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Pakistan CIP Summary

Although the number of poor generally declined over the past two decades, there seems to have been no corresponding improvement in the population-wide nutritional status. Half the children below five years of age are malnourished, 40% are underweight, 50% are stunted, and 9% are wasted. More than half the women and children are anemic, 1/3rd of young children vitamin A deficient and as a consequence 50-60 thousand die prematurely every year. Impaired physical and cognitive development of young children and lower productivity among anemic adults depresses national productivity by several hundred millions of dollars annually.

Fortification of Wheat Flour with Iron and Folic Acid

The government of Pakistan has set a goal of achieving universal fortification of wheat flour with iron and folic acid over 10 years and the Ministry of Health has endorsed mandatory legislation of flour with iron and folic acid. With product and industrial trials are complete, the CIP outlines a two-stage 10-year plan to implement fortification in two very distinct and different production and market environments. Initially, over three years, more than 700 large scale roller flour mills will begin fortification, covering about half the population. In early 2004, financing for \$3 million was awarded by the Global Alliance for Improved Nutrition (GAIN) for an innovative collaboration of government and the Pakistani Flour Millers Association to equip and train millers and launch large scale fortification on a national basis. Extending the benefits of fortification to the remaining 50-60% of Pakistanis who consume flour milled at small-scale stone mills, including those most at-risk, is a high priority. Working with the ADB, the Ministry of Health is developing strategies for expansion and sustainability in this small mill environment via a 3-year market scale program in two districts - including 100 chakkis and reaching 180-200 thousand consumers. This will be presented to the Japan Fund for Poverty Reduction in 2004.

Flour Fortification	5-Year Budget	GAIN Award
Production and Distribution		
Industrial implementation	\$3,350,000	\$1,301,000
Fortificant mix	\$9,835,000	\$487,000
Industrial quality assurance	\$480,000	\$260,000
Public Functions		
Food Control	\$802,000	\$556,000
Biological Monitoring & Evaluation Impact	\$105,000	\$105,000
Administration and program management	\$182,000	\$113,000
Communication and marketing	\$1,482,000	\$176,000
	\$16,236,000	\$2,998,000

Vegetable Ghee and Edible Oil with Vitamin A

The enrichment of vegetable ghee with vitamin A was legislated in 1965 but only an estimated 40% is fortified to the required level. The industry is centralized with 130 vegetable ghee and 52 solvent extraction plants supplying a wide national market for cooking oils. If this supply was fortified to current regulations, this daily oil consumption could deliver about 60% of Estimated Average Requirements (EAR) to all sectors of the population – saving lives and reducing health care costs. The CIP proposes new channels for public-private collaboration to develop producer

awareness and build regulatory capacity, including the development of an independent regulatory mechanism. Broader understanding of the national benefits and costs developed by the Pakistan Institute of Development Economics, as part of the CIP analysis, will be a key step in bringing oil fortification with vitamin A to fruition.

Cooking Oil	10 Year Budget	Seed Financing Request
Recurring Production Costs	31,107,220	3,110,722
Capital & Start-Up Costs		
Food Control & Monitoring Costs	2,689,170	2,689,170
Marketing Costs	2,036,620	2,036,620
Total	35,833,010	7,836,512
