INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

- HIV/AIDS and Food
- and Nutrition Security

From Evidence to Action

An international conference

Durban, South Africa

14–16 April 2005

Presentation Outline

- Introduction/background
- Guinea case study
- Methodology
- Evaluation tools
- Results
- Discussion
- Conclusion

Introduction/Background

- Malnutrition in Africa complicated by disease, high fertility rates, deteriorating health systems, shrinking economies
- Spread of HIV/AIDS further hinders effective responses to malnutrition
- Countries with high HIV/AIDS prevalence and malnutrition rates face enormous burdens
- 1999 WHO reported that malnutrition and HIV/AIDS were the underlying causes of 50% and 30% of deaths of children under five in Africa

Guinea Case Study

- WFP study (2004) showed that approx. 55% of families surveyed had either a very poor or undiversified diet
- Food expenditure consumed 85% of their income
- Rates of protein energy malnutrition very high (26% of children stunted; 9% wasted; 33% underweight)

Guinea Case Study (HIV/AIDS)

- Increasing prevalence of HIV/AIDS from 1996 to 2001 from 1.5% to 2.8%
- Corresponding increase in the numbers of orphans constituting 35,000 children (14.5% of the total number of orphans from all causes)
- Malnutrition according to the MOH is the main cause of infant mortality

Africare's Response

- Comprehensive program to combat malnutrition and HIV/AIDS building on an ongoing food security initiative and Africare's HIV/AIDS Service Corps program
- Goal: to assure the food security of communities and to ameliorate the household state of living in Dinguiraye Prefecture through monetization of vegetable oil and diversification of household agricultural production
- Project sought also to rehabilitate malnourished children using the Positive Deviance Hearth Model
- Africare linked the food security initiative to on-going HIV/AIDS prevention and education program through the Service Corps

PD Hearth

- Main objective is to rehabilitate malnourished children using locally available food and ingredients
- Detect moderate cases of malnutrition through monthly weighing
- Rehabilitate malnourished children aged 9-36 months, most at risk for malnutrition
- Ensure adoption of appropriate behaviors and best practices by caregivers
- Prevent further malnutrition in children through introduction of sustainable practices
- Encourage communities to develop supporting activities
- PD hearth is sustainable, affordable, easily replicable

Africare's Application to Orphans

- Based on experience in other PD Hearth programs
- Works in areas of high HIV/AIDS prevalence with corresponding high numbers of orphans
- Selection of Hearth sites using Community Assistance and Information System (**CAIS)** with results based on monthly weighing of children
- Use of Service Corps Volunteers helps in identifying those families affected by HIV/AIDS and/or are taking care of orphans as a result of AIDS
- Measures are taken to avoid stigma by using community to help in identifying all children who are malnourished and the Service Corps Volunteers who can identify those families affected by HIV/AIDS

Orphan Hearth-1

- Each hearth composed of 1 positive deviant mother and 12 other caretakers of children aged 9-36 months
- Children are pre-selected using index weight-for-age with final selection using weight-for-height
- Participating children are given 299mg/day of Mebendazole for 3 days and vitamin A supplementation
- Immunization sessions are scheduled following the national vaccination campaigns with cases of illnesses referred to health centers and health posts for treatment.

Orphan Hearth-2

- Positive Deviant mothers (**“Maman lumière” (ML))** are identified after weighing of their children
- Choice of the ML is made amongst mothers who, despite their family’s limited economic resources, are nonetheless able to meet the nutritional needs of their children, using local products
- Identification of the local foods based on a 24-hour meal recall
- Mothers identified as a model are then asked to participate in the Hearth
- In consultation with the model mom, the program staff chooses recipes and meals and establish their caloric and protein value using the food composition table
- The purpose of establishing these values is to ensure that all children participating in the Hearth receive between 150-220 calories/Kg (around 700 cals./day) and 26 grams of proteins.

