

Community Use of Local Foods to Address Moderate Malnutrition.



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Outline

- Overview of ASOTRY and TSIKONINA
- Goals of Tsikonina
- Project Approach
- Study Methods
- Results
- Conclusion
- Next Steps
- Key take aways





Malagasy homes



ASOTRY Overview

- ❑ ADRA, Land O' Lakes and AIM implements ASOTRY project in 32 communes in 10 districts in the Amoron'i Mania, Haute Matsiatra, and Atsimo Andrefana regions of Madagascar.
- ❑ **Objectives to:**
 1. Improve the state of health and nutrition of women of childbearing age and children less than five years.
 2. Increase access of households vulnerable to food.
 3. Improve the mitigation of the effects of disasters, preparedness and disaster response in vulnerable communities.



Madagascar Nutrition Statistics

- ❑ Among children under 5:
 - 53% stunted
 - 37% underweight
 - 15% wasted
- ❑ Average Household Size=5



Housing – Asotry area



Tsikonina Overview

- ❑ Improved health and nutrition of Women and Children U5
 - Sub purpose 1.1: Improved health nutrition behaviors of women and children 0-59 months.

- ❑ **Main approaches/activities:**
 - Care Groups
 - Growth Monitoring and Promotion
 - Promotion of quality, nutritious foods and “rainbow foods”
 - Cooking
 - Tsikonina



Tsikonina Overview

- ❑ Community-based approach to address moderate malnutrition in children 6-59 months.
- ❑ Based on Positive Deviance/Hearth model, ADRA implementation experience, adjusted to meet contextual needs.
- ❑ Find answers that already exist in the community.
- ❑ Equip community with tools to maintain children's health.
- ❑ Toward communities without malnourished children.

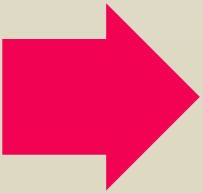


Tsikonina Overview



388 sites

Total number of Tsikonina programs implemented



2,853 children

Number of child beneficiaries of Tsikonina



Tsikonina Beneficiaries

Beneficiaries

- Children 6-59 months

- Women of reproductive age
 - primary caregivers (men included)



Key Players

CHVs

- Involved in every step; brought familiarity with community members and children

Field Agents

- Oversaw every step; brought understanding of Tsikonina program

Leader Mothers and Leader Fathers

- Implementation and follow-up; brought familiarity with community

Community Leaders

- Community mobilization and PDI; brought familiarity with community and respect



Approach

- Community Mobilization
- Positive Deviance Inquiry
- Preparation
- Implementation
- Follow-Up
- Reporting





Male Involvement



Photo: Sharon Tobing



Tsikonina Documentation

ADRA, after implementing Tsikonina, decided to assess the effective of the approach in terms of :

1. The effect of Tsikonina cooking and feeding session on weight for age in children 6 to 59 months of age in Madagascar?
2. The effect of the two cooking and feeding sessions training duration on caregiver's attendance?



Data collection and analysis

- 20 Tsikonina sites were selected for data collection and analysis.
- Data was collected for children (n=165) and caregivers (n=384)
- Data was analyzed using Excel and PASW 18 (SPSS software) and STATA .



Data Collection

- Quantitative data - child registers, and caregiver registers, follow-up records.

- Narrative reports completed by field workers after the completion of each Tsikonina session.

- Indicators:
 - Weight for Age z-scores.
 - Change in weight.
 - Caregiver attendance



Women preparing food for a Tsikonina session

Photo: Sharon Tobing



Results



Descriptive Statistics

Children (n=165)		n (%)
Age by group	6-11 months	38 (23)
	12-23 months	63 (38.2)
	24-59 months	64 (38.8)
Duration	6 days	104 (63)
	9 days	61 (37)
Gender	Male	76 (46.1)
	Female	89 (53.9)
Vaccination	BCG	111 (67.3)
	HIB	120 (72.7)
Vitamin A		101 (61.2)
Deworming		90 (54.5)
Sick		8(4.8)



