

EXTRACTING PROFITS WITH A SHEA BUTTER PRESS

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Photos: Denis Marchand

In the tiny village of Gladié in southern Mali, shea butter isn't usually a major topic of conversation. But it is a useful product in everyday chores such as cooking millet cakes or waterproofing the family hut.

In the latter case, a shea-oil-based coat is applied along the doors and windows of a dwelling, as well as to the base of its earthen walls, in order to protect against seasonal rains.

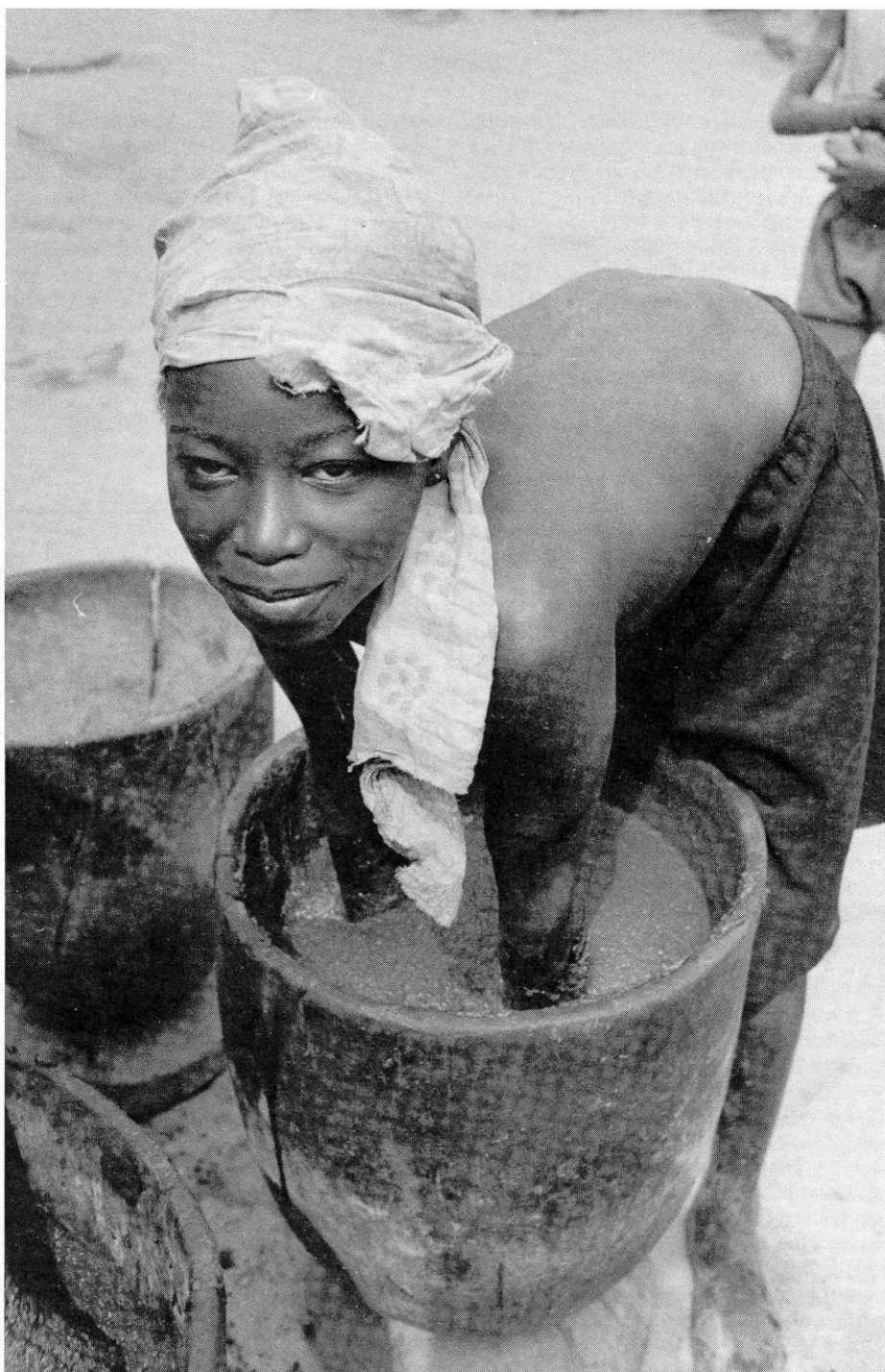
There is one occasion when shea butter does become the centre of attention. That's when the village women go to their storehouses to collect the fruit that they have patiently harvested from beneath the large shea trees which grow wild in the region.

For more than two days, the women spend their time heating and shelling the shea fruit, pounding the nuts found inside, and working the mixture with their hands and arms to extract the precious shea butter, which looks like thick oil. Even when this traditional process is carefully carried out by village artisans, only about 30 percent of the fruit's fatty content is extracted.