Orphan Hearth-3

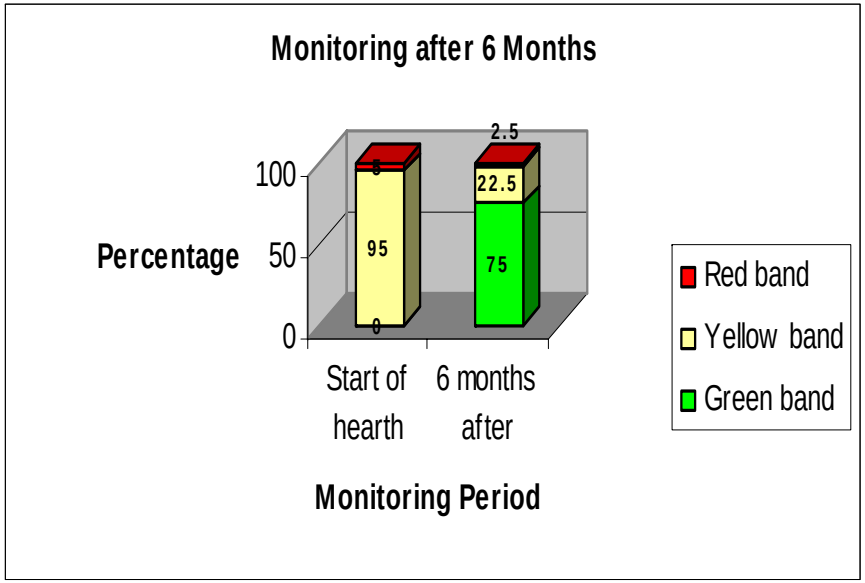
- The model mom benefits from training on key messages related to nutrition, hygiene, health and HIV, which she then communicates to other participants during the Hearth.
- At end of 3 week session, families have increased knowledge on the different food classifications and their importance as well as concepts of frequency, amount, density, and utilization (FADU), and finally prevention of infections, in particular, HIV/AIDS.
- Anthropometric data collected 1st and 12th day of the Hearth and 1, 2, and 6 months after the Hearth to monitor the evolution

Evaluation

- Qualitative: observations at the household level (nutrition of children, activity level of children, hygiene and sanitation measures, other health measures)
- Quantitative:
  - based on anthropometric measures, nutritional status of children, using protein-energy malnutrition indicators (excluding stunting);
  - the rate of success (rate of malnourished children who increased their weight by more than 400 grams for the 1st month and by 700 grams for the 2nd month after the Hearth)
  - the rate of failure (rate of malnourished children who gained less than 200 grams for the 1st and 2nd month after the Hearth); and finally the adequate growth rate (rate of malnourished children who gained and increased their weight from 200 to 699 grams for the 2nd month after the Hearth)
- Leaf color classification: green for a healthy leaf/no sign of malnutrition, yellow for a dry leaf/moderate malnutrition, and red for a dying leaf/severe malnutrition

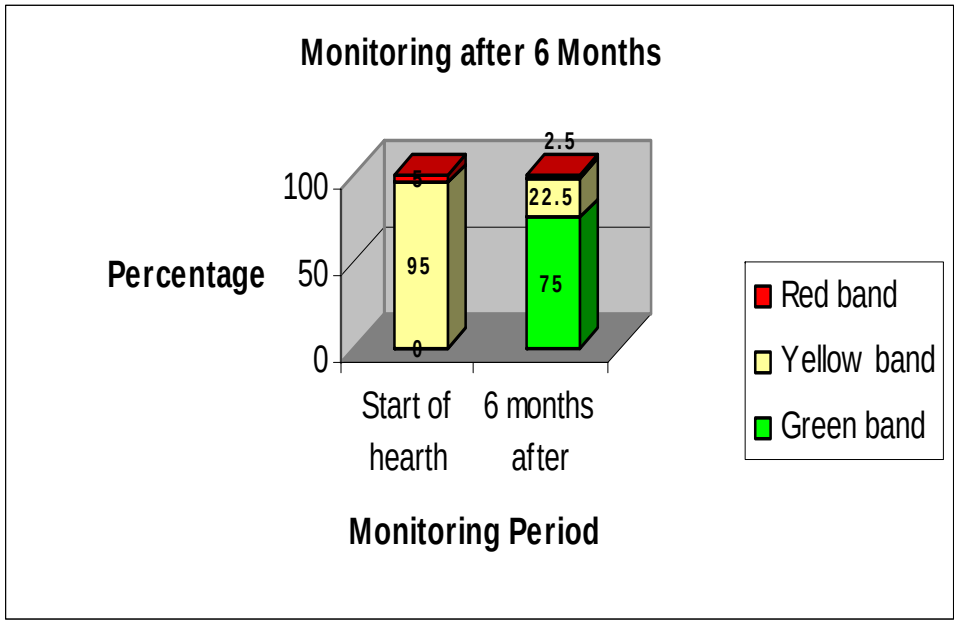
Results

- At the end of the hearth session noticeable improvements are recorded for most children
- One month after the hearth, women were consistently utilizing information and practices learned and were encouraged by children's apparent good health.
- The hearth children demonstrated visible behavioural changes. They displayed more energy and were more joyful.



