# **Organic Cotton Production and Marketing in Turkey**

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During the past 20 years interest in environmental issues has grown extensively. more and more people realize that we cannot go on consuming the way we have. Unless we change, we will leave a world behind us that will never repair itself. The price for this will be paid by the generations to come.

### Why Organic?

- ◆ For protecting ecosystems and sustainable environment
- ◆ For healthier farmers and consumers
- ◆ For cheaper agricultural inputs
- For more variety and added value
- ◆ For better quality
- ◆ For feeling good by doing good for the environment

Early 1980's have been the first years where many agricultural products were grown, certified and offered to the European markets in economical scales. The growth has been enormous within a short span of time and retailers were looking for more products within the community as well as from other countries around the world. First organic agricultural practices were employed in Turkey during middle of 1980's on growing organic dried fruits for which Turkey is famous with its ecological variety in these products and this was driven by demand from European importers and retailers. With its favourable climatic conditions also for many other products, varieties have gone up over 180 different items within 20 years; cotton, dried fruits and nuts leading others by far.

The first serious attempt for organic cotton production has started in Turkey to include cotton as a rotation crop and also to prove that organic farming should not be limited to only food production.

Cotton, being a cash crop, is cultivated in many developing countries totaling to less than 3 % of world's agricultural land. It is an intensive process that always require huge applications of agrochemicals which account for about 20% of all agricultural chemicals used in the world.

Cotton is usually known as a monoculture crop, but in organic systems it is grown in rotation with other crops, such as cereals and legumes. There is not a big difference between conventional and organic cotton production. For organic agriculture farmers need to be educated about concepts, practices and implementations.

When we look at typical plant production systems in Turkey (in regions where cotton is grown) typical winter crops are cereals like wheat, barley, rye which are sown during November and harvested in June. Typical summer crops are cotton, corn and sunflower. These are sown during April/May and harvested during September through November. There is overlapping in this conventional system. So new crop pattern should be applied to organic cotton and rotation crops. Time lines in new patterns should be arranged in such a way that bottlenecks of sowing and harvesting within limited time of available field working days facilitates longest vegetation period for high yield with good quality and acceptable costs.

These patterns are designed to help planning and positive impact on soil, plants, environment and eco systems. Also overall economic performance can be improved if plant production is also combined with animal husbandry. Organic farming helps to increase the diversity of crops, therefore rotation helps to reduce the build up of pests, diseases and weeds, balancing the rates of extractions, and replacing nutrients and maintaining a proper soil structure.

Plant nutrients, weed control and irrigation are to be arranged in ways to be in compliance with rules and regulation of organic agricultural practices. All these practices are controlled and certified by independent Certification companies in Turkey.

Information on average yields has been compiled, but not all projects report yields, and there is no database that differentiate between the yields obtained by experienced and inexperienced farmers. Field visits and interviews with farmers and field agents show that there can be big differences between the average yields obtained by farmers in the first years of conversion and those who have both the experience and farm management systems that are adapted and efficient in organic farming. Typically, farmers report yield drops in the early years and averages that eventually rise to the same levels as conventional, and in a few cases even

higher. Over time, it will be possible to provide a wide range of data from origins that differentiate between different categories of farmers, both in terms of experience and access to resources.

The first official regulation on organic farming in Turkey came into force on 29.06.1995 following European Union's Organic regulation EEC 2092/91. This was in force until Organic Farm Law became effective on 03.12.2004.

Currently there are 13 independent Control and Inspection Companies who are operating under Organic farm law.

Governments and regions have their own country or region specific organic production standards. The most commonly adopted standards are the European Union's EU 2092/91 standard, the United States Department of Agriculture's National Organic Program Standard and the Japanese Agricultural Services' JAS standard. For a project to be certified to one or more of these regulations, an accredited, independent, third-party certifier must review the farming project and its operations to ensure that it meets the requirements for the particular standard as well as the additional standards for dual or multi-certification. A standard lays out a set of conditions for the farming and/or processing of a product. A certifying agency confirms that the conditions of the standard have been met and is accredited by the body that created the standard.

