

ICAC

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COTTON AND TURKEY

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Introduction


- **Turkey**
- 769 604 km²
- as large as Texas
- population is around 70 million
- one forth of the USA



- **Arable land**
- 26.5 million hectares in 2000, the limit
- 17 % Irrigated (nearly, 4.5mil. ha)
- 69.1 % field crops
- 18 % fallow land, a quarter of cultivated land
- 3.2 % vegetable
- 5.4 % fruit
- 2.3 % olive orchard
- 2 % vineyards



- 47% of total plant production consist of field crops:
- 17% cereals, 3% legumes, 27% industrial crops
- 29 % fruits, 16 % vegetables,
- 8 % others and flower.




By international standards, Turkey is a major agricultural producer


- **top five of world producer**
- chickpea, chillies and peppers, **cotton**, cucumbers, eggplants, lentil, onion, sugar beet, tobacco, tomatoes, watermelon, apples, grapes, pistachios, chestnuts, walnuts, olives, and sheep milk
- **top ten**
- wheat, barley, rye, almonds, grapefruits, lemon, tea, goat meat, and sheep meat.
- largest producer of apricots, hazelnuts, and figs

- **Major export crops**
- hazelnuts, dried figs, raisins, pistachios, dried apricots, tobacco, olive oil, **cotton**, legumes, fresh fruits and vegetables
- **Imported crops**
- wheat, maize, rice, oil seeds, **cotton**

Generalized Cotton Regions in Turkey



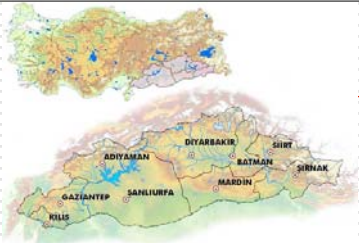
- Cotton is grown in different regions of Turkey.
- Most of the cotton production areas are in;
 - Aegean,
 - Mediterranean (Cukurova and Antalya) and
 - Southeast Anatolia regions.




- In recent years, there has been an obvious and gradual increase on sowing area of cotton in Southeast Anatolia region due to Southeast Anatolia Project (GAP).

□ The Southeast Anatolia Project (GAP)


- The Southeast Anatolia Project (GAP) is a multi-sector and integrated regional development effort approached in the context of sustainable development.
- Its basic objectives include
 - the improvement of living standards and
 - income levels of people so as to eliminate regional development disparities and
 - contributing to such national goals as social stability and economic growth by enhancing productivity and employment opportunities in the rural sector.



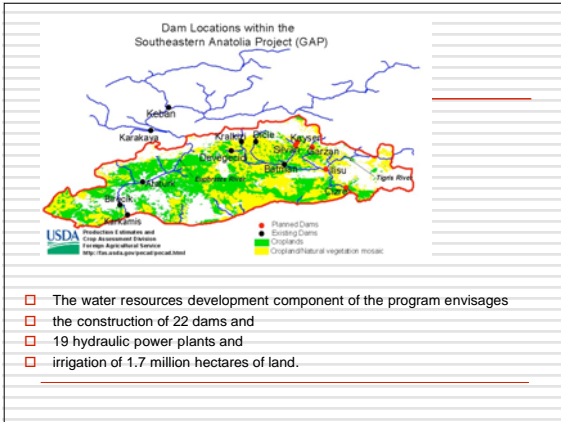
- Southeast Anatolia Project, or GAP with its Turkish initials, is the biggest development project ever undertaken by Turkey, and one of the biggest of its kind in the world.
- The project area covers 9 administrative provinces (Adiyaman, Batman, Diyarbakir, Gaziantep, Kilis, Mardin, Siirt, Sanliurfa and Sirnak) in the basins of the Euphrates and Tigris and in Upper Mesopotamia.



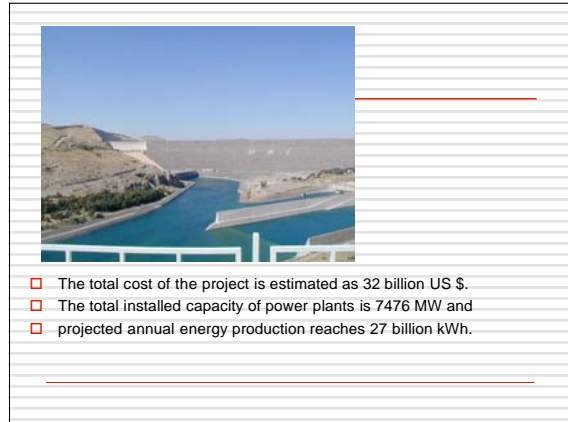
- The GAP had originally been planned in the 70s consisting of projects for irrigation and hydraulic energy production on the Euphrates and Tigris,
- but transformed into a multi-sector social and economic development program for the region in the 80s.



