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Condensed Version for the Public
Dear Readers,

Just what is it that characterises the agricultural machinery industry today? We enjoy enduring business relationships on all five continents, a steady market presence in over 180 countries and an average export share of 75 percent – all these elements combine to make up today’s global, customer-oriented and highly effective agricultural machinery industry.

Yet this success story, which has brought us one economic high after another in recent years, is certainly not a given, nor was it ever. In fact, it is rooted in high-performance technology meeting the demands of the market and reaching customers without hurdles.

Growth trajectory only possible on open markets

Open markets are absolutely crucial in this respect if we are to continue our growth trajectory well into the future. However, the idea of an international free trading system which is worthy of its name is still a long way off for some. Current developments in Eastern Europe alone ought to be a warning to us, as well as the situation in large parts of South America and Asia. This is why it is all the more important for us to get to grips with tackling the status quo prevalent in so many places, challenging those areas with room for improvement, especially in established sales markets.

TTIP as the impetus for business with the US

The Transatlantic Trade and Investment Partnership (TTIP), which is still at the negotiating stage, will create huge potential for business with the US which cannot be overestimated. After all, the United States, with its export volume of almost one billion euros, is now the second largest sales market for tractors and agricultural machinery produced in Germany. A strategic heavyweight of this kind, accounting for 13 percent of our overall sales as an industry, must be seen as a partner of equal standing. To ensure that this relationship has a lasting basis, however, is a job that needs to be tackled by the industry as a whole!

The VDMA 12-Point Plan

With its clearly formulated 12-point plan, VDMA intends to systematically address all aspects relevant to the TTIP negotiations process, but also lend some much needed objectivity to a debate that has frequently become rather overheated. In brief, VDMA is calling for the following:

1. Completely eliminating all tariff barriers
2. Business-friendly rules of origin
3. Facilitating customs clearance
4. Simplifying transatlantic mobility
5. Transparent access to the public procurement market at all levels
6. Comprehensive investor protection
7. Transparency and harmonisation of intellectual property rights  
8. Abolishing extraterritoriality  
9. Transparent development of technical regulations on product safety  
10. Strengthening regulatory cooperation  
11. Mutual recognition of conformity assessment procedures  
12. Accreditation according to internationally recognised accreditation rules

**Common technical standards for greater efficiency**

The issue that most concerns our industry – aside from eliminating customs duties and standardising rules of origin – is the current heterogeneity of technical legislation. In fact, differing standards create completely needless additional costs which, depending on the product segment, can be as much as 5 to 20 percent overall and which, in effect, act as customs duties. The biggest need for practical adjustments is in the field of electrical and electronic components which is still subject to widely varying regulations. If we were to rid ourselves of this pointless regulatory ballast, we would be able to make significant cost savings which would enable fresh investment in other areas. Clever negotiating must ensure that the best standard in each case becomes the common standard for all. To remain competitive in the long term, we cannot allow our high European standards of quality and safety to become diluted. If, consequently, we adopt the ‘best fit’ option in each case, a tangible increase in sales paired with positive effects on the job market is an entirely realistic prospect.

**Huge economic potential**

Ultimately, the potential of a common transatlantic single market could not be greater. Thanks to the TTIP, this is not just about 80 million Germans or 500 million Europeans, this is about well over 800 million people potentially creating the world’s strongest economic region. In order to maintain our leading position well into the future, stable economic and political frameworks are absolutely vital. At the end of the day, we will only succeed – with TTIP and other issues surrounding ‘open markets for the future’ – if we pull together as an industry and clearly address the specific requirements of the agricultural machinery sector.

Yours sincerely

Dr.-Ing. Hermann Garbers  
Chairman of the VDMA Agricultural Machinery Association  
Frankfurt, May 2015
Economic Conditions and General Mood in Agriculture

Slump on agricultural markets sets tone for industry’s economic situation

Prices for the most important commodities in the farming sector fell sharply over the past year and the trend is continuing to date. In April 2015, the global Food Price Index, calculated on a monthly basis by the Food and Agriculture Organization of the United Nations (FAO), was 20% below last year’s level. In the past few months, the prices for milk products and sugar have declined at an above-average rate, but stock market prices for grain and oilseeds have also lost a lot of ground. Meat prices showed a slightly more stable development based on a continual increase in consumption. Lower prices naturally put pressure on the income of producers, i.e. farmers, if they are not offset by economies of scale. This was the case in 2014 – despite high harvest volumes. Although long-term comparisons show that this level of income is still quite respectable, the turnaround has also led to a global decline in investments in agricultural machinery.

Grain production remains stable at 2 billion tonnes

If current harvest forecasts for the 2015/2016 season (July to June) are correct, then there will be an excellent harvest for grain, maize and coarse grain of approximately two billion tonnes for the third year in succession produced from a roughly constant area. There was also a clear boost in 2014 for soybeans, which play a key role as a source of protein in animal feed in China, the US and Europe.

The largest producer of grain is the European Union, followed by the Commonwealth of Independent States and China. Trading of this important foodstuff is dominated by Europe, including Russia and Ukraine, and North America. The main importers are located between the equator and the 35th parallel north, with Egypt topping the list. In Eastern Europe, export prices and export volumes for wheat are always a political issue – a fact which often continues to affect global pricing for months after the harvest is over if the relevant decisions still need to be taken or made public. For 2015, wheat harvest forecasts currently stand at between 700 and 720 million tonnes worldwide, meaning that the supply situation will remain comfortable despite a constant increase in consumption.

Global Harvest of Wheat in million tons

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
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<tr>
<td>2006</td>
<td>604</td>
<td>684</td>
<td>683</td>
<td>645</td>
<td>652</td>
<td>693</td>
<td>659</td>
<td>716</td>
<td>725</td>
</tr>
</tbody>
</table>

Source: ADM Germany
In a global comparison, the grain production of the EU will perform below average in 2015, according to current forecasts. Following very favourable results for maize in France and Hungary in the past year, caused by the weather, a return to normal yields is expected at these main locations. Wheat has come through the winter well and high yields are expected once more, in particular in the western part of the continent.

However, the development in terms of exports was surprising. European milk products, which are largely based on green fodder, have an excellent reputation and cater to the taste of an ever increasing circle of consumers, including those on the Asian continent. A large sales market has opened up in Eastern Europe too, where the level of self-sufficiency has fallen to well below 100% since the end of the Soviet period.

It will be exciting to see what the end of the milk quota in the EU holds for the future of milk production. In the prime locations, preparations have been underway for a long time now to appreciably increase the potential milk quantities per farm. According to a survey carried out among farmers in March 2015 by VDMA, more than a third of dairy farms intend to increase production – by on average an increase of around a quarter within just one year. And, above all, it will be existing large farms that will focus on achieving a continual increase in economies of scale by appreciably increasing herd sizes. Regionally, this means a greater concentration in north Germany, whilst the number of small farms in south Germany will tend to shrink even further in accordance with the previous pattern. The growth threshold for farms is now a herd size of around just under a hundred cattle.

Frameworks worsen slightly for farmers

The drop in prices for agricultural products is having an effect on the mood of European farmers. In a survey coordinated by the European umbrella organisation COPA-COGECA, key indicators fell in several countries. Some regional differences are apparent however, and these need to be analysed separately.

The results of the survey in Germany show a profession which definitely sees its future in a positive light but is holding back on investments for the time being, at least in the short term. As regards meat and milk prices in particular, the survey showed a higher rating than three months ago. Whilst the milk prices were rated as relatively poor at 3.6 (on a scale from 1 to 6, where 6 was

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1 According to estimates by the German farming association Landvolk Niedersachsen (from March 2015), expenditure related to the milk quota including the implementation of 33 amending regulations over the period of its validity amounted to over €15 billion.

2 COPA-COGECA is the umbrella organisation representing farmers and cooperatives and is based in Brussels. A joint project launched in 2011 combines national surveys carried out among members on business environments and economic perspectives. VDMA is directly involved and supplies results for four out of the ten countries surveyed.
the lowest) and were only beaten by ratings for farm rents, dairy farmers appear to see the farmgate prices (which recently stabilised at 30 cents per kilo) as an indicator that the market situation is unlikely to develop along the 2008 pattern, when prices fell to as little as 20 euro cents. Farms above all in North and East Germany will continue to increase capacity. In answer to the question of financial liquidity, German farmers continue to respond that the situation is quite relaxed. The only thing that has slightly increased is the scepticism in believing that the situation will remain this positive in view of the price fluctuations for agricultural products.

In the third biggest agricultural country of the panel, the aforementioned Italy, the mood has lightened. Despite the fact that the current business is still considered rather negatively, the expectations of Italian farmers have improved. Winegrowers were very positive, as is the case in France and Spain. Dairy farmers are at the opposite end of the scale in terms of satisfaction. Fruit and vegetable growers obviously had a bad year in 2014 and rate their economic situation negatively as you might expect, yet they are looking ahead to the 2015 harvest very optimistically. Italian meat producers have steadily moved away from the subdued mood of a year ago and are also confident about their future in the medium term. The Italian farming industry however is conscious of the fact that overall they need to work more profitably. Increasing costs are still having too negative an impact on profit margins.

