



(photograph – T Rukuni)

## Raising rural family incomes through improved peanut butter processing R7419

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The project impacts on a number of livelihood constraints and opportunities of rural families. These are (i) reduce labour drudgery (ii) provide consumers and families with safe, nutritious and high quality product (iii) increase family incomes through improved markets and (iv) increase profits from groundnuts through value addition. .

The project sought to increase the potential for improving the income and nutrition of rural groundnut farmers through the sale of increased peanut quantity of improved quality. The traditional stone grinding process used by farmers is labour intensive and productivity is low. The project evaluated the uptake of alternative processing technologies and investigated improved designed and conditions of processing peanut butter. The organoleptic, shelf life and good safety characteristics of peanut butter produced by traditional, commercial and upgraded small-scale processing techniques were investigated.

Research on peanut butter grinders has led to the incorporation of a metering device to regulate feed so that a smooth product can be achieved in one run. So far, about 43 machines have been manufactured and sold to entrepreneurs. A further 15, already purchased were brought back to the manufacturer to add in the metering device. A large number of informal sector artisans are now manufacturing the grinders. Their popularity has been encouraged by the interest shown by CARE, Farmers' Development Trust, TOCH Zimbabwe, Ministry of Youth Employment Creation, Zimbabwe Women's Bureau, and the Zimbabwe Farmers' Union, among others.

The project has increased awareness of the health risks. Peanut butter produced by rural women groups using traditional methods or manual machines showed lower levels of aflatoxins compared to commercial processors, possibly due to the smaller quantities of nuts from which the bad nuts can be sorted with ease. The incidence of *Salmonella* and *E.coli*, however, were higher in peanut butter processed by rural processors. The most exciting achievement was that the Panorama Group in Mt Darwin have improved their processing facilities and have a Standards Association of Zimbabwe (SAZ) licence. The Standards Association of Zimbabwe inspectors played a major role in educating women on food safety, health and hygiene. All samples from Panorama and associated groups are now well below the acceptable level of 20ppb aflatoxin. The project is now working with 10 women's groups in Mhondoro, Zvimba, Murambinda, Mt Darwin, Bikita, Nyanyadzi and Mutoko.

The ideal storage life of peanut butter without preservatives is about 90 days. The Spanish varieties were found to be the most favoured and variety Valencia was judged to be the best by consumers. Peanut butter without preservatives produced by rural women's groups was ranked the best compared to commercial brands with preservatives. The Zimbabwean market preferred a very smooth peanut butter with a medium brown colour.

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### **Related documents:**

(the documents could be made available on line – PDF files)

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