

Issues of Subtropical Fruits and its Development in the Surkhondaryo Region

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Abstract:

This article describes the surface structure of the Surkhondaryo region of the Republic of Uzbekistan and the associated subtropical climate and describes the existing opportunities for the development of subtropical fruit growing. In particular subtropical fruits such as pomegranates, sugar cane, oranges, lemons, jerusalem artichokes, stevia, olives, oriental dates have been scientifically elucidated for high yields and industrial processing through extensive zoning and the creation of special farms. It is also advisable to establish nurseries specializing in the cultivation of seedlings in Denav, Sariosiya, Uzun, Altynsay districts of the region.

Key words: surface structure, precipitation, subtropical climate, subtropical fruit growing, nursery, agricultural technology, farms, available facilities, processing, zoning.

INTRODUCTION. Surkhondaryo region, located in the southernmost part of the Republic of Uzbekistan, is surrounded on three sides by mountains. caused the formation of a dry subtropical climate. The climate of the region is hot and dry, with long sunny days (226-266 days). In the development of agricultural sectors in the region, precipitation, its regional and seasonal distribution, along with air temperature, play an important role due to climatic factors. Annual precipitation varies from 131 mm to 625 mm, with 44.3% falling in spring, 45.9% in winter, 9.0% in autumn, and 0.8% in summer. These factors make it possible to grow heat-loving subtropical and citrus crops and early vegetables in irrigated agriculture. In particular, there are opportunities for high yields through the development of this sector in the foothills and intermountain valleys of the region [6. b 11]. Storage and processing of grown fruits will meet the needs of the population and create opportunities for export.

Therefore, Surkhondaryo region has all the opportunities for the development of subtropical fruit growing in Uzbekistan.

Goals and objectives of the work. The main goal of the work is to scientifically substantiate the possibility of developing subtropical fruit growing in agriculture of Surkhondaryo region, which has a dry subtropical climate. The main tasks are the establishment of nurseries, the creation and zoning of new varieties of subtropical and citrus trees, as well as the work to be done to meet the needs of the population for these fruits.

THE MAIN PART. In the Surkhan-Sherabad valley, since the 1930s, there has been a growing focus on subtropical and citrus, fruit and non-fruit, as well as ornamental and shady trees and shrubs that emit a fragrant scent of flowering. The reason is that in 1930 a state forest nursery was established in Denau district. The reason for the organization in Denau district is that the climate is

temperate in winter and there are no severe cold days. Precipitation is also around 500-550 mm. Such climatic factors make it possible to conduct research on the reproduction of subtropical and citrus tree varieties in this nursery. In 1935, a branch of the former Union Subtropical Research Institute was established on the basis of this nursery [3.b17]. This section is now called the South Uzbekistan Fruit and Viticulture Subtropical Experimental Station. Selection work, research and experiments in the field of acclimatization of plants and the creation of new varieties of plants at the experimental station have yielded positive results.

Now in this region completely new varieties of subtropical and citrus plants adapted to the local climate have been created for the Republic and Central Asia. In turn, it is more diverse than tropical countries

seeds and twigs of plants were brought and zoned. Fruit trees such as pomegranate and almond, palm and jiida, walnut and pistachio, grape and apple, lemon and mandarin adapted to the southern climate have been zoned in the region.

Currently, in the northern and north-western regions of the region, the cultivation of grapes and pomegranates of the variety "Toifi" is yielding good results. It should be noted that there are huge untapped opportunities in this area. For example, in Boysun district, 3,700 hectares of newly developed land can be given to long-term use on a tender basis to specialized farms for the establishment of date palms and anoraks [5. b 98]. Similar opportunities exist in Uzun, Sariosiya, Kumkurgan and Sherabad districts. This will increase the production of pomegranates, dates and citrus fruits in the region and increase exports.

In the foothills and hilly areas of the region, especially in Boysun, Sariosiya, Uzun, Sherabad, Altynsay districts, there is an opportunity to use the terrace method of gardening, which is one of the untapped opportunities. Drip irrigation can be installed in such areas where water supply is relatively problematic.

Pomegranate, a subtropical crop, is widely grown in the Surkhandarya region. Currently, dozens of new varieties of pomegranate adapted to the local climate have been created in the region. In the northern part of the region, Denau, Sariosiya and Uzun districts, in the south, Sherabad and Termez districts have extensive experience in growing this subtropical fruit. There are opportunities to grow pomegranates in the foothills of the Surkhan-Sherabad valley at an altitude of 500-1000 meters above sea level [7. b 39]. This region is the only region in Uzbekistan for exports to the industrial centers of the country and abroad.

President of the Republic of Uzbekistan Sh. Mirziyoyev in his book "Building our great future together with our brave and noble people" said, "It is known that Surkhandarya region with its economic potential, important geographical location, natural resources plays a special role in the development of our country." Due to the climatic characteristics of the region, it is expedient to establish anoraks on 5,000 hectares of land in Sherabad district "[1. b 279].