**Evaluation of current farming situation**

<table>
<thead>
<tr>
<th>Country</th>
<th>2013Q1</th>
<th>2013Q3</th>
<th>2014Q1</th>
<th>2014Q3</th>
<th>2015Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Italy</td>
<td></td>
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<tr>
<td>France</td>
<td></td>
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<tr>
<td>Germany</td>
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</tr>
</tbody>
</table>

Source: COPA-COGECA

And now for a look at the neighbour, France: the last opinion poll carried out by the French farming union in March 2015 (based on 1,500 interviews) showed that the extremely negative trend of six months ago is continuing, with one in three farmers expressing their dissatisfaction. As well as the influence of low prices for agricultural products, the Common Agricultural Policy (CAP) rules of the European Union have also played a role. 60% rate the impact of ‘greening’, i.e. the new ecological instructions, as ‘tough’ or consider the rules to be disadvantageous, at least. On the other hand, French farmers think that the climatic conditions for cultivating arable crops or specialised crops are very favourable. Structural change in France continues unchecked: a relatively steady response across all of the recent surveys has been that around one in ten farmers believes they might stop farming within the next year. One in four farmers plans to do so on account of reaching pensionable age and due to the lack of a successor, but for one in two farmers economic considerations and the lack of profitability of their farms also play a role. The statistics confirm farming in France is certainly undergoing structural change, but not the extent of it. France is at level with Germany and Italy, where every year 3 to 4% of farms close down for good.

Objectively, the economic situation of agricultural producers in the EU over the past year has only worsened marginally. Although, according to Eurostat, income per farm worker and the gross value added of the agricultural sector fell overall...
in most member states by 2%, the key figures are still higher than those of the past decade. In 2015, income levels could fall further still in view of lower grain, oilseed and milk prices thus also reducing spending power for the year ahead.

Production and Business Climate in the Agricultural Machinery Sector

Global sales drop by 10%

The agricultural machinery sector achieved an all-time high in terms of production and sales in 2013. According to new calculations by the VDMA Agricultural Machinery Association, the volume was €103 billion worldwide (equivalent to USD 137 billion). Following the slight decline last year, a minus of around ten percentage points is expected for 2015. The deciding factor here is the weak economic cycle in the industry in America and Europe, but also in part of the Asian continent, especially in India.

Global production of agricultural machinery and, simultaneously, a high percentage of international trade are concentrated on North America and Western Europe. Production in South America, China, India and Turkey is (still) focussed heavily on the domestic market. Yet export shares are growing considerably in some cases, especially due to demand in the developing and newly industrialised countries which offer a huge potential for farming in terms of mechanisation. Japan and Korea are established high-tech locations with specialised machinery in the lower power segment, for example, for rice production. However with regard to tractors in particular, they have long sent an impressive export volume to the mature markets of Europe and America. The production locations in the Commonwealth of Independent States, including Russia, Ukraine and Belarus, have continually reduced their output over the past two decades and are supported by protectionist measures on the part of the state, whilst the competitiveness of the machinery will have to be raised further.

![Global Agricultural Machinery Production](chart)

Source: VDMA

Leading technology from Germany

As a production location, Germany has held its own very well against European and global competition. Its share of EU sales amounts to 27% and the share of worldwide sales to 8%. Within Europe, the location has even gained two or three percentage points over the past ten years. In terms of sales, the emphasis is on tractor production at a share of around 40% with a further focus on the power segment of above 120 hp. Harvesting machinery is in second place, including all self-propelled machinery such as combine harvesters, forage harvesters and potato harvesters. On the whole, German factories continue to produce the whole range of machinery for arable and livestock farming. Due to the flourishing domestic market, the export ratio in the last few years has held steady at between 70 and 75%.

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3 Due to a lack of accurate official statistics for many countries, this figure is based on regional and product-related calculations and estimates carried out by the VDMA Agricultural Machinery Association. It was re-calculated this year on the basis of extensive market research activities and revised retrospectively. According to the new calculation, for example, the production figure for 2013 has now increased from €96 billion to €103 billion.
Production is being reduced in 2015 in line with the global economic downturn. In the first quarter, both turnover and order intake fell by ca. 15% below the previous year’s level. For the full year 2015, the drop in sales is expected to reach up to minus 10% and a turnover of slightly below €7 billion, which would correspond to the level achieved in 2011. There is no clear recovery in sight for the coming year. The key issue here is the saturation of the established markets in Europe and America. For this reason, we would expect 2016 to be a further year of consolidation, before higher capital expenditure in the main markets can start to bear fruit again in 2017.

**Industry’s expectations fundamentally positive**

In view of the weak development of the economy over the past few months, the business climate in the agricultural machinery industry has deteriorated worldwide. Once a month, VDMA carries out a survey among leading manufacturers of agricultural machinery on behalf of its European parent organisation CEMA and every six months it does the same on behalf of the global alliance of associations, Agrievolution. At the moment, only a fifth of European managers and a third of global managers are currently answering ‘yes’ when asked whether they are very satisfied with their current level of business. The drop in sales has been too drastic and so too the fall in the level of incoming orders. Nevertheless, there has been a slight lightening of the mood in the first quarter of the year. This is chiefly due to the fact that the prospect of sales rising again is increasing as the current baseline for comparison falls.

The mood among Chinese and Turkish manufacturers is well above average, as they have recently reported higher levels of demand on their domestic markets. They also see greater opportunities for export. In both countries, the export share has actually risen significantly over the past two or three years. What’s new, however, is that the majority of company representatives active in the US have commented negatively on the situation.

Whilst it’s true that forced optimism is no longer appropriate in view of the dramatic drop in sales over the past six months, hope of an upturn in the near future is maintained. In Japan, things have taken a completely different turn again over the past year. The market recovery for the period 2013/2014 only lasted a couple of months. In the past few months, sales have dropped again. The business climate in the industry is correspondingly restrained; however the volume of incoming orders appears to be swelling again at the moment so that sales for the whole of 2015 are expected to match last year’s levels.

The majority of Western European manufacturers of agricultural machinery rate their situation as unsatisfactory. Most companies have reported a continual decline in the number of incoming orders in the past few months and have also noted a drop in sales of around 10%. The European sales market represents the majority of turnover so that the poor performance of the biggest markets, France and more recently Germany, has had a direct impact on the business situation overall. Business in Eastern Europe – a focus for German manufacturers in particular over the past few years – is considered by all to be extremely challenging. A further double-digit percentage drop in sales is expected. For the first time during the current period of recession, a CEMA survey carried out in May showed that there is no growth potential left for any of the big European markets – at least over the short term until the autumn. It’s possible that this worst-case scenario will have improved by the time the next survey is carried out; nonetheless, it does show the anxiety
with which managers are currently following developments on the markets.

At the moment, the order books of the European manufacturers are only keeping production facilities busy for eight weeks (last year it was ten). Globally, the backlog of orders has reduced too, with the exception of Turkey and Japan, who are reporting an increase in numbers.

The mood in the industry at the moment is therefore noticeably subdued. However, it is clear that the current economic downturn and slump in sentiment are nowhere near as bad as during the last downward spiral in 2009, when the industry slid virtually overnight into recession and recorded a drop in sales of over 30 percentage points in some cases. The economic situation for customers during the current downturn is much calmer and more favourable so it is unlikely at the moment that markets will wane further or decline more sharply over the longer term. Nevertheless, many companies reacted very quickly to the decline in demand and are keeping a closer eye (once again) on cost management, which includes the possibility of job cuts.

Global Market Development

Europe and America set tone for developments on global market

According to the volume of production worldwide, last year the global market totalled around €100 billion, which was just under the figure for the record year of 2014. The Old Continent (Europe) and North America are not only the world’s biggest production locations but also the world’s biggest sales markets for agricultural machinery and thus determine how the global economy develops for our industry.

Global Agricultural Machinery Markets

<table>
<thead>
<tr>
<th>Share of selected regions and countries in % (Ø 2012-2014) and trend 2015</th>
<th>Share</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Union</td>
<td>26%</td>
<td>↓</td>
</tr>
<tr>
<td>NAFTA (USA, CAN, MEX)</td>
<td>22%</td>
<td>↓</td>
</tr>
<tr>
<td>China</td>
<td>15%</td>
<td>↓</td>
</tr>
<tr>
<td>South America</td>
<td>8%</td>
<td>↓</td>
</tr>
<tr>
<td>India</td>
<td>6%</td>
<td>↓</td>
</tr>
<tr>
<td>Comm. of Indep. States (CIS)</td>
<td>6%</td>
<td>↓</td>
</tr>
<tr>
<td>Japan</td>
<td>4%</td>
<td>↓</td>
</tr>
<tr>
<td>Turkey</td>
<td>3%</td>
<td>↑</td>
</tr>
<tr>
<td>World</td>
<td>100%</td>
<td>↓</td>
</tr>
</tbody>
</table>

Source: VDMA

Where is the new baseline for the US?

