ECD Program
Baseline Report
Summary

February 2015

Homoine and Funhalouro Districts
Inhambane Province, Mozambique

Funded by The Hilton Foundation
Data collected April/May/August 2014

1. Background

The CARE ECD program

The CARE ECD Program is being implemented in two districts in the Inhambane Province. Homoine is a small, densely populated district with 107 475 inhabitants as of 2007. Consumption poverty rates are around 51% with the majority of the population living along the coastline and along transit routes with access to some good farmland relative to the rest of the province.

Funhalouro is a large, sparsely populated district with 44 320 inhabitants as of 2007. The area is prone to food insecurity and drought. With a consumption poverty rate above 69%, Funhalouro is one of the most vulnerable and impoverished areas of Inhambane. Because it is remote and the population dispersed there are few development interventions in Funhalouro.

The ECD program is an implementation science project because we are finding out how best to implement a home-based Early Childhood Development (ECD) intervention in these two different sites. This focus on implementation science means that a large part of the evaluation of the ECD project will include on-going qualitative research on which implementation strategies work best where and why.

The implementation strategy employed in the CARE ECD program is based on recent thinking around home-based ECD, especially on the importance of caregiver well-being in the development of children under-five. The widely accepted Essential Package developed by CARE, Save the Children and the Consultative Group on Early Childhood Care and Development and endorsed by the Mozambican Government informs the structure and content of the program.

On the ground, the CARE ECD program is based around a group of men and women selected by their village community who are trained by CARE to be “Masungukate - good advisors”. The Masungukate will visit the caregivers of children under-five in houses identified as vulnerable through participatory wealth ranking. The main aim of the visits is to provide support to the caregiver through listening, giving information and referral. The program will also encourage play through “play groups” in the homes of Masungukate.

The ECD program is linked to the PROSAN[1] intervention which runs in the same districts and villages and with the same households. The Masungukate will link caregivers to the PROSAN project and in this way improve nutrition outcomes for young children. We are particularly interested in how links to the PROSAN intervention improve outcomes for children under-five.

The research

The long-term impact aim of the program is to improve comprehensive developmental outcomes, as defined by the Essential Package, for children under-five. The aim of the research into the program is to evaluate program impact through nested quantitative and qualitative studies with the ultimate objectives of:

> i) Assessing whether the ECD program improves child development and nutritional outcomes and, if improvements do occur,

[1]Programma de Seguranca Alimentar e Nutricional, funded by Irish Aid from December 2012 through December 2017.

ii) What program components contributed significantly to that impact in the different environments? These components include nutrition, social accountability and ECD interventions. This is the implementation science aspect of the project.

The design is a before-after and also a project-control study using independent samples in intervention and control areas. A mixed methods research approach (i.e. qualitative and quantitative research methods) is being used. This approach will allow us to identify significance of difference between groups and over time, as well as a deep understanding of how the program components have worked for different categories of people and contexts, in particular in Funhalouro as opposed to Homoine. This gives important insight for future program development.

The program components include nutrition (PROSAN), ECD and social accountability. The comparison groups are thus:

- PROSAN only
- ECD + PROSAN
- ECD + social accountability + PROSAN

Note: PROSAN is working with all of the households in the ECD program, so an "ECD only" option does not exist (and is considered unethical).

In each of these groups a sample of households was enrolled at baseline and a second independent sample will be enrolled at endline. Impacts will be assessed by comparing differences between samples at base- and endline. Outcome variables will include broad measures of child development (based on the Essential Package ECD indicators) and anthropometric measurements. The research design also allows us to investigate the impact of a nutrition component (PROSAN).

Predictors of outcome will be assessed by means of a multivariate analysis including, location (district) and type of program participation. The indicators for the evaluation fall into the three categories outlined in the Essential Package (EP):

- Caregiver status
- Child status
- Caregiving environment.

A note about Phase One

This report is a summary of the baseline findings at the start of the program in mid 2014. The first phase of the project funding will end in early 2016 when we will conduct an "endline" for this tranche of funding. Given that the implementation will have taken place for less than two years in some areas at the beginning of 2016 we do not anticipate finding many impacts in relation to the child development indicators we have chosen to use. We do, however, feel that it is important to have gathered the data at baseline as we anticipate further funding and a continuation of the program so we will be able to use the baseline data reported on here as comparison data after at least four or even five years of intervention when we should be able to see impact. We also hope to already see at least a change in knowledge, attitude and practice of caregivers. Our "endline" data gathering in 2016 will then become "midline" data.

Much of our focus for the 2016 reporting, therefore, will be based on qualitative work we have done to look at behavior change and what aspects of the program have contributed to this with a focus on lessons learned about implementation.

2. Findings

Caregivers

General findings about caregivers

- The baseline identified a significant number of grandmothers (8.3% in Funhalouro and 19.4% in Homoine) as caregivers of young children. This group of caregivers is more vulnerable and requires more support. Young mothers (under 25) are another vulnerable group of caregivers we have identified.

- The majority of caregivers we are working with are not literate (49.5% in Funhalouro and 34.1% in Homoine have no formal schooling). It has important implications for the way the project staff and partners and Masungukate interact with them.

