

James Murray

News Report on Thurow, Roger. "Makeshift Cuisinart Makes a Lot Possible in Impoverished Mali." *Wall Street Journal*, July 26, 2002.

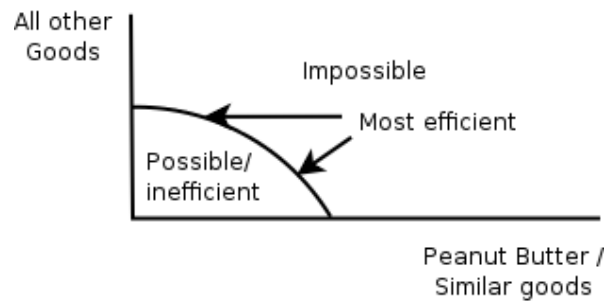
This article is about a new invention that is beginning to be used in impoverished African countries such as Mali. The invention is a grain and nut grinder and blender, specifically designed to be used by rural African women, that can turn 15 pounds of recently harvested peanuts into peanut butter in about 10 minutes. Before this machine came to the village of Sanankoroni, Mali, women made their living by manually grinding peanuts, corn, and grains for days before being able to sell the product at the market. This new technology makes the process extremely more efficient, freeing up an incredible amount of time for the women in the village.

What has resulted is not only more peanut butter for the village, but more of everything. Since the introduction of the machine, girls that used to stay at home helping with the grinding are now attending school, mothers and grandmothers are taking literacy courses, and more women are spending their time expanding farming plots. Using the proceeds from the invention the town has for the first time invested in lights across the village. With the village and buildings now equipped with light, businesses can stay open longer, and a midwife reports healthier babies are being born as delivery complications are more likely to occur when working in the dark.

This article is a classic demonstration of a movement in the production possibilities frontier (PPF). The production possibilities frontier shows what combinations of production of goods are possible when all resources are used efficiently. Figure 1 shows a hypothetical PPF for Sanankoroni with Peanut Butter (and other products made by grinding nuts, grain,

and corn) on the horizontal axis and all other goods on the vertical axis. Points on the PPF are possible when the village uses all its resources most efficiently. Points inside the PPF are possible, but not efficient. Points outside the PPF are impossible with existing technology.

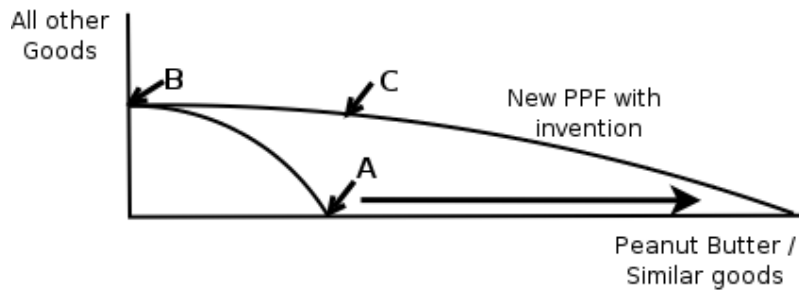
Figure 1: Production Possibilities Frontier



What happened in Sanankoroni was a drastic improvement in technology for peanut butter. The ability to produce much more peanut butter and similar goods shifts the horizontal intercept of the PPF to the right. Point A on Figure 2 indicates how much peanut butter the village can produce if it decided to allocate all its time and resources to peanut butter. With the improved technology, this point shifts outward. There is no initial shift in point B. This point represents how much of all other goods can be produced if the village made absolutely no peanut butter (and similar goods that use the new invention). If these goods are not being produced, the invention is not being utilized, therefore the village is no better off.

With simply an increase in the technology for peanut butter, the village can produce more of everything. It can move from a point near point A on the original PPF to point C on the new PPF which results in not much more peanut butter, but more of all other goods. This improvement in lifestyle was in fact the motivation behind the invention.

Figure 2: New Inventions Shifts the PPF



Finally, the future may show that the introduction of this invention will shift the PPF outwards at both intercepts. The article mentions some of the new things the village is enjoying include education, literacy classes, and lighting, which leads to improved productivity for other goods. These investments will likely lead to greater production possibilities of all other goods, which will shift the PPF outwards and lead to a higher standard of living for villages like Sanankoroni.