- The development program encompasses such sectors as
 - irrigation,
 - hydraulic energy,
 - agriculture,
 - rural and urban infrastructure,
 - forestry,
 - education and
 - health.



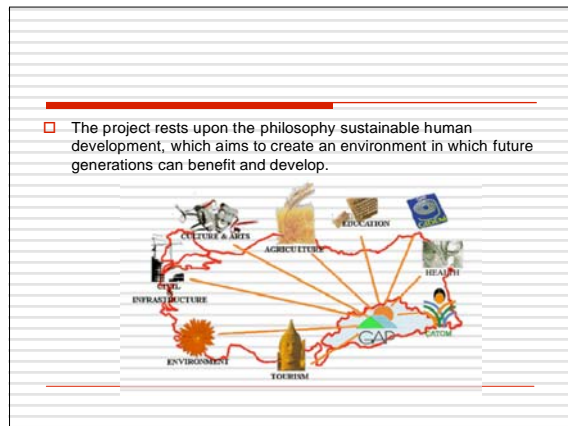
- The water resources development component of the program envisages
- the construction of 22 dams and
- 19 hydraulic power plants and
- irrigation of 1.7 million hectares of land.



- The total cost of the project is estimated as 32 billion US \$.
- The total installed capacity of power plants is 7476 MW and
- projected annual energy production reaches 27 billion kWh.

- The Atatürk Dam is the largest structure ever built in Turkey for irrigation and hydropower generation.
- It is located on the Euphrates river and constitutes the key unit in the Southeast Anatolia Project (GAP).

The Atatürk Dam



- The basic strategies of the project include fairness in development, participation, environmental protection, employment generation, spatial planning and infrastructure development.

Table 1. Turkey's cotton sowing area, production, seed cotton yield and lint yield in 2004.

Regions	Sowing Area (ha)	Seed Cotton Production (ton)	Lint production (ton)	Seed Cotton Yield (kg/ha)	Lint Yield (kg/ha)	Lint percentage (%)
SouthEast Anatolia	283.600	1.075.214	421.075	3.200	1.233	38
Aegean	211.790	667.341	267.607	2.680	1.083	40
Cukurova	125.939	515.139	196.233	3.870	1.276	38
Antalya	8.155	36.605	13.909	4.480	1.705	38
Total	629.384	2.294.299	898.824	3.560	1.324	39

- Cotton varieties grown in Turkey belong to *Gossypium hirsutum*.L.
- Untill now 54 cotton varieties were registered in Turkey.
- 34 of which belong to state organizations and
- 20 of which belong to private sector organizations.
- Particularly, in the last five years 33 varieties were registered.



- In Turkey cotton cultivation has been mechanized except first hand hoeing and harvesting.
- Production costs were higher and especially harvest problems such as scarcity of worker and picking with trash.
- In Turkey 99 % of cotton has been harvested by hand.



- In recent years farmers begin turning to mechanical harvesting.
- Today in Turkey there are about 100 mechanical harvesters (picker type).
- In Turkey roller-gining dominate saw-ginnig.
- There are 878 rollergin and 154 sawgin plants in Turkey.



- Organic cotton production in Turkey are increasing depending on demands from abroad.
- In Turkey organic cotton sowing area is 9.756 ha,
- Total organic cotton production is 34.877 tons.

STUDIES IN OUR UNIVERSITY

- Shocking treatment with high voltage electrical currents (25-30 KV/30 sec.) on cotton seeds.



- This instrument was developed by Prof.Dr. Mustafayev et al. in 1986 in Azerbaijan and it was brought by Dr. Mustafayev from Azerbaijan to Kahramanmaraş-Turkey in 1996.
- This treatment has stimulative effects on seed germination and plant yield.



- Studies on naturally colored cotton.



- In our faculty there are four naturally colored cotton lines from Azerbaijan.

- These are dark braun, light braun, green and cream.



- Our goal is to improve fiber properties of this coloured lines.







☐ Thank you...

A presentation slide with a white background and horizontal lines. At the top left is the Turkish flag, and at the top right is the logo of the Ministry of Agriculture, Republic of Turkey. A red horizontal line is positioned below the logos. In the center, there is a smaller version of the image showing the man in the blue shirt standing in the cotton field. Below the image, the text "☐ Thank you..." is displayed.