What does this mean for program implementation?

i) What these findings suggest is that we need to look at **training Masungukate how to adapt their support to caregivers of different ages**. To do this they will need training on the particular needs and vulnerabilities of young and elderly caregivers and we may need to look at better matching Masungukate with caregivers based on age.

ii) Our **educational approach needs to make use of visual materials and performance** approaches such as role-play for educating caregivers.

Social support networks, support and community trust

- Generally, caregivers have few trusted adults with whom they can share problems of a more personal nature. Social support from neighbors for personal issues such as lack of food or anxiety and depression is also lacking. This exacerbates the emotional stress they experience. Many caregivers reported feeling alone and without support.

What does this mean for program implementation?

i) The Masungukate supportive home visiting model we have adopted seems to be a good response to this issue. We need to continually emphasize to the ECD facilitators from the local partners who are mentoring the Masungukate how important this aspect of our program is. The **Masungukate need to become the trusted adults that caregivers do not have at present**. Research suggests that this should have an impact on child well-being.

Caregiver emotional stress

- Caregivers generally have high levels of emotional stress, as measured on a WHO emotional well-being scale. 40.4% in Funhalouro and 39.8% in Homoine have a high likelihood of suffering from emotional stress such as depression or anxiety. Of these, 25% (Funhalouro) and 17.3% (Homoine) are extremely emotionally stressed.

- Caregivers identify sole responsibility for the children without support from husbands and not having access to good food in spite of knowing about their children's nutritional needs as major causes of stress.

- Another issue that causes caregivers' stress is the lack of basic services in their home areas especially access to water and health services.

What does this mean for program implementation?

i) Having access to the Masungukate to talk to should help. But to optimize our input at the level of emotional stress we need to look carefully at how often a Masungukate can visit a caregiver in her home. Research suggests (Dawes and Biersteker 2012) that the minimum if emotional stress is to be reduced is once a week. The number of households a Masungukate is responsible for may preclude this. We need to consider a way of **identifying those caregivers who are especially at risk and prioritize support to them**. One way to do this may be to conduct a simple survey to find out how many caregivers are alone at home (because their husbands have migrated or are dead). This will not mean we reach all caregivers who feel alone as some husbands who are at home still leave all the responsibility for children to their wives. But it is one way of identifying **some** of the women who may be at particular risk.

ii) In relation to nutrition and powerlessness it is very important to **emphasize the crucial role that the partnership between the ECD project and the PROSAN project plays in improving caregiver well-being**. If caregivers can access some kind of livelihood support, especially in the area of feeding their children, this can go a long way to improving their mental health. The importance of the partnership must be central to the implementation of the ECD and PROSAN projects. If this partnership fails it may impact on the results of the ECD project significantly.

iii) The issue of helplessness related to access to basic services issues is more difficult to address within the ECD project itself. What can be done is **local advocacy where the Masungukate communicate the everyday difficulties women face and the burden this places on them to local leaders**. It may also be possible to link Masungukate with the Conselhos Consultativos Locais that exist at all decentralized levels, from village up to district. These are statutory bodies whose mandate is to hear issues of the community to ensure they are integrated into the district development plans. Local partner organizations should also be encouraged to do advocacy work around this issue at provincial level.

Child status

Documentation – birth registration

Most children are not registered (67.43% in Funhalouro and 68.72% in Homoine) , possibly because of the distances between the villages and the registration centers, or the perceived unimportance of doing so.

What does this mean for program implementation?

i) We need to **make sure Masungukate understand why birth registration is important**.

ii) Masungukate should focus on **encouraging families to register the child at birth** if possible.

ii) It may also be worth doing **more research on the cultural practices related to the naming of a child** so we can understand why and if this is a barrier to registration.

iii) The issue of distance to the registration center could be a barrier that the ECD program could help caregivers overcome. One simple intervention would be **a mobile birth registration project** in each of the villages in which we work building on experience of the Flatley ECD project for example.

Under-5 health card, immunizations

- It seems that this is an area of positive behavior for most caregivers. Many do have

Under-5 cards (89.1%) and most have been immunized (78.4%in Funhalouro and 81.3% in Homoine).

- The focus needs to be on those that do not have cards and have not been immunized. Even though this is a small number they are particularly vulnerable.

What does this mean for program implementation?
i) Regular checking of the Under-5 Health Card and immunization status should be a regular part of the Masungukate visits to make sure caregivers take the child to the nearest clinic as soon as possible.

ii) Masungukate training needs to include information on how important it is to support caregivers who do NOT have the Under-5 health card and whose children have not been immunized. We need to discuss with local partners who support Masungukate how the Masungukate can keep track of this process in a non-punitive way with the caregivers.

Diet and access to food

- Worrying about lack of food is one of the main causes of emotional stress for caregivers. And the caregivers have cause to worry. The Childhood Dietary Diversity Score (CDDS) shows very low diversity of food in the diet of under-fives in both districts, though Funhalouro is worse.

