal species becoming extinct.	...	
EN 16	Direct and indirect greenhouse gas emissions		...	P. 39–41, 46–47
EN 17	Other relevant greenhouse gas emissions	Other greenhouse gas emissions are also produced by business trips and commuting by our employees. They are not systematically recorded at this point. KWS is working continuously to improve its data situation.	...	
EN 18	Reduction of greenhouse gas emissions		...	P. 39–41, 44–45
EN 19	Emission of ozone-depleting substances	Not applicable because no ozone-depleting substances are emitted as part of our operational processes.	...	
EN 20	NOx, SOx, and other significant air emissions		...	P. 39–41
EN 21	Total water discharge			P. 42–43
EN 22	Total waste and disposal method		...	P. 44–45
EN 23	Significant spills	There were no significant spills in the reporting period.	...	
EN 24	Transport of hazardous waste	Dusts and seed removed from our inventories are classified as hazardous waste when they contain pesticides.	...	P. 44–45
EN 25	Waters and habitats significantly affected by discharges of water and runoff	Not applicable because KWS does not discharge water directly.	...	
EN 26	Initiatives to mitigate environmental impacts of products and services		...	P. 18, 23
EN 27	Reclaim and recycling of product packaging	Packaging that is taken back from returns is fed into the recycling system. The product packaging consists of cardboard and paper and is fed into the recycling system by the farmer.	...	
EN 28	Fines and sanctions for non-compliance with environmental laws and regulations	There were no fines or sanctions of this type in the reporting period.	...	
EN 29	Environmental impacts of transportation	Environmental impact of business trips and employees commuting to and from work is currently not recorded.	...	P. 46–47
EN 30	Total environmental protection expenditures and investments			P. 38

Product Responsibility		Comments	Degree of fulfillment	References
Management approach			...	P. 14–27
PR 1	Analysis of the health and safety impact of products and services		...	P. 18, 23
PR 2	Incidents of non-compliance with regulations on health protection and safety	No violations in the reporting period are known.	...	
PR 3	Labeling of products and services	Labeling is regulated by the German Seed Marketing Act.	...	P. 23
PR 4	Non-compliance with regulations concerning labeling of products and services	There were no violations in the reporting period.	...	
PR 5	Measurement of customer satisfaction and results	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.	...	
PR 6	Responsible 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).	...	
PR 7	Non-compliance with regulations on marketing	There were no violations in the reporting period.	...	
PR 8	Total number of substantiated complaints by customers regarding breaches of data protection	There were no violations in the reporting period.	...	
PR 9	Fines and sanctions for non-compliance with laws and regulations	There were no fines and sanctions in the reporting period.	...	

Human Rights		Comments	Degree of fulfillment	References
Management approach		All employees of the KWS Group are governed by the Code of Business Ethics. There is currently no systematic approach for considering human rights in investment agreements or selecting or examining suppliers because the potential risk of human rights violations is regarded as low given that the geographical focus of Group's business activity (procurement, production and distribution) is on Europe and North America.	...	P. 10–11, CoBE
HR 1	Investment agreements that include human rights clauses	There is currently no systematic approach for considering human rights in investment agreements.	...	
HR 2	Suppliers that have undergone screening on human rights and actions taken	Suppliers and service providers are not currently screened systematically.	...	
HR 3	Employee training on human rights	There is currently no special training on human rights.	...	P. 11
HR 4	Number of incidents of discrimination and actions taken	There were no incidents in the reporting period. Non-compliance with the Code of Business Ethics results in disciplinary measures.	...	CoBE
HR 5	Risk to the right to exercise freedom of association and collective bargaining in business activity	No risk exists at present.	...	P. 32–33
HR 6	Risk of child labor in business activity	No risk exists at present.	...	
HR 7	Risk of forced or compulsory labor in business activity	No risk exists at present.	...	
HR 8	Security personnel trained in aspects of human rights	There is currently no special training on human rights.	...	
HR 9	Incidents of violations involving rights of indigenous people	There is no risk potential at present	...	