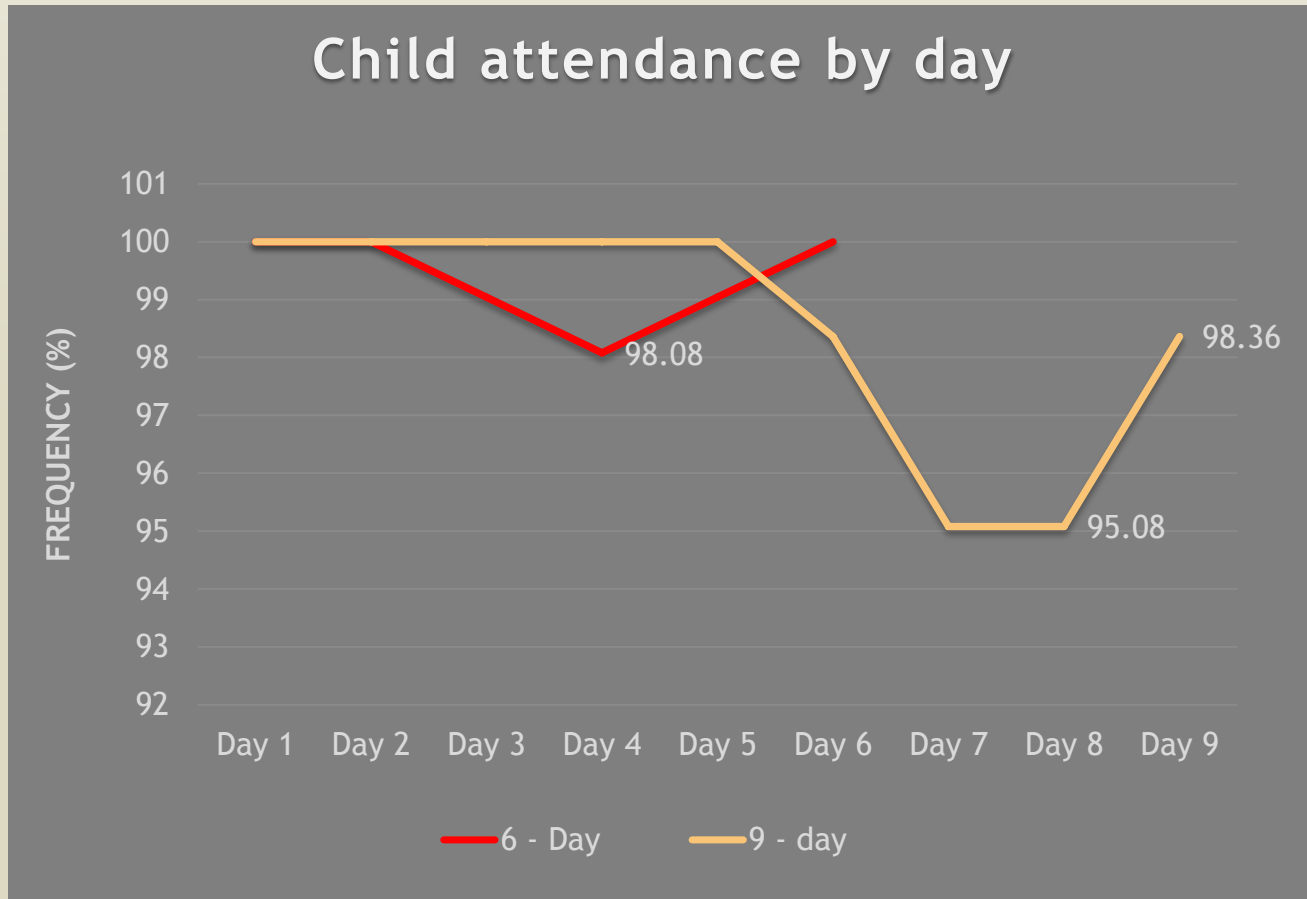
Descriptive Statistics

Caregivers (n=384)		n (%)
Gender	Male	56 (14.6)
	Female	212 (55.2)
Age	15-20	35 (9.1)
	21-30	105 (27.3)
	31-40	72 (18.8)
	41-50	23 (6.0)
	51+	24 (6.2)
Duration	6 days	258 (67.2)
	9 days	126 (32.8)

Caregivers (n=384)		n (%)
Education	None	71 (18.5)
	Primary	109 (28.4)
	Secondary	60 (15.6)
	Tertiary	14 (3.6)
Status	Pregnant	18 (4.7)
	Lactating	123 (32)
	Had child under 5	143 (37.2)
	Single/unmarried	28 (7.3)