According to new calculations by VDMA for 2014, the market volume for the North American Free Trade Agreement (NAFTA) came to approximately €23 billion.5 The party mood is most definitely over on the United States markets. This development was to be expected on account of the huge increases over the past few years. However the economic slump is not less strong than the previous growth, which will set this year’s market back by about three years. The main problem is not so much the lack of purchasing power on the part of customers – although this has been significantly reduced by the weak grain and soybean prices – but the low level of investment needs. For many years, politicians tried to address this by creating incentives such as tax breaks on the purchase of new machinery, so farmers were able to write off the purchase value against a generous tax allowance in the first year of purchase.

This measure, coupled with decent incomes – firstly from arable farming and then also from milk production – has allowed sales figures of combine harvesters, tractors and other machinery to rise sharply for years and created a kind of bubble. As a result, machinery dealers now have large stocks of used machinery on their hands which have to be sold off at correspondingly low prices. This will be at the expense of the new machinery business and it is not yet clear how long it will be affected. The price difference between new and used machinery already in-

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5 The production volume is similar, at a level of €22 billion. Of the three countries Mexico, USA and Canada only Canada has a net import requirement.
creased by several percentage points in 2014, so the mood among manufacturers is subdued. It’s not possible to tell at the moment if and when the trend will reverse. In general, the recession is expected to continue in 2016.

But first it remains to be seen how the drop in the market will pan out for agricultural machinery in the US with regard to the entire 2015 calendar year. Forecasts by leading agricultural machinery companies are anticipating a reduction of up to 30%. Tractor sales in the over 100 hp power segment have fallen by 17%, combine harvesters are down 42%. A company poll for the Agrievolution network shows a glimmer of optimism for the months ahead. However we can assume that the market is not currently suffering from any capacity or wear and tear issues and that following the boom of the last couple of years, things will settle down to a new, lower baseline over the medium term.

Regional power Brazil is losing ground

In the past decade, Latin American countries have always been oriented towards Brazil as the leading regional economic power. However, this role is becoming increasingly difficult for the country as the damper on the entire economy, but also on the agricultural sector, has become obvious. The government is busy overcoming past corruption cases in which primarily the public energy company Petrobras is involved. The value of the Brazilian real has declined dramatically, which could spur exports but makes imports extremely expensive and means that the country is falling out of favour with creditors. Foreign investors (especially from China), who could give the economy a boost, are therefore being welcomed with open arms.

The Brazilian agricultural machinery market therefore continues to decline noticeably. After the tractor market had already lost ground by 15% in 2014 and the market for combine harvesters shrank by 26% to 6,300 units, sales figures in the first four months of this year were 18% lower for tractors and 42% for combine harvesters than last year. With that, the country has become a hardly predictable market. In addition, the protective measures applied to imported machinery will probably weaken incentives for European manufacturers even further. Despite this, it is only a matter of time before the next upswing for agricultural machinery follows in this vast agricultural country, and, judging by recent economic cycles, that will once again be a period with strong growth rates.

The other Latin American agricultural machinery markets, which are all comparatively small, are likely to be more attractive at the moment. In view of similar trade barriers this does not really apply to the neighbour Argentina, the second largest market in the region, but more to the
emerging countries in the Northern Andean region, Paraguay and also Chile. Brazilian machinery manufacturers are able to at least slightly compensate the upheaval in the domestic market with stable deliveries to these countries. However, they naturally see their main opportunities for expansion in the Asian region but have not yet made very much headway. Increases in sales of Brazilian agricultural machinery in Africa were more substantial, also last year.

The development in Europe

Karl-Hubertus Reher
Regional Group for Europe

The VDMA Agricultural Machinery Association’s Regional Group for Central and Southeastern Europe broadened its focus in the past year. In order to be better able to analyse developments in the core markets, e.g. France, the United Kingdom and Italy, it was decided that in future the working group will also address the Western European markets. Particularly the French market was a cause for concern for many manufacturers last year. After enormous market growth in the previous years, a strong and so far continuing downturn can be observed in our neighbour country since last year. The downturn set in earlier in Southern European markets such as Spain or also Italy. In the meantime there is recovery potential, but from a low level.

In contrast, the countries in Central and Southeastern Europe, among them Romania and also Poland to a limited extent, have stood out through comparatively high stability. The past year was even a real boom year for Hungary due to comprehensive subsidy programmes aimed particularly at livestock breeding and mixed farming. Our Regional Group for Europe – the new title – is also following developments in Turkey with great interest. So far, however, market access for agricultural machinery suppliers from Germany and other European countries is still very difficult. Intensive market observation on the part of VDMA appears appropriate in view of the large market volume of €3 billion.

The economic downturn which began last year in Western Europe is currently continuing, while the markets in the Region of Central and Southeastern Europe remain more stable on the whole. Although the EU support programmes – repeatedly described in the following as a decisive influencing factor – for the period from 2014 to 2020 will probably only be effective as from the end of the year, farmers are fortunately increasingly making investment decisions that do not depend on these programmes. VDMA offers its member companies regular market studies through customer surveys, among other things, that show the trends and influencing factors in the markets of the region.

Heavyweight European Union

Europe calls the tune worldwide with regard to market volume for agricultural machinery. Analogous to their agricultural structure, the countries all differ strongly with regard to their technological requirements; nevertheless, many markets are trendsetters because their production is high on small areas and as a result they use highly efficient, state-of-the-art agricultural machinery. The 12 million farms in the EU cultivate approximately 180 million hectares of land and the added
value of approx. €400 billion contributes 2% to the gross domestic product of the Community. The agricultural sector is subsidised by the EU with about €45 billion per year.

The European agricultural sector has a slightly positive balance of trade, i.e. more goods were exported than imported. The other European countries as well as e.g. Japan, Australia but also the USA are net importers of agricultural products from the EU; the latter relationship is of particular significance in view of TTIP, the bilateral free trade agreement currently under negotiation.

The agricultural machinery market in the EU had – analogous to the worldwide trend – reached an all-time high in 2012 and 2013 with a volume of €27 billion in both years. The farmers’ good incomes, but also the state support programmes (especially in the still young member states), which were explicitly intended for the purchase of machinery, contributed to this result. This year, a stronger downturn will follow the only slight decline of the market in the EU by 2% last year. The first months have already shown that demand for new machinery has become noticeably weaker in most markets. The tractor market alone declined by about 15% in the first quarter. The large markets are dealt with individually below – in retrospect and prospect.

The agricultural machinery companies look back on the development in the German market in recent years with great satisfaction. The strength of this market not only contributes to stabilising turnover but is also important for establishing new technologies. In 2014, market volume practically remained at the high level of the two previous years, i.e. at approx. €5.5 billion. The tractor market closed with a minus of 4% at 34,611 new registrations (or 28,444 units in the performance segment above 50 hp). A decline of about 10% is becoming apparent for 2015.

Altogether, sales of tillage implements in 2014 remained just below the level of the previous year, with demand for cultivators being noticeably weaker. For most types of implements, there is a downward trend in orders so that the product segment currently has to cope with above-average losses. The trend in sowing equipment in Germany in 2014 was again divided in two: Demand for pneumatically controlled implements remained stable, both for multi-purpose implements (for grain) and precision seed drills (for maize and sugar beets). In contrast, sales of mechanical multi-purpose sowing equipment declined by about 10%. Sales results for the first quarter of 2015, which is the most important period in the season, were comparatively sobering.

After four good seasonal years for mineral fertiliser spreaders, most recently with 3,800 units, the market has quietened down considerably so that up to the end of the season 2014/2015 one fifth less implements can be invoiced. For plant protection machinery, on the other hand, we can report a record. In the calendar year of 2014, about 3,000 implements were sold; so many new machines were last sold in Germany 15 years ago. Recently, the focus was again more on mounted equipment. So far, the market has remained stable, but orders on hand have dropped noticeably.

In contrast to arable equipment, the comparative level for forage harvesting machinery is lower as weaker demand already showed effects last year. Rates of decrease in the German market are therefore currently lower. But a 10 to 15% decline in sales must be accepted for the upcoming end of the season for mowers, tedders and rakes. Demand for implements with a greater working width has held up better. Sales of round balers are above the level of the previous year, while the market for combine harvesters has declined slightly and the market for big balers has shrunk noticeably.
The German market for feed mixing wagons declined by approximately 10% in 2014. After a positive first half year, the second half of the year was sobering. No revival worth mentioning is expected for 2015 in view of the current uncertainties in the milk sector. Investments in milking and cooling equipment have also declined substantially. In the previous years, milk producers invested strongly in livestock houses and equipment—in preparation for the now liberalised milk market. After a clear dent this year, new impetus could become noticeable within a short time in view of the further expansion plans.

Given the ‘end of the quota’ as from 1 April, VDMA has asked German dairy farmers whether they intend to change their milk production. 36% of those surveyed stated that they intended to increase their quantity of milk in the coming 12 months. In Northern Germany, even every second farm manager plans to do so. On a nationwide basis, this means that an increase in national milk production of over 5% can be expected in the first year of market liberalisation. Particularly the large farms in eastern Germany appear to want to once more expand considerably. However, they only take these decisions under the condition that the price they receive for milk will not sink far below 30 eurocents.