Labor Practices and Decent Work		Comments	Degree of fulfillment	References
Management approach			...	P. 28, CoBE, www (About us / Principles)
LA 1	Total workforce	80% of the workforce is employed full-time; almost 90% have an unlimited contract of employment.	...	P. 28, 35
LA 2	Rate of employee turnover		...	P. 32–33
LA 3	Benefits provided		...	P. 32–33, 34–35
LA 4	Employees covered by collective bargaining agreements	Approximately 90%	...	
LA 5	Minimum notice periods regarding significant operational changes	Open, regular corporate communication is an element of KWS' corporate governance.	...	P. 32–33
LA 6	Workforce represented in health and safety committees	The whole workforce	...	
LA 7	Injuries, occupational diseases, lost days, days of absence and work-related deaths		...	P. 36–37
LA 8	Health care and counseling		...	P. 36–37
LA 9	Health and safety agreements with trade unions	There are no agreements with trade unions on specific health and safety issues.	...	
LA 10	Average annual further training per employee		...	P. 30–31
LA 11	Skills management and lifelong learning		...	P. 30–31
LA 12	Employee performance and career development reviews		...	P. 30–31, 32–33
LA 13	Composition of governance bodies and breakdown of employees by diversity criteria		...	P. 32–33, 34
LA 14	Ratio of basic salary of men to women	Employees are paid on a performance-oriented basis in accordance with the 13 wage categories of the collective wage agreement. This agreement does not make any distinction between men and women in their classification.	...	

Society		Comments	Degree of fulfillment	References
Management approach			...	P. 10–13
SO 1	Programs that assess the impact of operations on society		...	P. 12–13
SO 2	Analysis of risks related to corruption at business units		...	P. 10
SO 3	Training in anti-corruption	This is defined in the Anti-Corruption Policy of KWS.	...	P. 10
SO 4	Incidents of corruption and actions taken	There were no incidents in the reporting period.	...	P. 10
SO 5	Political positions and lobbying		...	P. 12–13
SO 6	Contributions to political parties and politicians	None	...	
SO 7	Number of legal actions as a result of anti-competitive behavior	There were none in the reporting period.	...	
SO 8	Fines and sanctions for non-compliance with laws and regulations	There were no fines or other sanctions in the reporting period.	...	

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The method and paper used in producing the 2009/2010 Sustainability Report of KWS SAAT AG have been certified in accordance with the criteria of the Forest Stewardship Council (FSC). The FSC prescribes strict criteria relating to forest management to avoid uncontrolled deforestation, environmental pollution and violation of human rights. Since products with the FSC seal of approval pass through various trade and processing stages, firms that process paper, such as printing companies, are also certified in accordance with the FSC's rules.

Key Economic Figures of the KWS Group

Fiscal Year	FY 2009/2010	FY 2008/2009	FY 2007/2008	FY 2006/2007
Net sales	754.1	717.2	599.1	537.9
Cost of sales	406.1	381.0	305.4	263.9
Selling expenses	128.6	115.0	106.1	101.5
General and administrative expenses	49.6	46.3	42.3	38.5
Other operating income and expenses	10.1	-7.5	5.4	5.1
Research and development expenses	97.5	89.5	80.6	75.2
Operating income (EBIT)	82.4	77.9	70.1	63.9
as a % of net sales (ROS)	10.9	10.9	11.7	11.9
Net interest expenses	-5.0	-2.9	-1.4	-5.6
Net financial expenses	-4.9	-2.7	5.3	-6.0
Result of ordinary activities	77.5	75.2	75.4	57.9
Income taxes	26.0	25.1	20.8	19.7
Net income for the year	51.5	50.1	54.6	38.2
As a % of net sales	6.8	7.0	9.1	7.1
Equity	492.9	434.5	398.0	366.1
Equity ratio in %	57.5	57.5	59.3	60.0
Balance sheet total	857.4	756.0	671.1	609.8
Return on equity in %	12.2	13.0	15.3	11.6
Return on assets in %	7.1	7.8	9.2	6.8
Dividend per share (in €)	1.90	1.80	1.70	1.40
Average number of employees	3,492	3,215	2,856	2,739
Compensation	117.2	108.3	93.7	88.6
Social security contributions, expenses for pension plans and benefits	30.0	26.7	25.3	22.7
Personel costs	147.2	135.0	119.0	111.3

Figures in € million, unless otherwise specified (IFRS)