

AGRICULTURAL MACHINERY

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2010



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AGRICULTURAL MACHINERY INDUSTRY IN TURKEY

Production

Turkey is one of the few countries of the world which are self-sufficient in food. At present Turkey is the largest producer and exporter of agricultural products in the Near East and North Africa. In fact, Turkey has traditionally been described as the world's food storehouse by many analysts. Such a huge agricultural sector has resulted in a strong agricultural machinery sector in Turkey.

According to the 2008 figures, 25 % of Turkey's population is engaged in agriculture and livestock production. About 7.5 % of total income in Turkey is obtained from agriculture.

The agricultural machinery sector is expected to further develop with the development and completion of the Southeastern Anatolia Project (GAP) which takes a new start in 2008. The project area covers 9 provinces in the Euphrates-Tigris basins and Upper Mesopotamia plains (Adiyaman, Batman, Diyarbakır, Gaziantep, Kilis, Mardin, Siirt, Şanlıurfa and Şırnak). The GAP Project is a comprehensive group of projects which includes construction of dams, hydroelectric power plants and irrigation systems as well as providing developments in agricultural infrastructure, transportation, industry, education, health and in other sectors. The basic development objective of the GAP is to transform Southeastern Anatolia into an "Export Centre based on Agriculture". One of the ultimate objectives of the project is to widen the irrigation schemes in an area extending over 1.7 million hectares (At present, total irrigated area in GAP region is 225 thousand hectares). Consequently, there will be substantial changes in crop pattern and output. Agriculture based industrial development will capitalize on such products as soybeans, peanuts, corn and sunflowers which have not been grown much prior to irrigation as well as oil seeds and fodder crops. Due to these developments, the agricultural machinery industry is expected to increase its capacity, quality and product range and become a primary branch of the Turkish machinery sector.

The agricultural machinery production industry is a branch of the industrial sector, which produces investment goods. All of the agricultural machinery and almost all of the tractors manufactured in the sector are used in agricultural production activities (a very small percentage of tractors are used in other activities, mostly in the construction sector). These products, which are also called "Agricultural Mechanization Tools/Devices", are very important agricultural inputs which increase the efficiency of employment in agricultural production, decrease costs and support product quality and productivity by ensuring the use of modern production technologies and by having agricultural operations done on time and in accordance with agrotechnical demand.

At present the following products are in the product range of the Turkish agricultural machinery industry: Farm tractors, engined single-axe hoes, engined mower machines, soil preparing/earth moving and seed bed preparing machinery and equipment, seed drilling, sowing, seeding, transplanting machinery and equipment, manuring machines, plant protection and irrigation/sprinkling tools and equipment, harvesting/reaping machines, threshing, drying, throwing, cleaning, classifying, processing etc. machinery, machinery and equipment for animal products, other machinery and equipment for field and garden agricultural production.

The agricultural machinery industry has two main categories: tractors and agricultural machinery. The agricultural machinery industry is comprised of about 1000 manufacturers countrywide. About 225 manufacturers organized under the Turkish Association of Agricultural Machinery and Equipment Manufacturers - TARMAKBİR. Companies manufacturing

agricultural machinery and equipment except tractors are mostly small and medium size companies. The sector employs about 15,000 workers.

Exports

The Turkish agricultural machinery industry largely meets domestic demand and exports the surplus. Exports in the sector have an increasing trend between 2005 and 2008. The value of agricultural machinery and spare parts and agricultural tractors and trailers exports was US\$ 313 million in 2009.

Quality is another aim of the sector, together with exports, and it surely supports exports. Agricultural machinery manufacturers are aware of the importance of ISO series total quality certificates. Most of the manufacturers are conducting programs for these certificates. At the beginning of 2002, it became obligatory to fulfill CE Mark requirements in order to sell products in the Turkish domestic market.

Total Exports of Turkish Agricultural Machinery Sector (US\$ 1,000)

	2005	2006	2007	2008	2009
Agricultural Machinery	64.433	77.687	114.173	157.345	130.091
Agricultural Tractors and Trailers	127.830	152.083	166.882	227.424	183.074
TOTAL	192.263	229.770	281.055	384.769	313.165

Source: Undersecretariat of Foreign Trade

The main products exported are: tractors, parts and components of harvesting, threshing machines, other thresher machines, other poultry keeping machines, machines for preparing animal feeds, other harvesting machines, harrow, ploughs, parts and components of other field, garden, forestry, bee keeping machines and milking machines.