Results-2

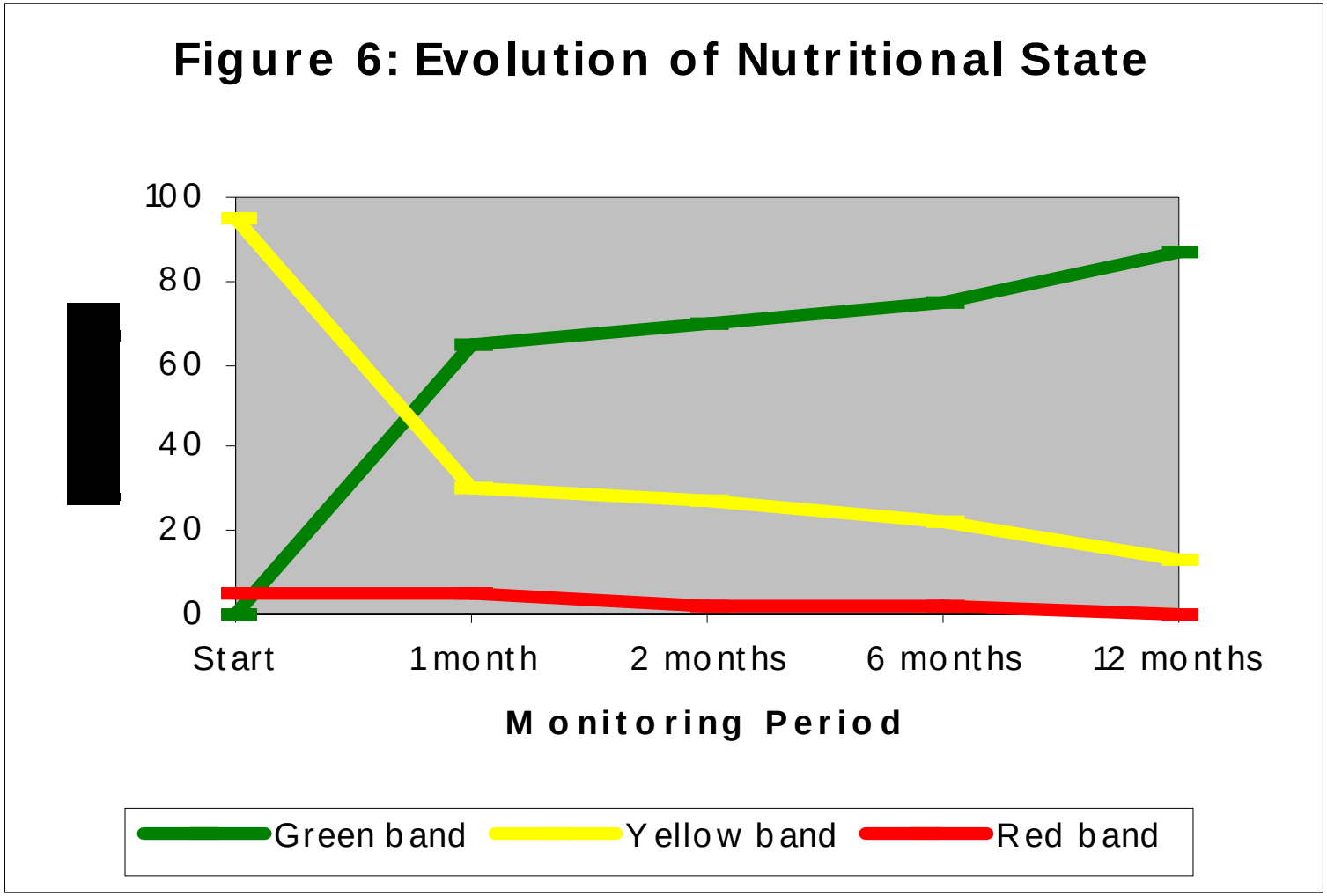
- At 6 months considerable improvement with most children being recorded in the green band
- Mothers reported being more able to deal with stigma: *"Since the death of my husband, I was victim of discrimination, the hearth allowed me to reintegrate the community, regain confidence in myself, and be aware of the importance of nutrition".*



Results-3

- At 1 year, 87% were entirely rehabilitated and recorded in the green band, while 13% had moderate malnutrition
- No more cases of severe malnutrition had been recorded after a year
- Families are also adopting other key behaviors including the use of pit latrines, hand washing at key times, immunization of their children, among others

Nutritional Evolution Over 1 Year



Discussion

- Differences between this asset-based approach, using mothers and locally available resources vs. traditional food distribution
- Builds on strength of African communities
- Shows that most children can effectively be rehabilitated with minimum costs to the family or caretakers

Conclusion

- PD Hearth model enables effective nutritional rehabilitation of vulnerable malnourished children, encourages valorisation of local food products, leads to behavioural changes at the community and household level, and reinforces social integration and revalorisation of children affected by HIV/AIDS and their caretakers
- Monitoring of the approach, however, is at beginning stages
- What are the additional criteria needed for selection and monitoring of orphans while ensuring that stigma is minimized within the community to increase better participation, communication and interventions?
- What other services can be provided in the context of PD Hearth (VCT, other forms of education)?
- What about orphans who are actually infected? Can PD Hearth be tailored to address their nutritional needs?

For additional information, please contact Africare at www.africare.org or 202-462-3614.