We did not have a good statistical data on organic products until 2002. As of this year, we have figures from Ministry of Agriculture and Rural Affairs

ORGANIC AGRICULTURAL STATISTICS						
	2002	2003	2004	2005	2006	2007
Registered organic growers	12428	13044	9314	9427	9314	10553
Organic Farming acreage (hectares)	89826	103190	162192	175073	162131	135359
Total quantity of organic products (tons)	310121	291875	279663	289082	309521	431202
Registered growers converting to organic		1754	3492	4974	8654	5723
Organic Farming acreage (hectares)		10431	47379	28737	30657	38923
Total quantity of organic products (tons)		32105	99140	132852	148573	136928

A look at Turkey's organic cotton production.

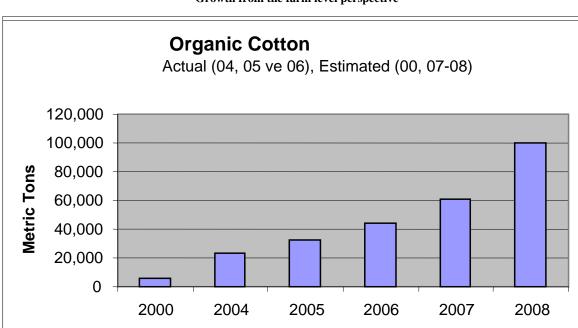
### When organic cotton business, like in many other crops, started, it was grown to order

Growers, growers cooperatives or companies with organic projects contracting growers would plant cotton according to the commitments they get from buyers on the base more or less agreed at time of planting. This has been the case until early 2000's. As demand grew during past few years with supply usually was short, a lot of new acreage were added to meet the demand. Again during this increase,

although no exact commitments were give, producers more or less knew they would be able to sell their crops.

We again do not have healthy statistics for organic cotton quantities. It was several hundred tons during early 1990's and reached several thousand tons by early 2000's.

It topped 10,000 tons by 2004 and 2005 was 15,000 tons, 2006 was 20,000 tons and Turkey was by far the number 1 organic cotton producer of the world. Although a crop size of over 25,000 tons realized during 2007 crop, India passed Turkey by growing more than 30,000 tons.



Let's have a look at world satistics which is Organic Exchange figures
Growth from the farm level perspective

	2000	2004	2005	2006	2007	2008
Actual/estimated						
organic cotton						
(metric tons)						
Organic Exchange	5,720	23,580	32,326	44,541	61,025	99,662

Now we are nearing a time that demand may not catch the growth rate and due to over production many growers prefer not to carry on planting organic cotton if they are not satisfied with their income. This has been the case this season in Turkey as growers are not satisfied with price level so far. Many of them regret that they have not planted corn or tomatoes like their neighbors who are making much more money and do not have to go through the hard work of growing cotton.

Another point is the fact that they have to face for sale of rotation crops. Unfortunately most of the time there is no market for their organic wheat or corn. They have to sell these at conventional crop price levels.

Also highly subsidized EU and USA cotton and lower cotton prices in the developing countries bring down the price of coventional cotton which is immediately reflected on organic cotton prices as the cost of extra work they have to do for organic growing cannot be rewarded. In the end they are reluctant to grow cotton.

With all these reasons, organic cotton is about to become just any other commodity. It will not be a special product and organic farmers will prefer to grow other crops.

If we do not provide good incentives either by government or as buyers or organic cotton and its products, we start losing even dedicated farmers for whom we have worked very hard over the years to become organic farmers.

Also it is a big burden for the merchants who have contracted farmers to buy at levels satisfactory to farmers if they cannot sell at fair prices. They usually buy from farmers and fix prices within a few months after harvesting and then carry this until new crop. If they cannot plan their sales ahead, they also will not want to take the risk of losing money. Without these traders, spinners or manufacturers as well as retails, will not be able to secure supply as it is most of the time is not their job to deal directly with farmers who can also not carry stocks over a long period of time.

Also buying from reliable cotton traders, textile industry is better off for integrity and certification of the organic cotton. With these in between they are secured for uniform quality, sustainability of source and authenticity of the certification.

