

# **HOW GOVERNMENT HORTICULTURIST HAVE RUINED FRUIT GROWERS IN PAKISTAN 'TOP HORTICULTURIST OF PAKISTAN AND OUR IGNORANCE'**

**By  
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In 1985, I and my wife went to a horticulturist who was considered at the top in his field in Pakistan, and in our discussions on the various aspects of subjects, he also styled him self as such. We respectfully told him that prices of mango fruit planted in 1965 to 1967, were not increasing in proportion to extra yield and annual inflation, while cost of inputs had doubled in the past six year after Khomeni's Revolution in Iran or Russia-USA conflict in Afghanistan and we want to introduce new crops suiting our soil, water and climatic conditions, so that we replace mango and banana the two mono-crops most of the farmers have adopted. We also showed our apprehensions that with our one hundred thousand acres each under banana and mangoes specially of Sindhri, there is going to be glut and prices are bound to come down, to make these two fruit growing as an un-sustainable venture. At the seriousness of our visit and also recognising our ability to introduce any new fruit or horticultural crops, he went to his bed room and brought book with cover and first 21 (xxi) pages missing and asserted; "This is the best book on what you are looking for, 'Tropical and Subtropical Agriculture', Vol. I Fruits. Some body borrowed and tore off the front pages and top cover of this beautifully bound book. I even do not remember the name of author or publishers. I refer to it every day a number of times. It is my dictionary and it is also my encyclopaedia. I do not loan it to any body any more, but I will suggest you some new fruits. there are mango relatives. They have high yields. They will be exotic but look similar to mango. If you introduce them, you can easily find market, because every body knows mangoes. You can run people crazy after you introduce them. They are from South-East Asia and you can easily export them as they will fruit here very late or very early when mango will not be available even in those countries and you can export. Accept the advice and enrich your-selves.

Then he gave us a list of fruits, we should try after bringing them from South-East Asia. Since he won't allow us to handle the book, I asked my wife to help him prepare tea he had ordered for us and try to see how many pages were in the book, he had kept closest to his buttocks. She quickly looked at the last page numbered as 1446 and religiously kept it in original position. We searched for the book all over the Pakistan Agriculture Universities and Colleges, but finding none turned to botany departments of the universities finally we found it in un-suspecting Sindh University, where it had not been issued a single time to any one. It had good quarter of an inch layer of dust over it and while taking out from the cup-board, I did get a few bronchial culvuntions, but it was a case of 'Eureka'. Happily we opened it, it was written by Ochse et al and published in USA, but our happiness ended into great shock, when next page shoed that it was printed in 1961, and was quarter of century old, when our country's great expert recommended some fruits from it. After some thought we realised that our expert is totally

ignorant and at least horticulturist ally illiterate. For some twenty years were of the opinion that these official experts of the department knew their job, kept them-selves upto date on fruits and had latest books and publication in their possession, had travelled abroad and met foreign experts and their knowledge was unquestionably superb. We realised that in those twenty five years at least twenty books may have been published in English language alone on tropical and subtropical fruits, some 500 books on individual crops and 50,000 abstracts in the Common Wealth Bureau of Agriculture's Horticultural Abstracts. More over we found our-selves economically ruined by ill-advice we got from such ignorant specialists for the past twenty years. Ochee him-self and his colleagues had worked in Indonesia and adjoining territories and were not too familiar with sub-tropics. The mango relatives recommended by him were tropical, rain-forest fruit trees and only one or two varieties had chances of establishing in Sindh, but their fruit being inferior may not catch up as he had presumed and advocated. Above all his encyclopaedia book was stolen from some library and he had him-self removed cover and pages to disguise names of authors and library stamps. We flet ashamed at our own lethargy of not collecting and reading books as well as accepting advice of the Department of Agriculture blindly.

The next moment, we decided to be on our own and in future take any advice from these specialists with caution. We decided to collect Horticulture Abstracts for the last 15 years, any important books and bulletins on tropical and sub-tropical fruits, important farmer's bulletins issued by universities and agriculture extension departments of Western Australia, Queensland, Northern Territory and new South Wales the four Provinces or States of Australia; South Africa and some states of United States namely California Arizona, Florida, Texas, Georgia, Hawaii etc. Agriculture libraries in Pakistan were searched and of the 12,000 books and bulletins collected by us only some 50 came from there. Most kind was Mr. Muhammad Idress Rajput Librarian at Tando Jam. Indian publications were nervous, but highly un-reliable with cooked data, but yet a few were of very high standards and at par with International publications of repute.

We assigned two persons to collected meteorological data of stations in Sindh and based on data of 1904-1984 for many of these places we constructed a micro-climatic map of Sindh dividing it twelve zones against three of survey of Pakistan. We now could see that some two hundred new fruits and nuts and equivalent number of industrial crops, herb and ornamentals could be grown in Sindh.

We then worked an agronomic requirement of each of these crops, covering climate, soil, water, propagation, varieties, root stocks, macro and micro-nutrients, irrigation, weed control, yields, diseases, harvest methods, post-harvest handling, marketing and economics. Simultaneously we started importing plants from USA, duly accompanied by photo-synation certificates of U.S. Department of Agriculture. Initial trials showed that we could grow peaches, plum, apples, pomegranates, grapes, Chinese jujube, fig, grape fruit and some mandarins in Hyderabad area. We also found that in this area, macadamia nut leaf will be damaged by solar heat in April to June and so will be the case with avocado. Cashew nut canopy will be damaged

by low temperatures below 4°C. Our pear, persimmon and pecan nut plant (like walnut ) are too young and have not fruited as yet. We also found that our mango and other fruit varieties were selected by our Pre-Independence Indian horticulturists primarily basing them on eating quality, rather than the number of trees that could be raised per acre, yield per tree and per acre, as well as net returns to the farmer per acre. We therefore have tried 18 mango varieties. We have removed chiku trees, because these trees were not prolific, varieties were inferior and technology to increase post-harvest shelf life of this fruit had not been introduced in Pakistan. The local dates are not salt or rain resistant and performed poorly. There is excellent germplasm of more than one hundred date varieties in Sindh but this has not been collected or studied in Sindh. Our guava varieties are very seedy, contain less sugar, have low total soluble solids to total acid ratio, are small in size and unfit for processing against some imported varieties. In brief the present fruit varieties need revolutionary changes and introduction of new varieties. In brief we cannot depend on our ignorant horticulturists, ill-informed research and extension workers, poorly equipped libraries and either lack of research facilities or lack of incentives. Our experience also has shown us that it is too expensive for private sector to enter in the field of introducing new fruits, nuts and other horticultural crops, unless one does not care for money and considers it a hobby to enjoy.

There is another danger in the Third World of being a researcher in competition with the Government Agencies. Their officers do not show results probably due to too low salaries, lack of facilities and latest publication, disincentives caused by low salaries, favouritism in promotions and postings, dis-crediting and discouraging honest and competent officers of theirs. Officers usually gang up against any private party trying to do some research with or without competing with them. We have not been immune to such attacks but have always maintained low profile and little publicity to our work. This is how to survive and presume one's work un-hindered in the Third World. We hardly have discussed the subject with any body except close friends.

This top horticulturist was Mr. Jagirdar, Horticulturist at Sindh Government Horticulture Research Station Mirpurkhas for some 25 years. Recently an imported mango has been named after him.