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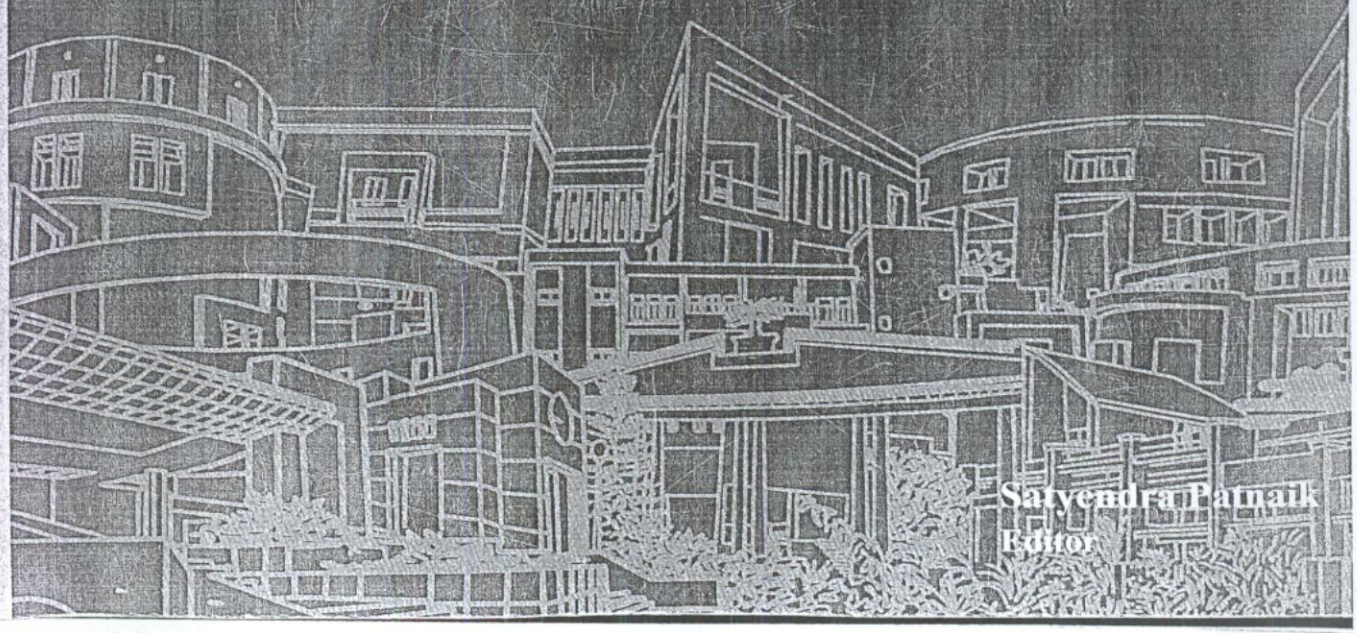

Satyendra Patnaik
Editor

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The Comparison of Good Agricultural Practices in Turkey and the World

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Abstract: *In this study the objective is to review existing knowledge regarding to GAP at the national and international level, to examine the implementation of the GAP system in Turkey and the world, GAP system and to determine the advantages for whole food chain participants (producer, retailer and consumer).*

Key Words: Good Agricultural Practices (GAP), food safety, food quality, Turkey

INTRODUCTION

Turkey is an agricultural country. 24.7% of Turkey population (15 Million people) engaged with agriculture sector. Farm holding is about 26.3 million hectares. Irrigated farming is practiced on 17% of the total cultivation and plantation area, and dry farming is practiced on 83%. Small family enterprises based on private ownership is dominant in the agriculture sector of Turkey. The number of enterprises has been increased in time with the expansion of arable lands. The mean land size has climbed to 61 decare in 2001.

Agriculture is still an important economic sector in Turkey despite its share had diminished over time as a result of transformation of economy into industry and service sectors. For this reason, recent developments in good agricultural practices closely concern Turkey. Good Agricultural Practices (GAP) is known to be a chain of activities in which Agricultural production is realized in a controlled way that is not harmful to human or animal health or environment agricultural products are certified and taken to consumers. GAP has come into presence through the engagements of different partners in food production, food quality, food safety, and the sustainable environment of agriculture as a result of rapidly developing and globalizing food economy and worries in the recent years. These partners includes food processing and retail industry which provides certain goals in food safety, food quality, production efficiency and environmental acquisitions, as well as farmers, agricultural workers and consumers. Many international markets have demanded actions to encourage natural sources management which contributes to sustainable agriculture and food safety. The main aim is to obtain adequate, safe and nutrient foods (İçel, 2007). In this study, current situation of GAP activities in Turkey are revealed, and certain comparisons are made with other countries in the world. Problems encountered in the registration of producers and providing sustainability which are among the main goals of GAP are presented in the study. In addition, the study argues to what extent the GAP is required for the elimination of current problems by presenting comparisons with other countries.

