

PASTORAL PRODUCTION

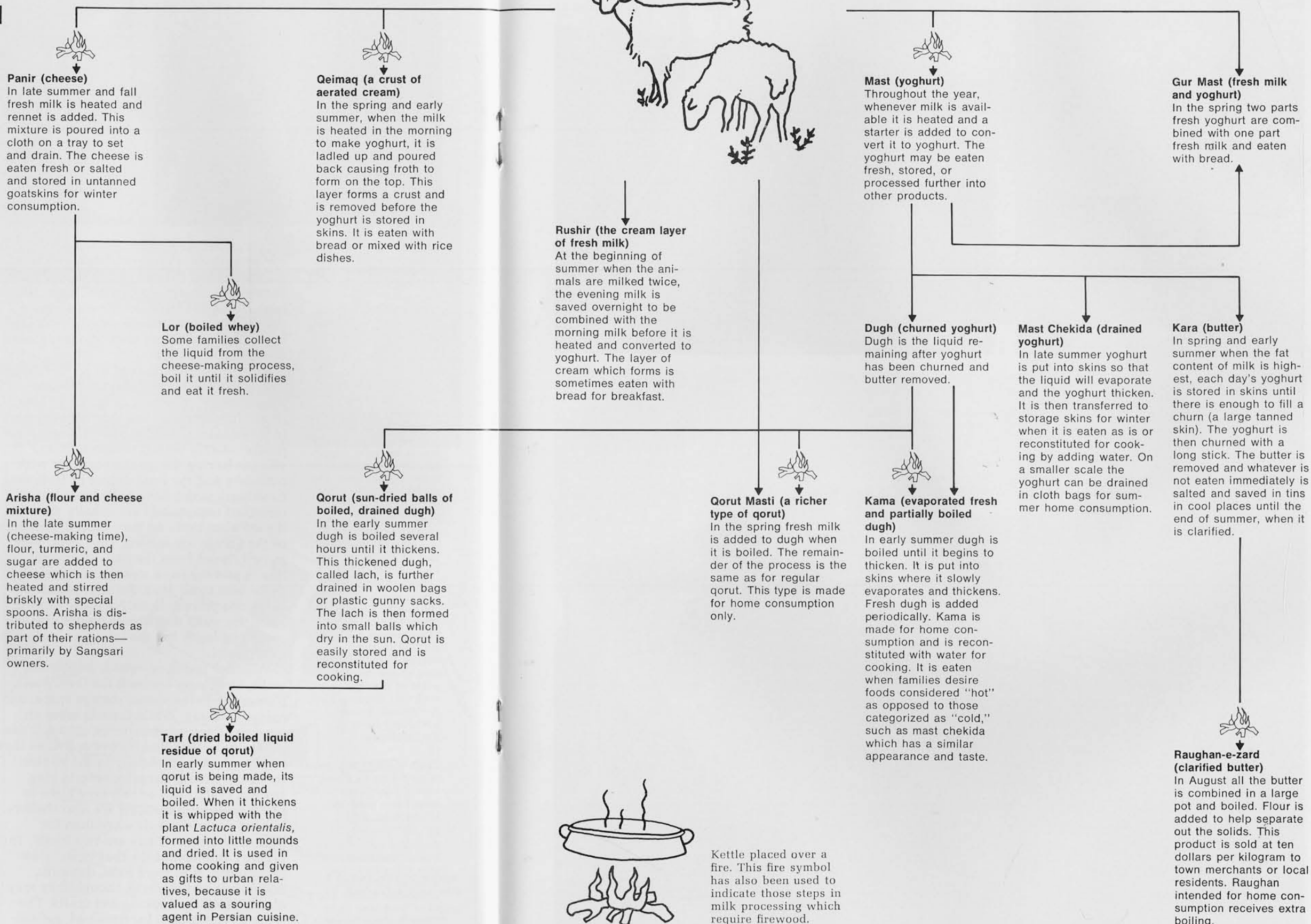
Milk and Firewood in the Ecology of Turan