Ultimately, the VDMA forecast for the German agricultural machinery market in 2015 is just below €5 billion, meaning a decline of about ten percentage points. With that, the volume would be exactly the same as the average level of the past five years, but still clearly above the 10-year average (of €4.3 billion.) Particularly finance-wise, the customers fulfill the prerequisites for the coming year to at least bring stability for German agricultural machinery dealers.

France remains an uncertain player

With a volume of most recently €4.8 billion, the French agricultural machinery market is in second position within the EU. The extent of the decline in 2014 surprised the industry, even though it was foreseeable that the record figure of the previous year would cause a counter movement. Particularly demand for tractors had nosedived—with regard to the number of units by 22% to 33,000 units and regarding turnover by 20% to €1.48 billion.

The mood among French farmers continues to be cautious; the same applies to their willingness to invest. Sales trends for both tractors and agricultural machinery are far below the level of the previous year. And a recovery is also certainly not apparent, which means that the level of the market for the entire calendar year could fall below the level of 2011.

Different Trends in the European Union

The trade association Federunacoma does not see any prospects of improvement for the Italian market. Over the past years, there was a steady downward development in market volume, which led to only 18,000 registrations of new tractors last year. In the first quarter of 2015, registration figures dropped by a further 9%. A decline of about 5% must be expected for the total year for the entire agricultural machinery market in Italy.

The participants in the CEMA business survey saw a positive tendency in the British market over the past few months. However, results of statistics so
far paint a different picture. In the first quarter, the United Kingdom was among the biggest losers in the European tractor market with a drop by 19%; the result for April was slightly better but only because the figure of the previous year was low. The expectations of the national association regarding harvesting machinery are clearly negative, with the exception of forage harvesters.

The A.E.A. forecast for 2015 shows a decline of up to 10%, which would be equivalent to a volume of €2.1 billion. And high stocks of used machinery are having an additional negative effect on sales of new machinery. In March, the members of the British Farmers’ Association were more satisfied than six months ago. Nevertheless, state regulatory measures and the effects of changes in European agricultural policy are regarded as hindering factors, and farmers are inclined to judge the profitability of their own farms negatively. Structural change also seems to be a major issue in the United Kingdom. 30% of the farms in the dairy, granivore and vegetable sector want to expand further.

The trade association in the Netherlands complains that not enough loans are granted to farmers. The agricultural machinery market is claimed to be saturated like in the neighbouring countries, and this has led to drops in sales so far, both for tractors and agricultural machinery. In general, however, Fedecom sees the market environment in a positive light and expects a slight revival of demand within the course of the year. Particular growth prospects are attested for dairy farms. Following a positive development last year, expectations are low regarding the Belgian market. Dealers’ incoming orders are perceptibly lower than in 2014, as are sales figures so far. With an expected decline for tractors of up to 20%, the latter again fell below the long-term average. The forecast for agricultural machinery sales in Belgium is a drop of 10% this year.

The development in Spain is uncertain. The market lost considerable substance in recent years, and the turnover volume stagnated in the past four years at only about €1 billion per year. After a brief revival in the previous year, sales figures in the first quarter of 2015 were once more declining. However, basically favourable framework conditions are reported as a result (among other things) of sufficient rainfall in the regions with arable farming. Thus, expectations for investment in the short term are better. On the other hand, continued strong and even dominating demand for used machinery in comparison to new machinery is seen negatively. Spanish customers have become very price-sensitive.

Poland continues to move away from record level

Guest article by Aleksander Muzalewski, University of Warsaw

Poland had a record harvest last year; almost 32 million tonnes of grain were harvested. However, due to the low prices for agricultural products, incomes in the agricultural sector remained on a stable level in the best case. The fifth largest market in Europe only shrank slightly to €1.4 billion, but the gap to the record year of 2012 with its €1.7 billion is already noticeable. New registrations of tractors declined by 5% to 14,180
units. Particularly sales in the normally strongest segment between 75 and 130 hp were relatively disappointing. The power class between 50 and 75 hp and from 130 to 160 hp developed all the better. The market for second-hand tractors increased by 2% to 15,421 units.

Western brands continue to dominate the market. The Czech brand Zetor also has a traditionally high market share, while Polish brands only have a market share of 7%. A look at Poland’s machine stock could show a different picture. For example, about half of the 1.5 million tractors in the farmers’ stock belongs to the Ursus brand. However, this manufacturer suffered significant losses in recent years; the situation has not yet changed much since it was taken over by Pol-Mot-Holding, a Polish investment company, in 2011.

The decline in Poland’s agricultural machinery market appears to be continuing this year. There were 2,740 tractor registrations in the first quarter, i.e. 19% less than in the same period last year. No real recovery is foreseeable for the coming months either, even though a few dealers are already ordering more machinery. The mood in the agricultural sector is at its lowest point since five years. Most farmers currently expect that prices for agricultural products will continue to drop. And only a few farms reckon with state support for investments in agricultural machinery. The support funds from the EU programmes for rural development from the period 2007 to 2013 have indeed been practically exhausted. Amounts from the funding programmes for the subsequent period up to 2020 will probably only be available at the end of the year at the earliest. However, the focus of the subsidies will be primarily on investments in the environmental sector and in equipment for pig and cattle production. Between 2007 and 2013, EU subsidies contributed to 35 to 40% of the agricultural machinery market volume in Poland. This is likely to be much less in future.

Slightly subdued mood in Romania

In 2013 and 2014, Romanian farmers achieved good harvests for both grain and oilseeds. Combined with increased prices, this led to high incomes. The mood improved, and investments were stimulated. The mood only changed in the middle of last year when prices for grain, especially for wheat, declined noticeably. In the beginning, this had no significant effects on farmers’ investments. Imports of agricultural machinery increased by 17% to approximately €500 million, which, in view of the weak national production, is practically equivalent to the market volume. After Italy, Germany is the second most important supplier with approx. €170 million (+19% compared to 2013). With the growing professionalism of farms, Romanian farmers are investing in increasingly larger machinery from German manufacturers.

Further impetus comes from the structural changes in the farms, which continue to grow in size. This development is partly due to the migration of the rural population to the cities or to other countries – here the freedom of movement for workers within the EU plays a major role. The differences between incomes in the cities and in rural areas tend to have increased since several industrial companies, e.g. the vehicle manufacturers Renault and Fiat, have started producing locally. The agricultural areas of small farmers are increasingly being sold or leased on a long-term basis to the expanding agricultural holdings. In turn, these operations are relying more on high effectiveness through the use of machinery in view of the lack of workers. Some of them also undertake contract work and help the small farms with certain work, e.g. with combine harvesting or plant protection. The structural changes also
encompass agricultural regions that so far were not at the fore, e.g. eastern and southeastern Romania as well as part of the Carpathians.

But subsidy programmes also have had a very positive effect on market development from the perspective of the machinery industry. In 2014, there were two waves of applications for Measure 121 (programme to modernise agricultural holdings), which were, however, funded from the new budget for the Programme for Rural Development for the period from 2014 to 2020. This measure enables farmers to gain access to modern machinery. The pre-accession phase until 2007 and the period shortly after accession saw increased investments mainly by the larger operations in the south and northwest of the country, which possess the best prerequisites for agriculture, including large flat tracts of land, good infrastructure and irrigation options. They are now no longer dependent on support thanks to efficient cultivation methods. In the regions along the Danube and the border with Hungary, there are several farms owned wholly or partly by foreign investors. Meanwhile, a significant portion of the investments is for high-end machinery.

Demand for Romanian products remains stable in the significant markets. Transport and shipping infrastructure has been expanded, and the refund of value added tax for grain exports is running more smoothly than in the past. The Romanian Ministry of Agriculture and Rural Development expects speedy approval of the individual support measures for investments within the new budget, which means that further waves of applications for farm modernisation projects can also take place this year.

For the long term, it can be assumed that Romania will establish itself behind Poland as the second largest agricultural machinery market in central and south-eastern Europe. The mix of machinery used will continue to shift in favour of Western brands, but demand will remain for simple and inexpensive machinery like that already offered by Turkey, Belarus and in the meantime also by China and India. The latter is increasingly used for fruit and vegetable farming as well as livestock farming. There is still immense potential in these areas. As a net importer, Romania is still far from being self-sufficient with regard to milk, meat and some types of fruit and vegetables.

Overheated investment cycles in Hungary

No European agricultural machinery market grew as strongly last year as the Hungarian market. Many product groups showed double-digit and in some cases even triple-digit growth percentages. The funds from the European Agricultural Fund for Rural Development (EAFRD 2007-2013) are one reason for the positive market development; subsidised loans at the national level within the scope of Hungary’s ‘Funding for Growth’ programme are another. This programme enabled Hungary’s central bank to grant interest-free loans to commercial banks, which in turn granted loans to small and medium-sized enterprises at a maximum interest rate of 2.5%.