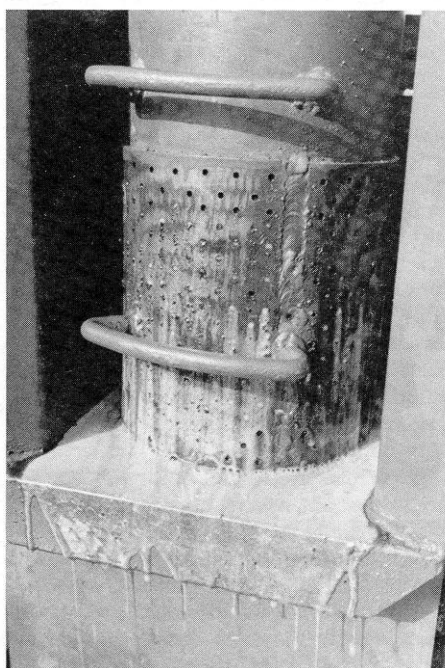
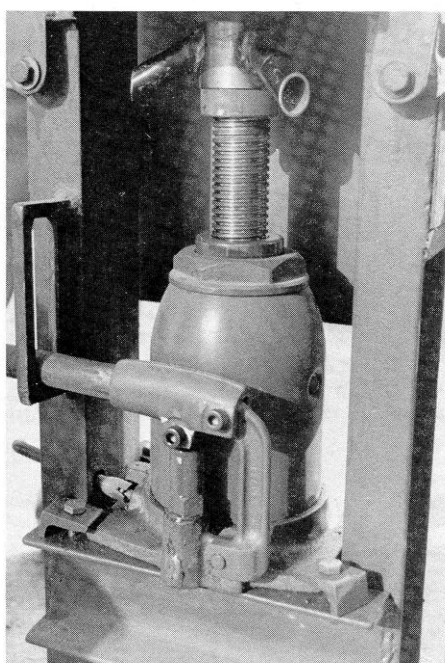
"Without actually becoming rich, the small producers would at least earn more money if they could extract a larger proportion of the shea butter from the processed fruit, and at a faster rate. Unfortunately, in the absence of an appropriate technology, the natural wealth of the shea tree is not fully exploited," comments Badji Tounkara, an employee of the farm equipment division of the Ministry of Agriculture.

Production constraints aside, there is still a strong demand for shea butter in Mali. Not only is it an important element in the rural diet, but its biochemical components are highly prized as raw materials in the manufacture of pharmaceuticals and cosmetics, especially ointments, beauty creams, and soaps.

Ointments are used in massages for children and pregnant women, for treating inflammations and skin problems, and for preventing dry skin. SEPOM, a Malian company, processes shea butter on an industrial scale and manufactures a beauty



Traditionally the nuts are pounded, then the mixture is hand-stirred for two hours. This tiring task allows the oily substance to separate from the flesh of the nuts and come to the surface. Below, shea nuts are pressed under a screw jack. The oil extract congeals quickly at room temperature and turns into shea butter. The cake-like residue is used as fertilizer or as food for livestock. The shea oil is also used to waterproof around the base of the huts and around windows.



cream which is as popular in West Africa as it is in Europe.

For small and medium-scale producers, there is now good reason to be hopeful. The Ministry of Agriculture's farm equipment division, with IDRC assistance, has developed a shea butter press which has proved out in initial tests.

Equipped with a jack which exerts 30 tonnes of force, this machine crushes more than three kilograms of shea fruit in 20 minutes. It extracts up to 85 percent of the fatty material contained in the fruit — a tripling of production — and the resulting shea butter is of much better quality. The press also simplifies the whole process. In particular, it permits a reduction in the cooking time of the fruit, which in turn saves fuelwood, a precious commodity in this seriously deforested region of the Sahel.

Finally, the shea butter press also makes it possible to retrieve oil cake from the process. A second pressing of the oil cake yields a lower-grade oil which can be used as a base for dyes or as waterproofing. When applied to a house, it protects the clay from the rain. It can also be applied to beehives to make them watertight.

The oil cake has other uses too. It can be fed to animals, applied as fertilizer, or burned as fuel. Even the resulting ashes can be used to make potash.

Prototype units were initially constructed by the farm equipment division. But now, with the exception of the jack which is imported from Europe, the presses are built by young local artisans. Formerly engaged in the construction of farm equipment at the Ministry of Agriculture, these artisans joined forces to set up their own operation.

Production is going well. More than 50 presses are now being tested in Mali, Burkina Faso, and Ivory Coast where shea trees grow in large numbers. The users, usually groups of small-scale producers, hope not only to satisfy their own domestic needs, but also to sell any surplus shea butter or its by-products in order to increase their incomes. ■

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