Turkey's Exports of Agricultural Machinery (US\$ 1,000)

HS No	Product Name	2005	2006	2007	2008	2009
8208.40	Knives and blades for agricultural, horticultural or forestry machines	210	189	204	314	332
8424.81	Mechanical appliances (whether or not hand-operated) for projecting, dispersing or spraying liquids or powders for agriculture or horticulture	4.509	5.353	5.307	6.839	7.305
8432.10	Ploughs	4.432	10.004	8.316	10.332	7.183
8432.21	Disc harrows	1.403	1.543	1.990	2.037	2.153
8432.29	Scarifiers, cultivators, weeders and hoes	4.997	5.160	11.106	10.387	5.609
8432.30	Seeders, planters and transplanters	3.096	6.265	12.700	13.918	9.396
8432.40	Manure spreaders and fertiliser distributors	1.083	916	1.904	1.942	2.161
8432.80	Rollers, stone-removers and other soil preparation or cultivation machinery	1.548	1.868	3.268	3.021	2.002
8432.90	Parts for rollers and other soil preparation or cultivation machinery	2.116	2.914	6.561	10.799	6.431
8433.11	Mowers, powered, lawn, with horizontal cutting device	300	664	748	514	658
8433.19	Mowers, powered, lawn, nes.	115	362	462	401	208
8433.20	Mowers for hay etc. including cutter bars for tractor mounting	2.534	3.047	5.607	7.720	6.249
8433.30	Hay tedders and rakes and other haymaking machinery	708	1.429	2.535	1.992	678
8433.40	Straw or fodder balers, including pick-	1.078	794	437	714	2.502

	up balers					
8433.51	Combine harvester-threshers	191	431	455	1.120	389
8433.52	Threshing machinery nes.	3.448	4.011	6.068	7.982	10.502
8433.53	Root or tuber harvesting machines	113	1.037	159	390	831
8433.59	Harvesting machinery nes.	2.705	3.735	3.920	5.103	7.096
8433.60	Machines for cleaning, sorting or grading eggs, fruit or other produce	1.064	774	656	1.581	603
8433.90	Parts of harvesting, threshing and other agricultural and mowing machinery	4.368	5.514	8.554	24.213	14.803
8434.10	Milking machines	6.050	6.990	5.894	12.223	6.961
8434.90	Parts of milking machines and dairy machinery	2.102	1.662	1.755	2.467	2.342
8436.10	Machinery for preparing animal feeding stuffs	4.587	3.456	5.498	5.223	11.949
8436.21	Poultry incubators and brooders	127	272	259	415	943
8436.29	Poultry-keeping machinery, nes.	8.351	6.957	11.771	15.581	13.486
8436.80	Agricultural, horticultural, forestry, bee-keeping mach. nes. inc. germination plant	454	446	2.476	800	1.356
8436.91	Agricultural, horticultural, forestry, bee-keeping mach. nes. inc. germination plant	918	607	1.394	2.274	1.843
8436.99	Parts of agricultural, horticultural, forestry, bee-keeping mach. nes. inc. parts of germination plant	1.824	1.289	4.164	7.045	4.120
	TOTAL	64.433	77.687	114.173	157.345	130.091

Source: Undersecretariat of Foreign Trade

Turkish agricultural machinery industry products are exported to a wide range of countries in the world. Major export markets are Morocco, Iran, Iraq, Bulgaria, France and Italy in agricultural machinery; the USA, Morocco, Iraq, Australia and Mexico in tractors.

Exports of Agricultural Machinery by Countries (US\$ 1,000)

	2005	2006	2007	2008	2009
Morocco	2.766	3.441	4.583	12.525	11.958
Iran	2.577	3.666	7.686	6.649	8.106
Iraq	1.544	1.159	2.576	3.397	7.951
Bulgaria	5.344	5.560	8.849	14.723	6.867
France	7.299	7.809	14.172	19.002	6.684
Italy	2.587	3.980	5.708	11.772	6.313
Azerbaijan	4.788	4.149	4.648	6.319	6.096
Sudan	1.922	6.571	6.287	12.159	5.906
Russian Fed.	2.664	1.511	5.085	5.240	5.883
Syria	2.891	2.536	2.624	1.963	3.983
Romania	4.767	5.199	3.067	6.584	3.850
China	0	0	0	889	3.690
Georgia	277	1.454	2.410	2.833	3.542
Malaysia	307	567	1.200	550	2.932
Greece	2.689	2.815	3.046	4.849	2.915
Saudi Arabia	591	896	1.954	2.724	2.465
Egypt	1.086	1.192	3.706	1.793	2.352