The funds from the past funding period of the EAFRD programme have in the meantime been practically exhausted, and, as in the other countries in the region, new support funds are not likely to be released before the end of this year. For this reason, many farmers are deferring their planned purchases, insofar as they have a need for investment. Apart from that, the mood in the agricultural sector has darkened in the meantime.
The half-yearly survey carried out within the scope of the VDMA Agricultural Business and Investment Barometer shows that the economic climate index has reached its lowest level since 2010.

Besides the gap in state funding, the most important reason for this development is the decline in prices for agricultural products. In our survey, the proportion of Hungarian farmers willing to invest has halved down to 9% for tractors in comparison to the previous year. Investments in harvesting machinery and mounted equipment are likely to be slightly more stable. Nevertheless, the agricultural machinery market will decline significantly this year and probably return to a level comparable to that of 2013.

Bridgehead function for the Turkish market

Agricultural structures in Turkey are modernising swiftly. Despite unresolved internal political problems, Turkey is continuing to transform itself into a leading industrial nation. But the urban migration that this brings about is impacting on agriculture. To get their work done, the remaining farmers are having to rely increasingly on contractors and machinery rings. The previous practice of dividing up farms between inheriting sons, which was often counter-productive, rarely takes place any more since changes to the law have made it almost impossible to split up farms.

Instead there is a real trend towards farms merging, and hand in hand with that, investors from other sectors are entering the field. Some of the leading industrialists are getting involved, in the hope that yields from agricultural activities will rise in the long term. This development is most evident in the dairy sector, not least due to the very high milk price, currently around €0.60 per litre. But other foods have become noticeably more expensive in recent years as well. City dwellers usually have more disposable income and can afford slightly more expensive food.

Besides farms merging, increasing numbers of contractor businesses are being set up. The conventional pattern is usually for a progressive farmer to invest in particular machinery over and above his own needs. He will then do work on his neighbours’ fields for a fee or, alternatively, in return for an agreed share of the harvest in low-yield areas. Nationwide contractors or machinery rental pools are not yet commonplace, however.

![Turkish Agricultural Machinery Market](https://example.com/turkish_machinery_market.png)

Turkey has an intact agricultural machinery sector. Apart from one or two harvesting equipment segments, demand is met from domestic production. In fact, a significant proportion of the tractors and agricultural equipment manufactured in Turkey is exported. The machines manufactured there use proven technologies and are generally regarded as robust, although they are designed for the smaller-scale structures in the domestic market, Central Asia, the Middle East and North Africa. To meet the needs of the growing number of larger farming structures, Turkish manufacturers will have to switch to producing larger capacity machinery alongside their existing product ranges, at the very least. The conditions for doing so are extremely good. Firstly, Turkey has a broad supplier structure that can respond flexibly to demand. Secondly, companies are very willing to collaborate with leading European manufacturers.
Development in the Commonwealth of Independent States (CIS)

Dirk Stratmann
Regional Group for the CIS

It is common knowledge that we will need to feed more than 9 billion people on our planet by 2050. But what is less well known is that we will have to double our agricultural output if we are to meet the needs of the world’s growing population. Many markets are already producing at full capacity, and others are regularly affected by natural disasters and cannot therefore be regarded as reliable sources of supply. There are only a few countries that have the potential to deliver more. The CIS markets will play a central and prominent role in this area in the future. The Black Earth Region, Southern Russia, almost the whole of Ukraine and parts of Kazakhstan are geographically predestined to meet the rapidly growing demand for food in the Middle East and parts of Asia. CIS countries still have reserves of agricultural land, good soils and abundant water supplies, so there is plenty of potential for increasing agricultural output there. In addition, these countries can build on their traditional position as ‘bread baskets’ if we can mobilise the potential and know-how that exist there and provide them with modern production technology.

However, this will require unlimited access to modern agricultural equipment - in other words, powerful tractors and machinery and smart solutions that are essential for efficient, economical agricultural practice. Many farms with modern equipment provide impressive proof that a great deal can be achieved with the right technology.

But there is a growing impression that the governments of some CIS countries are not yet sufficiently committed to developing a strong agricultural sector and are primarily occupied with energy and raw material export issues and the interests of individual market participants. They are therefore underestimating how a thriving agricultural sector can benefit emerging markets in the long term and the positive impact this can have on rural areas. A strong agricultural sector is the foundation for developing a processing industry and therefore for long-term prospects in the countryside. The partner companies of the members of the VDMA Agricultural Machinery Association are also committed to creating skilled jobs in structurally weak regions. They are putting forward fast, practical solutions to help farmers locally to put their knowledge of agronomy into practice.

All market participants need to understand that isolationist tendencies and trade barriers create major obstacles to the development of a thriving agricultural sector and prosperity in rural areas: not only do they curb potential investors’ willingness to invest, but they also make it more difficult and more expensive to upgrade equipment and machinery fleets. As an industry, the German and international agricultural machinery sector is therefore looking to collaborate with selected market partners, increase vertical integration and convince politicians that they can achieve more together by observing established rules. We should not let these unique emerging opportunities pass us by!
Political target for less imported machinery in Russia

The general mood in Russian agriculture is moderately positive and optimistic. Over 90% of the respondents of a VDMA survey considered their current situation to be stable and in the future would like either to maintain their operations at the same level or expand. Farmers perceived their current situation as more favourable and comfortable compared to their situation five years ago. Their productivity has increased and their machinery fleets have been modernised.

In response to our questions about any negative trends in their industry, the answers tended to concentrate mostly on economic factors: the costs and risks of borrowing money, lack of infrastructure, fluctuating grain prices and currency depreciation etc. The surprising thing is that many of our respondents answered that they avoid using government financial mechanisms such as Rosagroleasing and Rosselkhozbank and prefer using their own money for purchasing equipment or take out commercial loans (from Sberbank, for example). Another big problem for farmers is the constant rise in input prices. Farmers therefore need to find ways of improving their productivity by using wide-cut equipment, for example.

In terms of their business structure, over 85% of our respondents indicated in their interviews that over the last decade sugar beet has been losing profitability and is considered to be a strategically declining culture. Today, the average output of sugar beet in Russia is 18 tonnes per hectare, but in some Southern regions of the country it can be as much as 30 to 40 tonnes per hectare (in the Krasnodar, Kursk and Belgorod regions).

At the same time, farmers are opting for maize and soybeans, which are considered to be strategically winning cultures in the future. Today, the average output of maize in Russia can reach 5 t/ha and 1.4–1.6 t/ha for soybeans. Over the past few years in Russia, we have seen an increase in the production of these cultures as well as an expansion in the areas under cultivation. Thus, for soybeans alone, the country’s total output in 2014 reached 2.5 million tonnes compared to 1.6 million tonnes in 2013. During the period from 2009 to 2013, the area dedicated to growing soybeans in Russia expanded by 75% from 0.87 to 1.53 million hectares.
424 units and the Russian authorities’ rigid allocation of issuing import licenses only after the harvest season.

Also the Russian market for agricultural implements declined in 2014. Although there are local brands which benefit from the subsidies, their sales plummeted with the only exception of seeding machinery, which matched the level of previous year. The strongest decline was observed in the segment of fertiliser spreaders with a decline of 65%, followed by a decline in balers of 36%, and disc harrows and cultivators of 22%.

The trend for imported implements was more favourable, although declining. With its average of 11%, it was less than for Russian manufacturers. Imports of ploughs went down by 12%, disc harrows by 13%, seeders by 14%, mineral spreaders by 6%, sprayers by 18% and balers by 16% respectively. The market share for imported implements varies between 30% for seeding machinery and 100% for sprayers. Most of the imports come from Germany, France, Italy, the USA and Canada as well as from the CIS countries Ukraine and Belarus. But there is a player to mention that has gained much ground recently: China was already the third supplier after Germany and the USA in 2014, with an increase of exports to Russia by 18%, contrary to the general trend. Within only five years, their machinery shipments to the Russian Federation doubled to 140 million Euro. Around half of the import volume from China refers to soil working machinery and (smaller) tractors.

Ukrainian investors on hold

Despite the official ceasefire in eastern Ukraine, the economic and political situation in the country remains tense. Since the military conflict started, the national currency, the hryvnia, has lost more than 60% of its value against the euro, resulting in enormous rises in prices of foreign goods and services. As Ukraine has to import a large proportion of its consumer and capital goods and energy sources, inflation in the country is extremely high. As a result, the purchasing power of vast swathes of the population has plummeted. The decline in jobs is also impacting on the economy. More than two million Ukrainians have left their homes. In the east of the country it is the working classes who are most severely affected and generally flee to Russia, but in the urban centres large numbers of highly qualified workers are emigrating with work permits to Western Europe or the USA.

Agriculture is one of the few sectors that are still relatively healthy. Despite the fighting in the east of the country and the loss of Crimea, Ukrainian farmers brought in yet another very good grain and oilseed harvest last year. Production of maize, sunflower and soybeans rose at the expense of wheat, barley and sugar beet. Domestic consumption has fallen, but at the same time exports are up, bringing in good money for exporters and traders. The devaluation of the hryvnia has made some production costs cheaper in euro terms, while earnings are generated in euros or US dollars. This development has helped Ukrainian agricultural holding companies – particularly those highly indebted to Western banks – to stay afloat.

