

KEY NOTE

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The diversified natural resources and eco-systems, Pakistan is endowed with, gives a comparative advantage in agro-livestock and fisheries sectors, over her competitors in this area. With this advantage, the country can cater to diverse market niches and satisfy the demand and aesthetic tastes of consumers, in the emerging global trade context.

To underpin economic development of the country, sustainable trade development remains the cherished goal. To this end, one need to exploit, to national advantage, all export possibilities by unfolding the inherent potential of different sub-sectors of economy. Such an initiative warrants capitalizing on the strength and managing the weaknesses of these sectors. One of such promising sub-sectors is that of horticulture, which like livestock and fisheries, has enough in store in terms of future trade prospects. With in horticulture sub-sector, mango and date palm industries, like citrus, have great potential.

Mango and Date palm rank 2nd and 3rd respectively, in terms of production in our fruit industry and are also extremely important for the economy of country by sharing almost half of our foreign exchange earnings through fruit export. The two fruit together contribute more than 25% in production and 46% to our fruit export.

Dates have always been held in very high esteem in almost all cultures and religions in the world. The real importance of this fruit could well be gauged from the fact that date palms and dates have been referred to over twenty times in the Holy Quran and many Ahadith and sayings of the Holy Prophet. Asia has held the mango with high esteem and it is considered to be the 'king of fruits'.

There are hundred thousands of mango varieties in the world. Pakistan offers a wide choice of near about 200 mango varieties. Some of the most famous varieties are: Sindhri, Gulabkhas, Swarnarice, Baganpalli, Collector and Neelum in Sindh; Malda, Langra, Aman Dusehri, Anwar Ratual, Samar-e-Bahisht, Fajri Kalan and Sensation in Punjab; Langra and Samar-e-Bahisht in NWFP, while Sindhri and Baganpalli in Balochistan. Most these varieties were released from 1949 to 1967, with yield potential of 8000 to 21600 kg/ha.

Our commercially important date varieties include Aseel, Karbala, Zahdi, Fasli and Kupro of Sindh; Muzawati, Begum Jangi, Jaan Swore, Kehraba, Kozenabad and Rabai of Balochistan; Dhakki and Gulistan of NWFP; Hillawi, Khudrawi and Shamran of Punjab.

Pakistan has annual production of 1,072,000 Mt of mango, on an area of 100,000 ha, against the global production of 26,286,255 Mt, being 5th in ranking production wise (FAO, 2004). Other major mango producing countries are India (10,800,000 Mt), China (3,622,000 Mt), Thailand (1,750,000 Mt), Mexico (1,503,010 Mt), Philippines (890,000 Mt), Brazil (845,000 Mt), Indonesia (800,000 Mt) and Nigeria (730,000 Mt). Although, per hectare yield is higher than all the major mango producing countries, yet it is far less than it could be, as Israel and France are harvesting 20 and 12.61 Mt of mango per hectare, respectively. The same is the situation of dates which are cultivated on an area of 80,000 hectare, with annual production of 650,000 Mt. Although, average yields (8.12 Mt per hectare) is not less than most of the countries at the top in ranking, but less than that of Egypt, which has an average yield of 37.16 Mt. This shows a wide gap in production of both fruit.

Moreover, when we see the production trends of mango and date palm over the years, it is obvious that although, from time to time, there has been increase in the cultivation area under these fruits, both locally and internationally, however, per hectare yield has been almost stagnant (Fig. 1 & 2). There are problems regarding propagation, management, diseases and insect pest control. This situation is of great concern and needs attention. It is worth necessary to find out the cause of static production per unit area of these fruit. As production (yield) is determined by the sum of all the factors and practices, starting right from the nursery, therefore, all the areas of crop production including propagation, cultural practices, plant protection measures, harvesting techniques and post-harvest procedures need to be addressed. Research in the field of breeding is also the need of time, as our commercial varieties are susceptible to one or more diseases.

With the rapid technological advancements in the areas of communication, logistics and post-harvest management, the international trade in these fruit has now reached over 831 million US dollars, and the demand is ever increasing in all parts of the world. As regard export from Pakistan, mango is one of the most important foreign exchange earning fruit crop. In 2003-04, Pakistan exported 60,441 thousand tonnes of mangoes for 18,007,000 million US dollars, with a unit price of 297 US dollars per metric tonne. Per unit export price of our mango is the least all the major mango exporting countries, as Philippines, Peru, Mexico, Brazil and India are earning 1,170, 779, 541, 548 and 476 US dollars per Mt, respectively. Even the countries which re-export mango, like France and Netherlands, are fetching 1,621 and 1,060 US dollars per metric tonne. Story for dates is not different from mango, for which Pakistan is the largest exporter after Iran. Export value of 71,144 Mt dates was just 25,413 thousand US dollars; the unit price being 357 US dollars per Mt. While, Israel, USA, France and Tunisia fetched 3921, 3441, 2510, and 1990 US dollars per tonne respectively, during the same year.

