ital could ease the population pressure in Tehran and other major cities, alleviating challenges such as air pollution, traffic congestion, and resource shortages. By distributing the population more evenly across the country, the government could manage resources more effectively and reduce environmental degradation.

Impact on political structure

This shift would also require a fundamental rethinking of Iran's political structure. More than just a geographical change, relocating the capital could prompt a decentralization of power, possibly moving toward a more federal or regional governance system. This would promote balanced development across different regions and address internal migration issues that have plagued Iran for decades.

The relocation of government ministries and institutions to a new capital would necessitate legal and regulatory adaptations, as well as a redistribution of resources and opportunities across the country. From an international perspective, a new southern capital would bolster Iran's regional presence, potentially improving political and economic relations with neighboring Persian Gulf countries, particularly the [P]GCC members.

However, this historical shift comes with significant challenges. It would require tens of billions of dollars in investments, and successful implementation would depend on detailed planning, national solidarity, and cooperation among elites and the public.

A Strategic opportunity for change

Relocating the political and economic capital is a transformative move that could enhance Iran's long-term development and strengthen its regional position. A well-thought-out roadmap and substantial political, social, and economic investments will be essential for success.

Policymakers must ensure that the move is meticulously planned to avoid new challenges, such as environmental issues, water shortages, or social tensions arising from the relocation. Without robust security infrastructure, the relocation could expose Iran to external threats.

In the end, collaboration between public and private sectors will be key to successfully implementing this historic project. If properly executed, it holds the potential to reshape Iran's role in the region and foster balanced, sustainable national growth.

Tehran's water crisis reaches critical levels

Social Desk

ANALYSIS

An analysis of the available data indicates that Tehran Province has entered a state of severe water stress. Given the stagnant water resources and the increasing population of the capital, if proper and timely management of water resources is not implemented, the demand for water will inevitably skyrocket, leading to a supercritical water crisis in the province.

Conditions in Tehran Province have gone beyond the alarm or warning stage of drought and the province has entered a dry stage, and the continuation of this situation has reduced Tehran's agricultural production capacity and made life impossible in many parts of the province.

A closer look at the water industry statistics in Tehran reveals a "supercritical" water situation, largely due to the misguided policies governing water usage in agriculture and industries. According to Management and Planning Organization Of Tehran Province, the number of deep wells in the province has decreased since the 2018-2019 water year, but shallow wells have seen a 30% growth over the past 15 years. As a result, the number of shallow wells has increased from 26,707 in the 2007-2008 water year to 34,560 in the 2022-2023 water year. Furthermore, the statistics show that due to the decline in groundwater levels, the amount of water extracted during this period has decreased from approximately 193 million cubic meters to 160.8 million cubic meters, a 15% drop. On the other hand, with the increase in the number of wells in Tehran and the decline in groundwater levels, the role and number of qanats and springs, which were once the sole source of water supply, have also decreased. Additionally, since the 2018-2019 water year, the discharge of Tehran's groundwater resources has remained constant, meaning that these resources have reached their maximum capacity and have no excess discharge capacity. As reported by the Tehran Chamber of Commerce's Economic Research Department, the increasing pressure on underground water resources has led to a significant decline in the water level in wells, a decrease in water quality, and the drying up of some wells, springs, and qanats, necessitating the relocation of wells, which poses a dangerous risk of land subsidence. According to the Tehran Province Agricultural Jihad Organization, this province contains 1.2% of the nation's agricultural land, yielding 7 million tons (6%) of the country's agricultural products. The province also ranks among the top four in the country in the production of 14 agricultural and livestock products.

It is worth noting that the continuation of production levels also directly depends on the preservation of land use, as landowners who own unproductive or low-quality land believe that obtaining low yields from such land is not economically viable and therefore opt to change the land use, either legally or illegally, to increase their income. As reported by the National Land Organization, in 2022, Tehran Province had the highest number of cases of unauthorized land use changes. In a province like Tehran, where the population is increasing, land use patterns are changing. With the rise of drought and the decline of vegetation cover, the area of pastures and agricultural lands is decreasing, and we will witness a change in the use of agricultural lands. In fact, climate drought and the resulting lack of recharge of groundwater aquifers lead to a decrease in the area of irrigated crops, orchards, and fallow lands, causing good pastures to deteriorate and become mediocre or poor, prompting farmers to change the land use, often illegally. Unauthorized changes in agricultural land use, in addition to destroying agricultural lands, also pose a threat to food self-sufficiency, increase unemployment in rural communities, and lead to increased migration from rural areas to cities.

Cost of water is not genuine

One of the challenges of the water crisis in the agricultural sector is that the price of water is not realistic. This has led to an excessive demand for water in agriculture. The significant difference between the economic value of water and its current supply price has exacerbated the reckless extraction of water from wells, deepening and drilling of unauthorized wells. Water is a public and non-excludable good, and preventing people from consuming it is difficult and costly, both politically and socially. The cost of preventing water extraction by those who are not authorized to do so is usually very high. Therefore, water is considered a non-excludable good. The most common approach to limiting water extraction is to design and implement an operational water pricing system that makes water use unjustifiable for consumers with low economic efficiency. This approach aims to reflect the true value of water and encourage responsible consumption, thereby reducing waste and promoting sustainable use of this vital resource.

Illusion of water abundance

Economic water scarcity is the result of inadequate or inefficient investment in infrastructure, leading to improper water distribution among different consumer sectors. Insufficient investment in infrastructure development can result in limited access to clean and safe freshwater, even in areas where there is no physical water scarcity. Inadequate access to water can be due to instability in supplying water regularly due to inadequate infrastructure or mismanagement of water use.

Water scarcity can also be the result of a societal shift, such as the prevalence of a consumerist lifestyle and excessive water consumption, and behaviors stemming from the illusion of water abundance. In large cities like Tehran, where significant investments have been made to diversify their water sources, examples of behaviors resulting from the illusion of water abundance can be observed.

Let's set aside the slogan of self-sufficiency

In many developed countries, unlike Iran, industrial water consumption accounts for 40 to 60 percent of total consumption. This means that the majority of water consumption in these countries is allocated to industry, as it has a higher added value. In the current situation, it might be better to set aside some of the slogans of self-sufficiency in all agricultural products and determine production levels based on available water resources. Importing certain agricultural products is not a sign of dependence, but rather a means of managing water resources.

Tehran can no longer accommodate new population

Currently, Tehran Province is home to over 14 million people, who require a large volume of water for consumption. On the other hand, the establishment of a wide range of activities in the province has led to an increased demand for water resources. Given the increasing population of Tehran and the decrease in rainfall, as well as the urgent need to increase extraction from groundwater resources, it can be said that the province can no longer tolerate further population growth.

The failure to properly implement land-use planning programs has led to uncontrolled population growth in Tehran Province, particularly in the city of Tehran. In addition to the numerous problems caused by population growth, providing water for the residents of the province has become a challenge and is now in a state of emergency.

The article first appeared in the Persian language Etemad newspaper.