Ukraine’s economic ties with the European Union are taking shape very slowly. The increasing access to the lucrative EU market is having a positive effect on the Ukrainian agricultural sector. It cannot yet make up for the loss of the Russian market, but it is an important stabilising factor for the country. A third of all Ukrainian exports, worth €5 billion, are already going to the EU. In its negotiations with the EU, the Ukrainian government is pressing for higher duty-free quotas for dairy and meat products. Exports of these highly processed products are helping to create greater added value in Ukraine. In the case of dairy, there are still some 160 standards, ordinances and laws that have to be adapted to EU standards.
A significant decline in investment in agricultural machinery has been evident over the past year. For example, German exports to Ukraine shrank by 39% in 2014, which was broadly in line with the general market trend in the country. Tractors and combine harvesters were hit even harder, with the market shrinking by 60%. Manufacturers of other tractor-mounted implements have fared slightly better, with declines of between 15 and 30%, depending on the segment. There are two reasons why implement manufacturers ultimately performed better. Firstly, this equipment is cheaper to buy than self-propelled machinery, and secondly the need for modernisation in this area is even greater, whereas tractors and combine harvesters had already attracted significant investment in previous years.

Although arable farming in particular remains profitable, a further drop from last year’s low level is expected this year, due in part to the general mood in the country. One year on from the change of government, the country is in an even worse economic position than before. Any economic reforms have at best been rudimentary, and loans and international economic aid have been used to re-equip the armed forces or have been routed into obscure channels. The excessive bureaucracy persists. Loans are unavailable, or can only be obtained at very high interest rates. The opposition, which had once closed ranks against Yanukovych, is now increasingly engaging in trench warfare, with the result that all hope of a rapid economic recovery has faded.

Ukraine’s central bank policy is severely restricting international trade. For example, anyone receiving payment for agricultural exports in dollars or euros must first sell the money to the central bank at a fixed rate which is generally lower than the actual rate. But when they need dollars or euros to import machinery, spare parts or other goods, they have to convert it back at the less favourable rate. Psychologically, investment plans are on hold despite the fact that there is still a great need for modernisation. It is uncertain whether this attitude will change as the year progresses. The Ukrainian government is pinning its hopes on international donors. It is therefore planning an international donor conference with the focus on the energy and agricultural sectors. According to the Ukrainian Minister of Agriculture Pavlenko, investment projects in the agricultural sector worth USD 10 billion will be proposed there. Further concessions for the sector will be a VAT refund of up to 100% for agricultural manufacturers and the abolition of the 10% export tax on oilseeds.

The development in Africa

Frank Nordmann
Regional Group for Africa

The African continent is gaining ever more importance as a market for agricultural machinery. Its greatest potential clearly lies in the south of Africa. However, Nigeria too is becoming an increasingly exciting prospect. Last year, it overtook South Africa in leaps and bounds as the strongest economic power in Africa, with a GDP of USD 522 billion. However, this does not hide the fact that the challenges on the ground are as big as ever. Political and religiously motivated unrest, the lack of a middle class and flagrant corruption make it especially difficult for small and medium-sized manufacturers of agricultural machinery to gain a foothold there. Other countries seem at first glance to be a little less complicated in this respect, in particular those in East Africa and in the south of the continent.

However, some of the challenges and hurdles in Africa are common to many of the markets. Standards of education and infrastructure are two of the most critical issues. Rapid development in both of these areas will be crucial in establishing Western machinery in Africa. On the other hand, we should not overestimate the importance of Chinese and Indian manufacturers
having been a step ahead hitherto. Of course it is hard initially to compete with suppliers whose prices are often only a fraction of those of our own machinery. And as a European supplier, it is a lot less promising still if investment in agricultural machinery is carried out in the form of bartering for resources or projects. However, more and more frequently, we are seeing buyers of Asian machinery switch to Western machinery the second time around – often due to the experience they have had in terms of quality, product life and the aftermarket sector. This is where German manufacturers of agricultural machinery can triumph. In Africa too, products with the ‘Made in Germany’ label are considered to be of particularly high quality and extremely durable. In addition, their know-how in terms of after-sales service already gives German and European manufacturers a big edge over their Asian competitors.

In essence: taking the initiative, being on the ground and making contacts – whatever form they take – are all crucial to achieving success in Africa. There are now a large number of opportunities for gradually exploring foreign markets, some even come with political support. For example, a special initiative by the German Federal Ministry for Economic Cooperation and Development entitled ‘One World, No Hunger’ is due to be launched soon. As part of this project, Green Innovation Centres are to be established in a range of African countries where the target group can find information on modern agricultural production methods and be given practical training on handling modern agricultural machinery. Being part of this as manufacturers can be the first step towards establishing the brand in the country over the long term. Similar projects have already been established in Morocco, Ethiopia and Zambia and were launched by the German Federal Ministry of Food and Agriculture to promote exports.

The German Food Partnership programme is also worth a mention. This partnership has launched the project PIA (Potato Initiative Africa) – a cooperation between the public sector and private companies. In Kenya and Nigeria, this pilot project is developing a suitable model for modernising the entire value chain for potato production from ‘field to plate’ with the aid of German manufacturers of agricultural machinery. This model could also be transferred to other markets in the future.

Whatever form your involvement in Africa takes, prior to taking any decisions, it is extremely important to examine carefully which markets are worth considering for your products. Adopting a ‘one-size fits all’ approach to all 55 countries would make as little sense in Africa as it would in Europe or Asia.

A continent on the move

The one thing that many of the African markets have in common is that they have enormous potential starting from a low base. In terms of agricultural machinery, the most movement tends to be in the eastern and southern parts of the continent. The biggest market for agricultural machinery in East Africa is Ethiopia – now the second biggest in the whole of sub-Saharan Africa (after South Africa). With an import volume of around €95 billion, the market is comparable to countries such as Serbia, Croatia or Greece. However, the size of the market alone is not critical. Up until now, Ethiopia’s imports of agricultural machinery have almost exclusively been supplied by Chinese manufacturers. On the one hand, the end consumers are Asian investors in the country. According to press reports, there are now approximately 800 agricultural projects financed by foreign investors in Ethiopia, the majority of which are Asian. On the other hand, more and more Ethiopian farmers are also investing in agricultural machinery. The government plays a key role here by leasing farmland at low prices and providing favourable loans for agricultural machinery. Up until now, the price has been a priority for the typical Ethiopian farmer, as they are frequently investing in agricultural machinery for the first time ever, which is why they tend to turn to Chinese products. It will probably take a few years before their purchasing behaviour changes in the light of the experiences they have had with the machinery.

Kenya borders to the south of Ethiopia. In many respects, Kenya is a little further ahead than its neighbouring countries – especially in terms of infrastructure in the country. Farming is characterised by a large number of small farms, plus a few large farms still remaining from colonial days. Last year, German manufacturers supplied agricultural machinery worth around one million
euros to Kenya – at first sight a modest amount. Up until now, the lion’s share of Kenya’s imports of agricultural machinery, at a total value of around €60 million, has come from India, Brazil and China. Nevertheless, the German share of the market has almost doubled in the past year. Kenya is currently developing in a very promising direction, and this has been confirmed by the German manufacturers that are present locally. In neighbouring Tanzania, the market volume is probably a little lower – around €40 million. However both countries tend to be mentioned in the same breath. They are both among the biggest in sub-Saharan Africa, the local conditions are similar and opportunities for growth are enormous. Where they differ, however, is that Kenya will soon come up against its limits in developing new areas for cultivation. The situation in Tanzania has looked very different up to now. The potential for fertile farmland seems to be enormous. Yet the Tanzanian market for agricultural machinery has hitherto been dominated by Chinese and Indian products.

Further south in Zambia however, more than half of all imported agricultural machinery (which ought to be roughly the same volume as Kenyan imports) comes from South Africa. This is relatively typical for markets bordering South Africa. Zambia is considered to be Africa’s poster boy and has a stable political situation, an investment-friendly climate and excellent conditions for agricultural produc-

![Diagram showing import volumes for agricultural machinery in the main African markets (2013)](image-url)
investing in agricultural machinery. For this reason, the greatest potential for growth in the tractor product sector is for smaller machinery. Last year, the majority of the total sales of around 600 tractors were made up of those in the 50 hp sector. In particular, the Agritech Expo fair in April this year showed how much potential is attributed to the market. This was also demonstrated by the subsequent opening of a farming training centre, involving around a dozen German manufacturers of agricultural machinery.