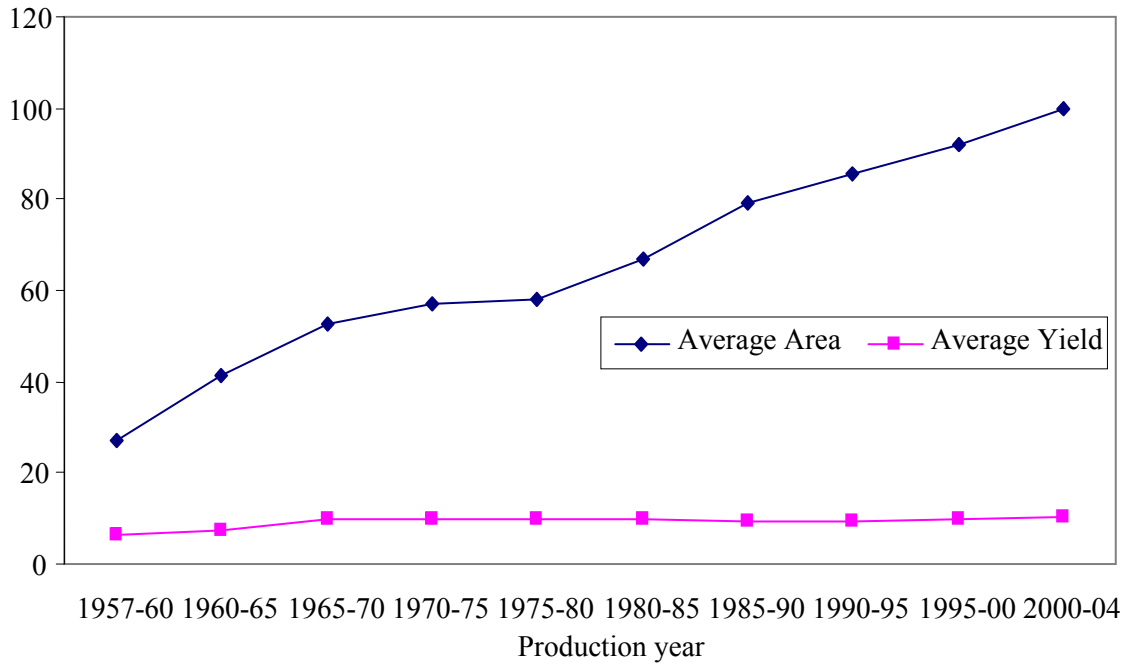
Likewise, the post-harvest losses in these crops, especially in developing countries, are quite high, thereby making the industries unsustainable. Some important factors causing our less export other than infrastructure are improper harvesting techniques, faulty cleaning, grading and packing procedures, which lowers the price of these fruit in the international market. Post harvest losses account for some 20-40%. And according to an estimate, saving 30% losses would help double mango exports from Pakistan.

From sustainability and economic perspectives, there will be less investment needed to improve the situation through better post-harvest management of the existing produce, compared with investing in increasing the production area to compensate for these losses.

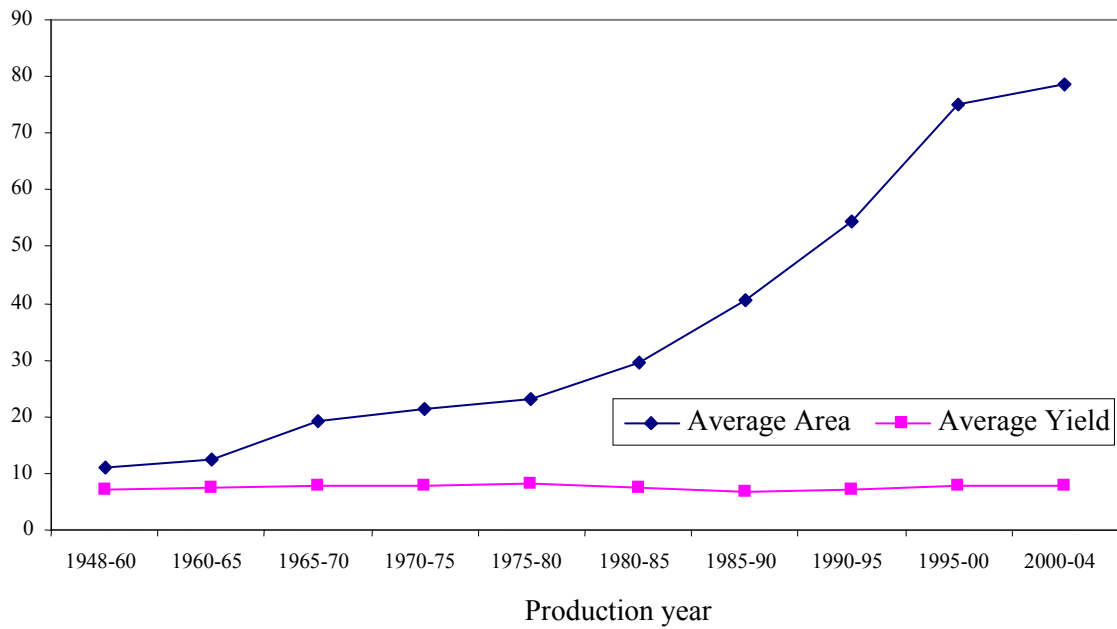
As with the advent of WTO, food and agricultural trade has gone global, the food safety and quality issues have got a new prominence. In this context, two of WTO Agreements namely "Agreement on application of Sanitary and Phyto-sanitary (SPS) Measures and "Agreement on Technical Barriers to Trade (TBT)" are of special importance for, these address (food) safety and quality issues, respectively and are binding on 145 (WTO) member countries. The growing concern about food safety in fresh produce trade and the limited levels of pesticide residues (MRLs) demand more research in the field of bio-control. This in turn requires streamlining of all the procedures and practices right from the orchard management up to shipment of fruit to the destined market.

More research and development is needed to extend the marketable life, packing line automation, cooling, CA storage, ripening, disinfection and quality assurance of these valuable fruits. Orchard management practices are needed to be in accordance with GAP defined by WTO.

Keeping in view the above mentioned limitations and problems, it deemed desirable to hold a conference to address the challenges about these fruits. Such objectives will be the topics of equal interest to all scientists, growers, processors, exporters and other organizations involved in the supply chain of these fruits. This conference will provide one platform to discuss the issues and scientific developments to update the knowledge about these extremely important fruit crops.



Production trends in mango from 1957 to 2004 (Pakistan)



Production trends in Date fruit from 1948 to 2004 (Pakistan)