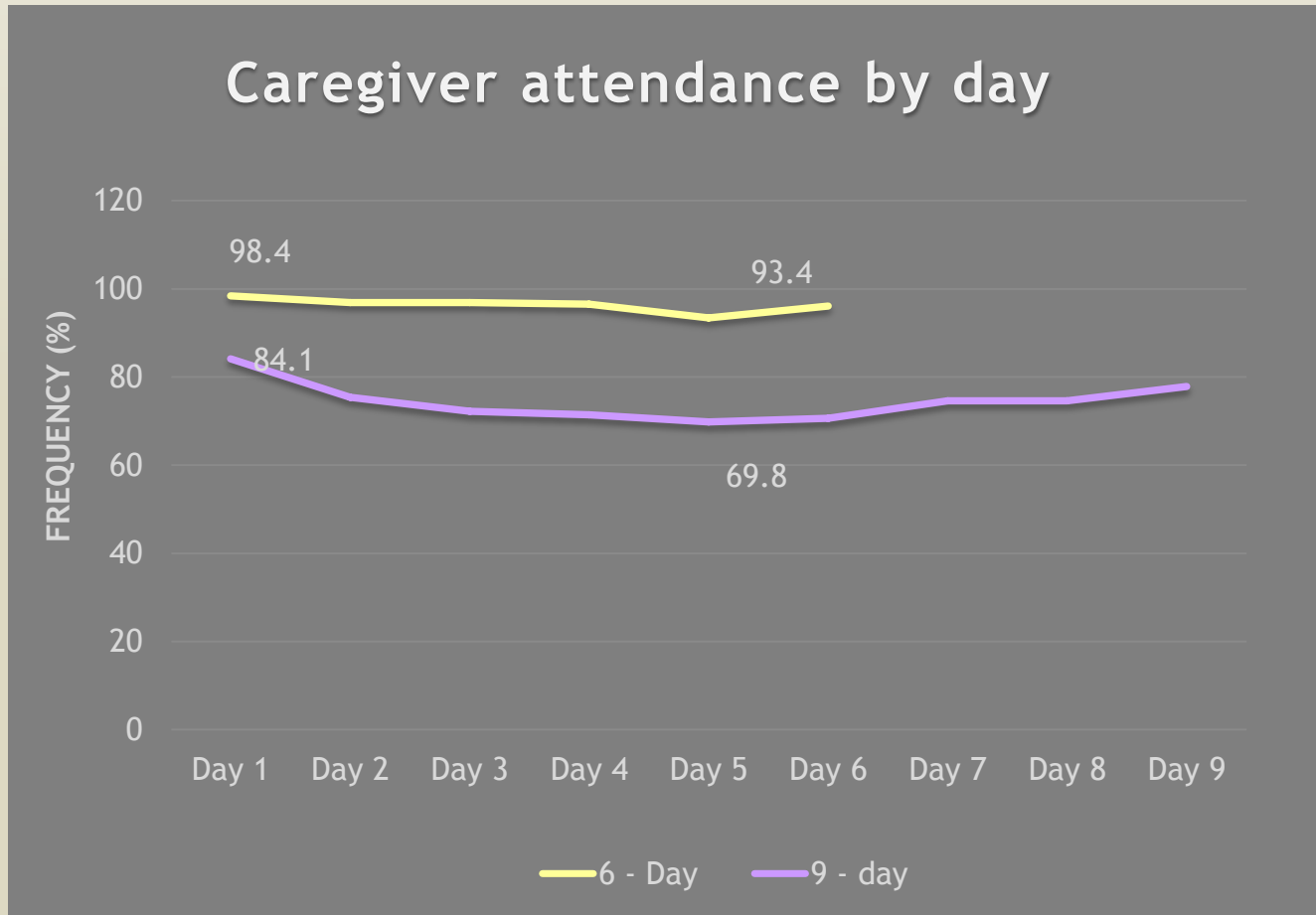


Child attendance rate





Obj. 1: Caregiver attendance rate



Weight Change



Weight Change	6-day session (n=104)	9-day session (n=61)	Z test (proportion)
	n (%)	n (%)	
400 grams +	68 (65.4)	49 (80.3**)	p=0.04
200-300 grams	24 (23.1)	10 (16.4)	p=0.282
100 grams	0 (0)	1 (1.6)	
No change	7 (6.7)	0 (0)	
Lost	5 (4.8)	1 (1.6)	



WFA proportion by session type

Session Type	Nutrition Status Day 1	Nutrition Status Day 12	% change
6 day			
% underweight	65.3	50.9	-14.4
9 day			
% underweight	78.7	62.2	-16.5
Test of Difference in proportion (z-test)			-2.1 (p=0.717)



Conclusion

- Tsikonina can influence significant weight gain in children underweight.
- Results suggest that lengthy feeding sessions may not be relevant for the Malagasy population.
- Child attendance rates had lows of 98% and 95% of the 6- and 9-day sessions, respectively.
- At the end of 12 days 65.4% of children in the 6-day session and 80.3% of children in the 9-day session were growing well(400g+ weight gain).



Tsikonina benefits

- Community ownership.
- All supplies and ingredients from village.
- Low program costs.
- Possible sustainability.





Key take-aways

- ❑ Tsikonina can relieve malnutrition where there are limited public treatment services within the community.
- ❑ The time needed to effect weight changes can be short and effective.
- ❑ Caregivers can be empowered to take charge of their children's nutrition status - choice, ownership, skills.



Photo: Sharon Tobing



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Any questions?

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