#### We have to sustain increase of organic cotton production by

Frequent visits for internal controlling

Continuous commitment from textile industry

Pay good premium or at least fair prices to organic cotton

Cover financial needs of farmers during growing perios

Educate farmers by explaining benefits for environment and their underground waters and

Reward all the people in the chain

When we look at Industry and Marketing of Organic cotton we see that it is not a niche market product anymore.

### Why retailers choose organic?

- Organic is a fast growing market, not a niche market anymore
- Organic adds value and good reputation to companies who offer organic products
- ◆ Good organic products help bring loyalty and respect to brands both from customers and employers

## Rapid growth seen in organic market

From a couple of hundred million USDollars worth of organic cotton product sales at the beginning of the millenium, within several years it has gone over 2 billion US\$ mark.

Organic cotton was grown in several countries and its products were sold by a few hundred retailers mainly in Europe. Today organic cotton is grown in more than 20 countries on all continents and more than 2000 brands and retailers are offering apparels, home textiles and perdonal care products all around the world.



	2001	2005	2006	2007	2008
Estimated Global					
Retail Sales					
(millions US\$)					
Organic					
Exchange	245	583	1,073	1,911	2,618

### **Organic Cotton to Organic Cotton Textile Products**

Organic cotton does not require different type of treatment for ginning and pressing. However special care should be taken for storing and ginning for organic seed cotton in order to prevent contamination with other conventional cotton.

Similarly spinning is not a different process when compared with conventional, but again special care should be taken for not affecting its organic nature.

Also during knitting organic nature is not affected. But for weaving, extra care to be taken for seizing of the warp so that only allowed seizing materials are used.

When it comes to dyeing and finishing, these processes are the most critical and only allowed chemicals should be used.

Just like in organic agriculture, organic cotton textile processes must be controlled and certified from the raw cotton stage all the way through spinning, knitting/weaving, dyeing/finishing and cut/sew stages. These controlling and certifications are carried out according to certain standarts laid by the certifying companies. During the last year there has been a harmonization of these rules and it was agreed by majority of the companies in the supply chain that GOTS (Global Organic Textile Standards) will be the common standard.

According to this standard, all fibres used will be grown according to organic agricultural methods. There will not be use of heavy metals, toxic and non-biodegradable chemicals. It is also not allowed to use that any chemicals which will damage the environment and leave undesirable residues on the textile products.

All processes in the production chain will be required to meet GOTS criteria

- Fibres will be certified organic
- Washing and Bleaching / Dyeing and printing
- Water cleaning systems
- Storage after process
- Accesories
- Labelling
- Packing materials
- Social criteria of workers in the process chain

We understand that now there are more than 400 textile companies in Turkey who are certified for organic textile production. Not long ago, only 3 or 4 years ago, the number was just about 10 companies

#### How can we increase organic cotton textile production and exports?

First we need to overcome the obstacles which mainly are:

Little Consumer awareness
Price and cost issues
No link from organic foods
No support for small business
Lack of information about types of products
Limited style variety

### Organic markets have to be analyzed for

- Demographics
- Overview of organic market
- Import vs. Export
- Distribution channels incl. Market shares and product range focus
- Restricting factors
- Profile, role, challenges of
  - conventional retailer
  - wholesaler
  - organic producer
  - Addresses of main market players in the country

### Focus specialized organic retail

- Market subdivision
- Product focus
- Successful markets & brands
- Success factors
- Profiles of several specialised organic retailers
- Role, Challenges & developments in
  - Market share
  - Product range
  - Customer typology
  - Supply chain
  - Competition

Keywords: health, social factors, regional products, authenticity, Environment, non-GMO Get encouraged by international examples and adapt these to own circumstances.

Educate staff in product knowledge, management and communication.

### **Expectations and conclusion**

- Research and development for novelties and new techniques
- ◆ Try to get long term commitments from customers
- ◆ Bring out our better sides compared to other countries
- Try getting similar subsidies from the state where competing countries are having.