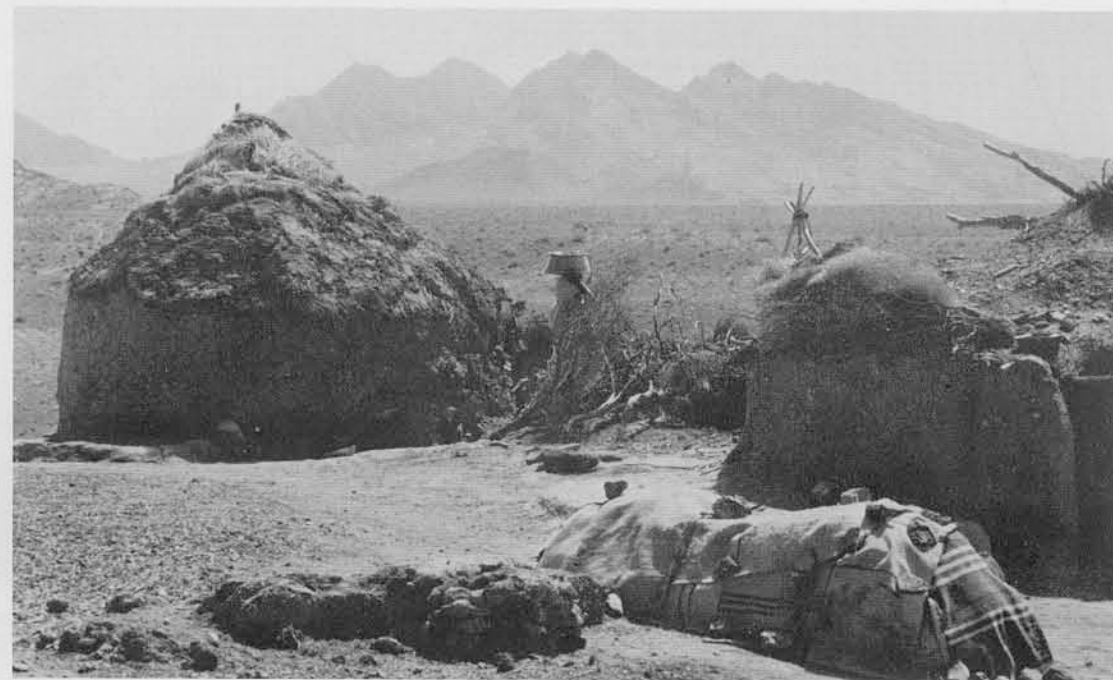
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Pastoral production in Turan focuses on milk. Goats are the major producers because they are in milk from late February or March until late September. They are usually milked twice a day from April until midsummer and once a day thereafter. Sheep are in milk from March until midsummer, but milked less so that the lambs (which have a higher price than kids) may receive more of the ewes' milk. Villagers with large families also keep a cow in order to have fresh milk through the winter. In the summer cow's milk is often combined with sheep and goat's milk for processing.

Milk production is measured per animal by the amount of clarified butter produced. On the average, Turan residents estimate 400-500 grams per village animal and 1000-1500 grams for those animals which graze away from the villages year round. Sheep milk is richer in fat which gives ewes a greater yield of clarified butter but less of other products such as *qorut*. For this reason sheep milk is sometimes processed separately at milking stations. Processing milk into products that can be stored for later consumption or sale requires large amounts of firewood. The collection of this firewood from the live as well as the dead vegetation, in addition to the pressure of grazing, constitutes perhaps the most significant factor in the ecology of Turan today.

Milk and its products vary in their processing and use throughout Iran. Some products made in Turan are not known elsewhere, and in other areas of Iran often products are found which are less important or even unknown in Turan. The following chart illustrates the products which are important in the Turan diet and the way in which they are processed.





1 Making qeimaq. In the process of turning milk to yoghurt the milk is boiled in large copper pans. At the summer stations one copper pan may hold the milk of one owner but in the village where families have fewer animals, women pool their milk in groups of five or so and take charge of processing for the number of days corresponding to their portion of the milk. Here the milk is being ladled and poured in order to produce the froth for qeimaq.

2 Making butter. Butter churning begins before 5 A.M. in the cool morning air. If a second batch is churned it is shielded from the hot summer sun.

3 Making qorut. Young girls usually have the task of forming boiled drained dugh into balls to dry in the sun. When fully dried they are stored for winter use or sale in the towns.

4 Summer station with (solar) milk cooler (talar). Even after being soured milk products would spoil unless kept cool. The talar is a traditional mode of cooling, whereby moisture from milk products seeps out through the skins in which they are stored and evaporates. The skins rest on a raised wooden rack which facilitates air circulation. They are covered by old rugs and felts. At one reading when

the temperature outside was 37°C, under the talar it was as low as 20°C.

5 Uncovered talar. Goat skins are tanned for summer storage of milk products—yoghurt, dugh and kama. These skins allow evaporation for cooling. Products such as cheese, which need no draining are kept in untanned skins (with hair).

6 Cotton stalks serve as fuel for bread ovens.



7
Gathering firewood at summer milking station. At this summer station where there were over 200 milkers about 21 tons of firewood were required for milk processing in one season. Most of this was brush which had to be collected green. But sometimes in the spring a flash flood washes down large amounts of vegetation which can be gathered quickly for fuel needs.



8
Preparation for baking. A girl brings fuel for the bread oven in the foreground.



9
Baking bread. One of the major fuel needs in Turan is for bread—long flat loaves cooked on the sides of cone-shaped mud ovens. Women bake bread every three or four days depending on the season and number of guests and family members. Families use 120-240 kg. of wheat per person per year for bread.