Right in the south of the continent, South Africa is the largest and most well-established market for agricultural machinery in Africa. It accounts for almost a third of the entire current market volume of the continent and acts as an engine for agricultural machinery in the region south of the Sahara. Conditions on the market are comparable to some extent with those of Europe, in particular as regards the target group of commercial farms. Hitherto these have tended to be farmed by white South Africans. More and more white farmers are now selling their land to the government, who in turn are allocating it to the black South Africans. This only happens semi-voluntarily – as a rule, the government is forcing their hand. In addition, at the moment (minimum) wages are rising rapidly for farm workers in particular, which in turn has led to a greater demand for modern agricultural machinery. Last year however this effect was offset by the weak exchange rate of the Rand against the US dollar.

As a result of the correspondingly higher prices for machinery, less machinery was sold in total than in the previous year. In the case of tractors for example, sales dropped by 4% down to 7,200 units.

With the exception of South Africa and the Maghreb, most African markets in the south of Africa have probably seemed only moderately interesting to date, at least in terms of their current market volumes. The potential within these markets however is enormous. Over the next few years, one or two of the markets will have already reached a level comparable to that of the smaller Asian markets. At that point it would be good to already have a foot in the door by then.

### The development in Asia

**Dr. Jens Oeding**  
Regional Group for Asia

The mood on the Asian market for agricultural machinery has been mixed in 2015. The investment climate for harvesting machinery in India has not been too bad, partly due to the buoyant attitude in the wake of the parliamentary elections. However, we are currently seeing a downward trend in the big farming countries of China, Japan and Thailand compared to 2014. Nevertheless, the downward trend is significantly weaker overall compared to Europe and the US.

In India, the new government under Prime Minister Modi is stable in office thanks to a clear majority and is working towards returning the economy to a growth trajectory which should match at least that of China. The main focus is on stimulating the agricultural market. Through measures such as offering favourable loans to improve farming structures, setting up a fund to stabilise the prices of agricultural products and providing direct subsidies, the aim is to stimulate growth of 4%. The Indian market for agricultural machinery is split in two in 2015: whilst the demand for harvesting and tillage machinery remains high and stable, the tractor market has declined sharply over the past three months.

Thailand is the biggest market for agricultural machinery in the Southeast Asian region. Due to the military putsch in September 2014, subsidies for rice growing have been drastically reduced. This has had a considerable impact on the markets for agricultural machinery. Both the demand for harvesting machinery and the demand for tractors is declining. Although numerous manufacturers are trying to offset this with aggressive
financing packages, it remains to be seen what effect this will have on resuscitating the markets. To date, markets such as those in Cambodia and Myanmar have been considerably less mechanised than Thailand but are still of interest nonetheless. Clear growth can be seen in these countries, albeit at a low level. German products, and German agricultural machinery in particular, have an excellent reputation in these countries. The number of Chinese machines replaced by German products after just a few harvests is on the increase.

Farming in China on the other hand continues to undergo rapid change and is considerably influenced by the dictates of Chinese agricultural policy. The Chinese are pressing ahead with land reallocation which will open up new markets for larger machinery for manufacturers in the future. Farmers and manufacturers of agricultural machinery must adapt to changes in the subsidy systems. Chinese policy aims to rapidly drive the degree of mechanisation for the maize harvest from today’s level of around 55% to over 80% — a level which has already been achieved for wheat. As a result, subsidies for harvesting machinery for grain maize have been increased, to the detriment of the other harvesting machinery. Fodder crop farms have been particularly badly affected. The market growth for milk products in China has declined from the previous figure of 17% per annum to 10%. At the beginning of 2015, Chinese milk producers suffered from an extreme drop in the price of milk — tonnes of milk had to be poured away and large numbers of dairy cows slaughtered. In conjunction with lower funding for the purchase of forage harvesters, this has led to the Chinese market for forage harvesters being halved. Although demand in recent years has concentrated on tractors under 100 hp, demand for higher-powered tractors is on the increase.

Unusual market drop in China

In 2014, China’s grain harvest reached (according to Chinese authorities) 607 million tonnes. Wheat production remained stable whilst the rice crop area was slightly reduced. However, the rice yield went up. The area under cultivation remained stable and the proportion used as feed even increased. The soybean area was reduced due to the poor harvest in 2014. Also the sugar crop decreased in 2014. On the other hand, China noted an increasing demand for imported dairy products. Although China’s birth policy has not changed much yet, the improvement of living standards is likely to increase demand for dairy products. Meat production is likely to remain stable.

After ten years of investment, China has made tremendous progress in the development of agriculture, but has also faced more severe resource constraints. For example, the process of urbanisation continues to reduce existing arable land (a reduction of about 0.4 million hectares per year), making the situation with only 0.13 hectares cultivated land per capita even more tense. In addition, there are large areas of land in the south contaminated with heavy metals and a shortage of fresh water has become an increasing problem. Land recultivation costs have risen in recent years. Although the yields could be increased, profit margins for growing grain have decreased. The central government is aware of these problems, so the No. 1 central document in 2015 pointed out for the first time the need to
promote the reform of state-owned farms, encourage large-size agricultural machinery leasing, and to promote an agricultural water resources fee system as soon as possible which emphasizes environmental protection. A network platform with full traceability of food quality and safety should also be gradually established. The future development of China’s agriculture will contain aspects of both quantity and quality by improving the technological efficiency and sustainability.

In 2014, China’s Gross Domestic Product (GDP) grew by 7.4%, the lowest in 24 years. After experiencing the golden period of development from 2004 to 2014, with changes in the overall economic environment, China’s agricultural machinery market is gradually entering the shift period. 2014 already brought a slight decline – according to VDMA calculations by 3% to €16 billion. On the other hand, professional equipment is still clearly on the rise, and this will also support a new upswing in the short term, probably as soon as this year.

Subsidies for purchasing agricultural machinery have gone up since their implementation in 2004, playing an important role in promoting the rapid development of the agricultural machinery market. China’s agricultural mechanisation level jumped to 61% in 2014 from 34% in 2004. The country has realised the shift from manual and animal-based agriculture to professional agricultural production based on the wider usage of machinery. Compared to the past, recent changes to the subsidy policy for the purchase of agricultural machinery look more market-driven as the scope of machinery eligible for subsidies has expanded and application procedures have become more streamlined and more transparent. VDMA estimates the amount of subsidies in 2015 to be slightly above the level of 2014.

Thailand as a strategic centre in the ASEAN region

Farming in Thailand has barely developed further in recent times. Two thirds of the 66 million inhabitants live on the land and most of the family farms still tend to be small and have a low level of mechanisation. The majority of work is carried out manually – partly by local workers and partly by migrant workers from neighbouring countries to the north. Hitherto, neither contractors nor cooperatives have played a very important role in the agricultural sector. There are a few large companies such as the C.P. Group or Mitr Phol Sugar, however real structural change is not in sight.

Last year, Thailand lost its position as the world’s biggest rice exporter to Vietnam and India. The biggest growth can be seen in the production of sugar cane, also one of the most important export goods for Thailand. This is also the sector where the hitherto modest group of buyers of Western agricultural machinery can be found. This group consists of farmers themselves, contractors or mills, which provide the farmers with machinery. There are no government investment incentives for agricultural machinery in Thailand. Programmes for machinery are primarily limited to measures to support prices for agricultural products. But here too, funds have been sharply re-
duced since last year, which has had a significant impact on the income of Thai farms and thus also on their willingness to invest.

The tractor market in Thailand is officially announced in the range of 70,000 to 80,000 units for last year, but with only few units in the range above 130 hp. The mounted equipment used has hitherto been rather small and primitive. In most product groups, local manufacturers are one step ahead, followed by Japanese and Chinese producers – with the exception of larger tractors and a few niche products, which are supplied by the West. Even if, at first glance, Thailand appears to be of limited interest as a sales market, this could change in the near future.

Its neighbouring countries are currently developing rapidly, which will lead to cheap labour from the north returning to their home countries. In addition, the minimum wage in Thailand is increasingly on the rise so that farm workers in the long term could be both rare and also expensive. This could increase the demand for modern and powerful machinery in farming. Each of the states of the region is experiencing strong growth individually, but economic integration is also being driven forward by the ASEAN group. Both of these factors speak for increasing one’s involvement in Thailand. The country would make a perfect hub for trading agricultural machinery for the entire region, as Thailand is considered to be the entry market for South-East Asia.

India places its hopes on Prime Minister Modi

2014 was marked by a decline in sales on the Indian market for agricultural machinery. Despite a promising start, the figures in the second half of the calendar year saw a downturn in the double digit percentage range. Tractor sales ultimately stood at 539,000 units, around 4% down on the previous year. The southern regions of Kerala and Tamil Nadu were particularly badly affected. One reason for the downturn was the below average monsoon rainfall in the summer. At only 88% of average rainfall volumes, it reached the lowest level for five years. This was followed by unseasonal rains during the kharif harvest in autumn, causing the harvest to be partially or completely destroyed in large areas. Together with low global producer prices, in particular for sugar cane and cotton, this has led to a drop in income from farming. In the first quarter of 2015, tractor sales fell again by a hefty 30%.