One of the most common plants in the subtropics of Surkhandarya region is the eastern date. This plant can be grown and cultivated in all regions of the region. Ibn Sina, a well-known orientalist, also praised the date, saying, stops diarrhea. Burnt grease is useful when the pumpkin is bitten. Date palms cleanse the stomach, and the juice of the fruit is an important tool in the treatment of sinus disease, and even radiation sickness "[2. b 65]. Its varieties such as "Sharq", "Kavkaz", "Virginia" are widespread in the region. Oriental dates are an excellent variety for their healing properties and fruit quality. Experts call it diospros, meaning "God's food."

Fruits such as pears, apples, peaches, and plums contain more sugar than oriental dates, 17-25 percent when ripe, and up to 60% when ripe. In addition, dates are rich in vitamin C and iron [3.b

27]. In Surkhandarya region, the creation of new varieties of this plant (oriental date) adapted to the local climate, the development of a favorable scheme for planting seedlings, the identification of the plant's demand for mineral fertilizers, its irrigation a number of measures, such as knowledge of the norm, complex processing of seedling spaces, should be developed by specialists from a scientific and practical point of view. When such agro-technical measures are taken, more than 300 quintals can be harvested from each hectare of eastern dates [3.b 28]. In the future, the needs of our people in the subtropics of Surkhandarya can be met by expanding the area of palm trees, which are famous for their nutrition and healing properties.

Sugarcane is one of the most valuable subtropical plants and one of the plants that can be grown and harvested in the upper regions of the region (Denau, Altynsay, Sariosiya, Uzun). Sugarcane is a perennial crop grown in tropical and subtropical climates. It is characterized by a high content of nutrients in the stem, including sugar. More than half of the sugar produced worldwide comes from sugar cane. It is also used to make rum [8. b 411]. Surkhandarya region has the potential to grow sugar cane for industry, that is, to create a solid raw material base for the production of rum in Uzbekistan.

Surkhandarya has favorable climatic conditions for growing subtropical olives. By growing this plant, it is possible to provide the population of the country with environmentally friendly, high-quality vegetable oil.

In 2006, olive groves were established on 4 hectares of land in the hills of Altynsay and Shurchi districts by drip irrigation. 25-30 kg of fruit was harvested from one adult olive tree. If 6 olive trees are planted in the family yard, a total of 180 kg of fruit can be harvested, and 60 kg of environmentally friendly olive oil can be obtained as a result of processing. [5. b 145]. You just have to be more discriminating with the help you render toward other people

It is possible to make a good income by planting subtropical crops, harvesting and selling it. For example, if 300 bushes of almonds are planted per hectare, an average of 25 kg of fruit can be harvested from each tree, for a total of 7,500 kg. At an average of 20,000 soums per kilogram of almonds, a total of 150 million soums is earned, of which 10 million soums are spent on cultivation, care and harvesting, and the remaining net profit is 140 million soums [4. b 80]. There are many such examples.

For the Surkhan-Sherabad valley, there are opportunities to grow non-traditional but cultivable subtropical crops, including Jerusalem artichokes and stevia. Jerusalem artichoke, which grows in North America (150-200 c / ha), is used in the pulp and paper and pharmaceutical industries (in the preparation of drugs for the treatment of oncological diseases). This plant was planted on 20 hectares in Boysun district in 2012-2013, but planting was stopped due to the lack of processing enterprises in the country [5. b 176]. Growing and processing of this plant will limit the import of paper raw materials and save foreign exchange resources, improve the health of the population, increase employment. The stevia plant, which grows in South and Central America, contains a lot of sugar, which can be used in confectionery. The Surkhan-Sherabad valley also has favorable climatic conditions for growing this subtropical plant.

CONCLUSION. Dry subtropical climate For further development of subtropical fruit growing in Surkhandarya region can be achieved by implementing the following measures (works):

- Establishment of farms specializing in subtropical fruit growing on the basis of drip irrigation technology in the foothills and lowlands of the region, in the intermountain valleys;
- Increasing the number of special nurseries for growing seedlings. It is advisable to establish such nurseries in the northern districts of the region (Denau, Altynsay, Sariosiya, Uzun). This is

because the climate in these areas is relatively mild and there is almost no loss of grafted buds;

- Correct introduction of advanced agro-technical education in farms specializing in subtropical fruit growing, dissemination of excellent labor experience gained by specialized farms, increase of gross yield through effective use of mechanization;
- Construction of a number of fruit storage refrigerators to meet the needs of the population for subtropical fruits throughout the year;
- By meeting the needs of the population in food products and industry in raw materials through the cultivation of subtropical fruits and their industrial processing, it is possible to eliminate employment problems, as well as to export them to foreign markets. Create;
- -Involvement of the population in the development of this sector in private farms and thus solve the problem of employment;
- Zoning of many subtropical plants in the region, which have passed the rigorous testing of nature, in other regions of the country.

Through the development and implementation of such measures, it is possible to achieve further development of subtropical fruit growing in our country, including in Surkhandarya region.

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