RESULTS AND DISCUSSION

A review of Good Agricultural Practices in Turkey

GAP is a project which should be followed by all countries in view of its scope and aims. However, applicability of GAP is closely related to development level and agricultural infrastructure of the countries. A significant number of the enterprises in Turkey are small sized, education level of a great part of farmers is rather low and farmer organization is poor; therefore, it is highly probably that serious problems will be encountered in the adaptation to new standards. Especially the Eurepgap text which establishes the GAP standards of Europe is highly comprehensive, and difficult to apply individually by farmers in Turkey. However, large-scaled enterprises which operate with expert staff have the possibility to apply Eurepgap. The first precaution to be taken is to inform producers and firms and the producer organizations should support the studies in this regard.

GAP which provides a certificated system was started in 2000 to meet the demands from Europe. Government and exporters have encouraged consumers to embrace GAP system. As the Eurepgap standards have been

established for European marker, many developing countries like Turkey have supported their farmers to meet these standards for the continuity of their export market.

Ministry of Agriculture and Village Affairs issued a regulation in September 2004 and provided a legal basis for GAP. All the subjects in the production chain are practiced by the independent control and certification institutions. These institutions should apply to GAP committee in the Ministry of Agriculture and Village Affairs in order to attain authorization. Controls and certification procedures are performed with respect to Turkish regulation (September 2004), importer firms or international regulations. Production will be carried out in Turkey in accordance with the rules of Eurepgap and world with the "GAP Regulation" which came into force by being published in official gazette on 8 September 2004. Certification institutions are being authorized by the Ministry (İçel2007). On the other hand, many regulations and notifications have been issued on GAP in Turkey's adaptation process to EU. There are many articles referred or directly linked to GAP in EU adaptation studies, especially in many legal regulations issued on agriculture, food and consumer protection between 2004 and 2005. In the *"Law on Soil protection and Land Use"* 5403 numbered legislation issued in 2005 and the regulation of the same, it is explained that producers who make project-based investment to protect and improve soil and apply soil cultivation, irrigation and production techniques are given priority for agricultural supports; in addition, how the land classifications, soil fertility and the detailed mapping studies are performed by public are explained, as well. Moreover, it is stated in the regulation of *"Farmer registration system"* issued in 2005 that only registered farmers can benefit from supports, and thus it is planned to provide control and pursuit of supports in Turkey. In the regulation of *"Protection of Water Sources from Nitrite Pollution of Agricultural Origin"* prepared by the Ministry of Agriculture and Village Affairs in 2004, it is stated that "GAP" principals will be created to provide general protection level of all water sources against nitrite pollution and these principals are explained in detail. Another regulation is the notification and regulations issued within the context of food codex and 5179 numbered legal regulation. In the regulation of *"Remainder Limits of Maximum Plant Protection Products in Food"*, limit values applied in EU within ITU standards are explained in a second list. However, this list is stated to be applied in Turkey after full membership. 5199 numbered "Animal Protection" law, directly related to ITU standards, was issued in 2004, and 3285 numbered *"Animal Health and Constabulary"* was issued in 1986.

Table1. The financial supports for good agriculture practices in Turkey

Fresh vegetable and fruit producers	22.5 $/da
Greenhouse producers	112.5$/da
Using Bambus bee support (per colony)	75$
The producers which obtaining agricultural information services (per year)	337.5$/da
The producers which built orchard with certificated virus-free fruit tree	270$/da
Citrus producers	202.5$/da
The producers which built orchard with olive (except Gemlik)	135$/da
The producers which built orchard with the other fruit species	162$/da
The producers which built orchard with certificated pistachio	40.5$/da
Diesel and fertile supports for tea, fresh fruit, vegetable, seedling, arboriculture	10.12$/da
Diesel and fertile supports	6.75 $/da
To the producers who had soil analyses	3.34$

Support for the 50 % of certificate and laboratory analyses payments	

However, significant changes were made in 3285 numbered law in accordance with EU adaptation in 2001, 2003, and 2004. Both laws directly concern the livestock farmers and contain certain procedures of *"integrated farm quality security system"* developed with respect to ITU standards in EU. Another related regulation was made in 2004 as *"the regulation on procurement, production and trade of vegetable seedlings"*.