Kazakhstan	438	1.163	516	1.025	2.286
Uzbekistan	440	7.376	1.760	7.004	2.170
TRNC (Turkish Rep. Of Northern Cyprus)	2.460	1.937	2.761	1.832	2.113
USA	846	172	800	1.000	1.977
Tunisia	927	1.311	874	907	1.789
Holland	277	425	1.282	2.400	1.787
Germany	356	564	676	1.698	1.491
Pakistan	97	357	786	583	1.256
Macedonia	278	673	708	1.716	1.169
Libya	526	425	984	934	1.135
Nigeria	992	1.752	2.325	955	1.055
<i>Other Countries</i>	<i>12.697</i>	<i>9.024</i>	<i>23.099</i>	<i>23.321</i>	<i>20.369</i>
TOTAL	64.433	77.687	114.173	157.345	130.091

Source: Undersecretariat of Foreign Trade

Exports of Agricultural Tractors and Trailers by Countries (US\$ 1,000)

	2005	2006	2007	2008	2009
USA	47.176	38.896	35.792	105.304	61.922
Morocco	914	15.787	25.317	20.633	24.444
Iraq	719	832	3.104	4.228	16.593
Australia	15.101	7.952	8.421	8.241	7.186
Mexico	2.478	5.033	5.904	8.961	7.179
Malaysia	503	1.837	3.205	4.374	6.403
Rep. of South Africa	3.145	7.950	16.366	12.244	5.323
Tunisia	0	553	1.955	1.522	5.285
Italy	2.275	2.538	2.044	4.165	4.623
Brazil	0	0	0	128	3.842
Chile	0	1.959	2.983	5.553	3.113
Angola	299	447	1.114	3.425	2.397
Polond	17	0	0	69	2.088
Argentine	264	0	603	3.734	1.751
France	968	1.132	1.079	144	1.737
Spain	512	1.430	474	360	1.640
Kenya	590	927	2.972	1.957	1.551
Ecuador	425	681	704	2.031	1.525
Philippines	649	1.517	1.386	1.705	1.443
Costa Rica	385	623	1.231	2.326	1.176
Croatia	0	287	482	1.325	1.159
Uruguay	0	0	0	277	1.138
Indonesia	196	149	951	1.893	1.105
Tayland	1.394	1.966	0	2.275	1.089
Portugal	2.885	2.403	1.769	739	1.075
Syria	289	861	874	711	1.066
<i>Other Countries</i>	<i>46.645</i>	<i>56.321</i>	<i>48.151</i>	<i>29.098</i>	<i>15.222</i>
TOTAL	127.830	152.083	166.882	227.424	183.074

Source: Undersecretariat of Foreign Trade

Trade Fairs

The products of the Turkish agricultural machinery industry are exhibited in international and national fairs organized in Turkey.

Trade fairs held in Turkey related to agricultural machinery are listed on the web page of TOBB -Union and Chambers of Commodity Exchanges of Turkey - "*Turkey Fair Guide*" (<http://www.fuarrehberi.org.tr/> OR <http://www.tobb.org.tr/fuar/eng>).

Major fairs organized in this sector in 2010 are;

- Agrodays - Agriculture and Agricultural Technologies Fair
March 2010, Mersin
- Malatya Agrotech - Agricultural Technology, Agricultural Industrial Products, Livestock Fair
April 2010, Malatya
- Çorlu Agriculturetech 2010- Agriculture Technologies, Animal Breeding, Planting, Seeding Fair
June 2010, Tekirdağ
- Agriculturetech 2010 - Agriculture Technologies, Animal Breeding, Planting, Seeding Fair
September 2010, Kırklareli
- Agroexpo Eurasia - Agriculture, Agricultural Technologies, Greenhouse, Livestock Breeding, Seed And Seedling Production, Irrigation Technologies, Dairy Industry, Livestock Production Machinery Fair
September 2009, İzmir
- BurTarım - Bursa Agriculture, Stockbreeding, Poultry, Seed Raising, Saplings and Dairy Industry Fair
October 2010, Bursa
- Anatolia - Agriculture, Agricultural Machines and Industry Fair
October 2010, Çorum
- Agrotec'2010 - International Agriculture, Agricultural Machines, Pesticides, Animal, Greenhouse Equipments Fair
October 2010, Ankara
- Adana Agriculture - Agriculture, Stockbreeding, Poultry and Dairy Industry Fair
November 2010, Adana
- Growtech Eurasia - International Horticulture, Agriculture, Floriculture and Technologies Fair
December 2010, Antalya