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Territorial Water Cooperation in Iran

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In the central plateau of Iran, the climatic and geographical conditions gave rise to the technology of qanat which then underlay the production systems in this region. Qanat consists of some shaft wells interconnected by a subterranean tunnel which drains out the groundwater seepage and conveys it on to the earth surface using the height difference between the two ends of the tunnel.

This paper tries to give insight into the role of qanat in territorial identities in its beneficiary societies. Territorial identity or behavior can impede the development of fruitful cooperative activities, but qanat could have built up a good capacity for cooperation and social convergence which can be used in configuring sustainable development. The structure of qanat which entails a vast spatial extent may pass across several territories whose inhabitants have to pull together in order to maximize their profit from its water. This study questions the common statement that water is always the matter of war, and water scarcity in arid zones always triggers conflicts or nourishes oriental despotism. This paper examines the following three hypotheses:

- 1- Qanat as the most vital water supply source in the central plateau of Iran has not been able to fully meet the water demand of the growing population due to its structural peculiarities, so the qanat based agricultural sector could not have absorbed all the existing labor force. Thus the population overflow turned to the industrial activities which were not that contingent on water. Moreover growth of industrial activities then led to an increase in "Mobility" which could enfeeble the territorial behavior in the end.
- 2- The man made water currents like quant which are dependent on periodic maintenance can strengthen interaction and cooperation between different territories and can blunt the territorial identity, in case they flow across two or several territories and benefit all of them. In other words, where a man made stream which needs maintenance to keep running crosses into two or several territorial borders, the territorial borders may become more uncertain which encourages more cooperation across the borders and then more cooperation can make the borders vaguer and this cycle continues.
- 3- The geographical and climatic conditions of the central plateau of Iran have ruled out the possibility of concentration of all the vital resources (water, soil, workforce, etc.) within a certain territory. The dispersal of pivotal resources over the different territories can make them more dependent on each other and weaken the territorial identity. For example, where a territory enjoys a fertile soil but has to bring water from its neighbor, it cannot develop the sense of self-sufficiency which usually hinges on territorial identity.