A review of Good Agricultural Practices in the World

With the recent development of international trade in the world, rules of agricultural and food products are determined by the sub-regulations of World Trade Organization (WTO), Agriculture Agreement and Health and Plant Health Agreement like all other trade agreements. Conditions determined for *"The Protection of Human Life and Health"* with Health and Plant Health Agreement are demanded as the determining principle for Food Safety. With this agreement, member countries to WTO including Turkey should take local precautions for Food Safety in accordance with the international standards and principles. This necessity constitutes the basis for such applications as GAP, Hazard Analysis at Critical Control Point (HACCP) and Good Manufacturing Pratice (GMP). GAP can be defined as the all activities and processes in delivering safe products to consumers in safety food chain, as well as the planning, development, marketing and registration of agricultural production; in addition, it can also be defined as the agriculture form which is widely accepted, sensitive to environment with identification-registration system and meets minimum hygiene standards. In the late 1990s, GAP was started by United States Department of Agriculture and Food-Drug Department to provide food safety in fresh vegetables and fruits, and in the mean time, FAO started to study on GAP principles. Large-scaled retail dealers which control 70-80 % of the fresh vegetable and fruit market in EU countries carried out a new regulation and determined minimum standards required for the domestically produced or imported agricultural products in order to provide healthy consumption of agricultural products for their societies. This protocol, names as EUREPGAP, was prepared to determine framework of GAP which included basic principles developed by Euro Retailer Producer Group-EUREP and required to enable suitable production of horticultural products (fruit, vegetable, potato, cut flower and seedling) in the world. The most comprehensive GAP in the world is the protocol prepared by EUREP (Içel, 2007).

In recent years, it has been interested widely for agricultural system in terms of ecological, economic and social sustainability aspects from production to consumption. On the other hand, to succeed in today's competitive agri-food marketplace, two options are available: organize production more efficiently and focuse more consumer oriented in order to meet consumer requirements (Viaene, *et al.*, 2000). GAP, one of the most important approaches, was developed to provide sustainability in agricultural production and trade and to serve confident for the quality and safety of the products that their origins well known (Akkaya, etc.). Even though GAP in Turkey is in early stage but it is potential for practices successfully because of strong food safety government policy in sector of agriculture and upstream food production. However there are major challenges to effective implementation of national GAP program at growers and government level as Thailand (Wannamolee, 2008);

At growers level

- Insufficient awareness about safety, environmental and social impacts of agricultural practices
- Lack of knowledge and low education
- Poor understanding of GAP requirements.
- Poor record keeping.
- Low motivation and incentives to implement GAP.
- Unhygienic practices in production and food processing.
- No direct links with markets.
- Small number of large export companies.
- Insufficient organization of small growers in producers associations.
- Inappropriately using pesticides
- Shortage of skill labor

At government agencies

- Poor understanding of the role of national GAP.
- Insufficient dialogue with stakeholders.
- Insufficient outreach.
- Lack of coordination in training.

As the farmers in Turkey are unconscious on technical issues in spite of the studies on GAP, importers and producers should be encouraged with the supports for GAP. For this purpose, it is very significant for the national economy and the exportation of Turkish agricultural food that the decision and control units from producers to consumers should be enlightened and informed on the subjects required to meet the future demands of products.

REFERENCES

1. Akkaya, F., Yalçın, R. and Ozkan, B., 2004. Good Agricultural Practices (GAP) and Its Implementation in Turkey.
2. Delice, N. And Delice, A., 2005. The Evaluation of The Good Agricultural Practices Standard in Relation To The Eu Accession Framework. J.Agric.Fac.HR.U., 2005, 9 (3):53-62.
3. İçel, C. D., 2007. The Good Agricultural Practises in Eurpa comminity and Comparison of Turkey.
4. Viaene, J., Verbeke, W. And Gellynck, X.2000. Consumer attitude to integrated quality management throughout the vegetable chain. Acta Hort. 524: 97-102
5. Wannamolee, W.,2008. Development of Good Agricultural Practices (GAP) for Fruit and Vegetables in Thailand. Senior standards officer Office of Commodity and System Standards Accreditation National Bureau of Agricultural Commodity and Food Standards. Bangkok.Thailand.