However, the country is looking ahead to the coming months with typical Indian optimism. Local manufacturers are predicting that sales will now rise again – with the expectation of a good rabi harvest for this spring. On the other hand, in the month of May big parts of the country had to cope with extremely high temperature during the day (partly above 45°C). The decisive period will be monsoon during summer. At the moment, the Indian Ministry for Meteorology is predicting that the rainfall will be at around 93% of the average of the last few years.

India’s new Prime Minister Narendra Modi continues to inspire hope in the industry. He won the elections in May 2014 with a resounding victory, is seen as business-friendly by broad sectors of the population, and intends to steer the country towards a steep growth trajectory. One of his main aims is to expand infrastructure and the education system. He also plans to tackle and simplify the burgeoning bureaucracy. Farming too is to be supported with a large number of measures to increase productivity. The opportunities for implementing these plans ought to be greater now than during the period when the multi-party coalition was in government. However when Mr Modi presented the budget for the current financial year at the end of February, there was disappointment in some quarters. Many had hoped for a considerably larger and less tentative package of reforms. Yet many representatives in the industry locally are saying if Indian farming and its agricultural machinery market are ever going to kick into gear, then now is the time for it to happen.
Worldwide Production of Agricultural Machinery

Regional Distribution (Ø 2012-2014)

- Rest of the World
- Oceania
- Rest of Asia
- Japan
- India
- China
- NAFTA *
- Rest of Europe
- European Union

* USA, Canada, Mexico

Source: VDMA, own calculations and estimation

European Tractor Registrations
in units, totals for selected countries

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Sources: CEMA, Systematics International, Martin & Jacobs, VDMA, Fedecom
Agricultural Machinery in the European Union
Values in Million Euro, including tractors

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<td>17%</td>
<td>457</td>
<td>428</td>
<td>485</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>376</td>
<td>412</td>
<td>423</td>
<td>3%</td>
<td>334</td>
<td>367</td>
<td>359</td>
<td>-2%</td>
<td></td>
</tr>
<tr>
<td><strong>Rest of new EU members</strong></td>
<td><strong>1160</strong></td>
<td><strong>1125</strong></td>
<td><strong>1018</strong></td>
<td><strong>-10%</strong></td>
<td><strong>1086</strong></td>
<td><strong>1068</strong></td>
<td><strong>980</strong></td>
<td><strong>-8%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>EU 13</strong></td>
<td><strong>3819</strong></td>
<td><strong>3615</strong></td>
<td><strong>3700</strong></td>
<td><strong>2%</strong></td>
<td><strong>4724</strong></td>
<td><strong>4471</strong></td>
<td><strong>4614</strong></td>
<td><strong>3%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>EU 28</strong></td>
<td><strong>3478</strong></td>
<td><strong>3307</strong></td>
<td><strong>3674</strong></td>
<td><strong>11%</strong></td>
<td><strong>26878</strong></td>
<td><strong>26754</strong></td>
<td><strong>26179</strong></td>
<td><strong>-2%</strong></td>
<td></td>
</tr>
</tbody>
</table>

* excluding intra trade
Some countries including transfers (e.g. Netherlands, Belgium - reason for exports exceeding production)
Sources: Eurostat, VDMA (incl. own calculations and estimation production 2014), CEMA
### Tractor Production and Markets in Selected Countries

in units

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>64,456</td>
<td>77,613</td>
<td>64,794</td>
<td>55,819</td>
<td>65,089</td>
<td>55,623</td>
</tr>
<tr>
<td>USA</td>
<td>154,705</td>
<td>160,170</td>
<td>157,870</td>
<td>185,164</td>
<td>201,770</td>
<td>207,833</td>
</tr>
<tr>
<td>Italy¹</td>
<td>71,021</td>
<td>67,000</td>
<td></td>
<td>19,339</td>
<td>19,017</td>
<td>18,176</td>
</tr>
<tr>
<td>Germany</td>
<td>59,213</td>
<td>63,599</td>
<td>51,349</td>
<td>36,264</td>
<td>36,248</td>
<td>34,611</td>
</tr>
<tr>
<td>France</td>
<td>28,364</td>
<td>28,300</td>
<td>24,000</td>
<td>38,764</td>
<td>42,646</td>
<td>33,127</td>
</tr>
<tr>
<td>Belarus</td>
<td>60,386</td>
<td>53,146</td>
<td>41,814</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey &gt; 30 hp</td>
<td>53,982</td>
<td>56,407</td>
<td>61,000</td>
<td>50,320</td>
<td>52,285</td>
<td>59,458</td>
</tr>
<tr>
<td>China &gt; 30 hp</td>
<td>499,200</td>
<td>505,200</td>
<td>525,000</td>
<td>2,230,000</td>
<td>1,815,000</td>
<td>1,858,000</td>
</tr>
<tr>
<td>India¹ &gt; 30 hp</td>
<td>578,690</td>
<td>696,801</td>
<td>612,994</td>
<td>590,672</td>
<td>696,828</td>
<td>626,839</td>
</tr>
<tr>
<td>South Korea</td>
<td>49,980</td>
<td>42,629</td>
<td>49,515</td>
<td>12,246</td>
<td>11,688</td>
<td>10,548</td>
</tr>
<tr>
<td>Japan &gt; 30 hp</td>
<td>158,668</td>
<td>157,864</td>
<td>148,226</td>
<td>44,993</td>
<td>51,778</td>
<td>46,157</td>
</tr>
</tbody>
</table>

### German Market Volume for Agricultural Machinery by Segments

Values in 1,000 Euro

<table>
<thead>
<tr>
<th>Kind of machinery</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>%-change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tractors</td>
<td>1,900,870</td>
<td>2,046,280</td>
<td>1,972,721</td>
<td>-3,6%</td>
</tr>
<tr>
<td>Soil Working Equipment</td>
<td>252,848</td>
<td>266,173</td>
<td>262,712</td>
<td>-1,3%</td>
</tr>
<tr>
<td>Machines for sowing, plant protection and fertilising</td>
<td>253,233</td>
<td>289,198</td>
<td>304,694</td>
<td>5,4%</td>
</tr>
<tr>
<td>Harvesting machinery</td>
<td>855,709</td>
<td>792,671</td>
<td>791,261</td>
<td>-0,2%</td>
</tr>
<tr>
<td>Equipment for husbandry</td>
<td>290,599</td>
<td>294,505</td>
<td>313,947</td>
<td>6,6%</td>
</tr>
<tr>
<td>Conveyor equipment for agriculture</td>
<td>95,944</td>
<td>81,251</td>
<td>85,394</td>
<td>5,1%</td>
</tr>
<tr>
<td>Trailers for agricultural use</td>
<td>83,976</td>
<td>82,125</td>
<td>83,501</td>
<td>1,7%</td>
</tr>
<tr>
<td>Other machinery*</td>
<td>1,683,531</td>
<td>1,705,261</td>
<td>1,676,235</td>
<td>-1,7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,416,710</strong></td>
<td><strong>5,557,464</strong></td>
<td><strong>5,490,465</strong></td>
<td><strong>-1,2%</strong></td>
</tr>
</tbody>
</table>

Sources: Turnover Statistics VDMA Agricultural Machinery, Federal German Statistic Agency, * incl. parts, lawn and garden maintenance, forest equipment, repair, others
Exports of Agricultural Machines and Tractors Worldwide

Imports of Agricultural Machines and Tractors Worldwide

Sources: official national statistics, VDMA, total of the ex- or imports from 52 countries
International Fairs Supported by VDMA Agricultural Machinery Association

Agritechnica
Hanover, Germany
Next date: 8 - 14 November 2015
Worldwide leading exhibition and innovation show (arable and grassland cultivation equipment)
Main target groups: Farmers of Germany and total Europe, representatives of the agriholdings, investors of main agricultural countries

Agrosalon
Moscow, Russian Federation
Next date: 4 - 7 October 2016
Leading fair for arable and harvesting equipment in the CIS
Main target groups: Plant manager of big farms of Russia and some other CIS countries, representatives of agriholdings, investors, banks

Demopark
Eisenach, Germany
Next date: 21 - 23 June 2015
Leading specialised fair for gardening / landscaping, municipal and golf court equipment
Main target groups: Greenkeepers, purchasers of municipal administrations in Germany and Europe

Interagro Complex
Kiev, Ukraine
Next date: 27 - 29 October 2015
Leading national fair for arable, harvesting and livestock equipment
Main target groups: Plant manager of big farms of Ukraine and some other CIS countries, representatives of agriholdings, investors, banks

Kazagro / Kazfarm
Astana, Kazakhstan
Next date: 27 - 29 October 2015
Leading national fair for arable, harvesting and livestock equipment
Main target groups: Farmers, investors, banks

Romagrotech
Fundulea near Bucharest, Romania
Next date: 11 - 14 June 2015
Leading national fair for arable cultivation and harvesting equipment including live machinery demonstrations
Main target groups: Farmers of the whole country, investors, banks

Zentral-Landwirtschaftsfest
Munich, Germany
Next date: 17 - 25 September 2016
Traditional trade show for arable, harvesting and livestock equipment
Main target groups: Farmers (small, medium, big holdings) of the region South Germany / Austria
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