Dietary diversity: Percentages table

	Grain	Starch	Green leaves	Other veg.	Orange veg.	Mango, papaya	Meat	Eggs	Fish	Leg., nuts	Dairy	Oil, fat
F	87.61	22.94	62.39	10.09	2.75	15.14	9.63	1.83	4.13	70.18	5.50	17.89
H	85.07	49.05	66.82	11.61	7.11	42.65	5.92	1.66	11.37	69.43	2.61	24.41

- In addition, the fact that the PROSAN baseline shows that 1 in 4 children were eating only two meals a day is extremely worrying, especially for children under-five who need frequent, small meals for optimum growth.

- Qualitative data suggests that the giving of traditional medicines is a common practice

What does this mean for program implementation?
i) The partnership between the ECD project and PROSAN livelihood projects will be an important way of increasing access to a more diverse diet for children (and indeed entire households) and needs to be a priority for the households in which we work.

ii) Broadening the child's diet within the constraints of poverty (e.g. making sure toddlers get access to pumpkin and beans when they are available) and the use of alternative nutritious foods (such as Moringa powder) also need to be a focus of the discussions Masungukate have with caregivers.

iii) Further research into the types of traditional medicines and when they are to be given to babies is needed if Masungukate are to deliver a targeted educational message around this issue.

Growth

- Overall, we find that 41.35% of children in our sample are height stunted.

- 8.24% of children in our sample are underweight.

Our figures (8.24% and 41.35% at 2 standard deviations below the norms for weight and height respectively) closely match WHO data for all of Mozambique (WHO Global database on child growth and malnutrition, July 2013) and for Inhambane Province, which has figures for 2011 of 7.1% and 36.8% (weight and height, respectively).

It is worth pointing out that we will not be able in the timeline for the present ECD program funding to impact on height and weight (children need some years of good nutrition before the impact is seen in growth statistics), but we can aim to increase dietary diversity for children. Because of the close correlation of our data we can use dietary diversity as a good proxy of children's growth.

What does this mean for program implementation?
i) What this points to is the need to emphasize diversity in children's diets in our educational work with caregivers. Caregivers need help in identifying cheap sources of protein and ways of introducing new easily accessible foods into their children's diets.

ii) This data also points to how important it is to link caregivers to the PROSAN program if we are to improve the lives of young children in our project areas.

Caregiving environment

Mosquito nets

Most caregivers reported when answering the questionnaire that they used nets (65.60% Funhalouro and 80.57% Homoine) but we know from observation that this is not always the case and we should also be concerned about the 34.40% in Funhalouro and 19.43% in Homoine who do not use nets.

What does this mean for program implementation?
It may be useful to explore in further focus groups discussions why mosquito nets are not used in some households and if use is as high as caregivers say it is. This discussion would need to explore caregivers' perceptions of the value and effectiveness of nets.

Stimulation

- Most caregivers indicated when answering the questionnaire that their children do have things to play with and that someone plays with them. 61.7% of caregivers said they provide their children with play materials. This included pots, sticks and toys; anything that the child can play with. The splits are 58.7% and 63.3% in Funhalouro and Homoine, respectively.

- The qualitative data seems to suggest that the caregivers are not the ones who play with the children. It is most likely older siblings who play with the under-fives. The qualitative data also seems to suggest that this is largely due to the amount of time that caregivers spend working in the fields and gathering wood and water – there is little time to play with children.

- Only 22,3% of children had stories told or read to them and only about 50% of caregivers report singing songs to their young children.

Acceptance

- The qualitative research suggests that shouting and beating are the most common ways of disciplining young children.

- What is a significant finding is that there are caregivers who use positive discipline strategies.

Responsivity

- The quantitative (77.8% were observed showing affection to their children during the household interview) and qualitative findings also seem to suggest that most caregivers show affection to their young children.

What does this mean for program implementation?

i) There is a need to help caregivers understand why play is important for child development. This education should be a core part of what Masungukate talk about in their home visits as well as what they role model.

ii) Caregivers need to understand that language and cognitive stimulation do not need literacy on the part of caregivers. Building caregivers' confidence in their ability to 'teach' children, whether they are educated or not, is key.

iii) Another important thing is to show how play can be integrated into a caregiver's workday; it does not have to be a separate activity taking the caregiver away from essential work for survival.

iv) Masungukate need to understand what positive discipline is and why it is important for young children's development. This should be a focus of Masungukate discussion and role modeling. It is important for Masungukate to understand that their own behavior with their own children is a powerful role model for beginning to change the cultural norms around punitive discipline.

v) Masungukate need to find ways of identifying these caregivers who do not beat and shout at their children and find ways of making them role models.

vi) Masungukate must praise caregivers for the ways they show affection to their young children. It is an important principle to keep reminding Masungukate that most caregivers love and wish the best for their children – this prevents a culture of blame from entering the dialogue between Masungukate and caregiver – something we want to avoid at all costs.

Safe and hazard-free home environment

- Most homes in both areas scored low results on the hygiene and safety checklist. These results suggest that many homes are not safe places for young children.

- The qualitative research reveals that some of the communities face problems accessing clean water but behavior such as using clean water containers are in the control of caregivers. It may be useful for Masungukate to look at the issue of "what is in our power as caregivers to change and what isn't" and work with caregivers on aspects they can change.

What does this mean for program implementation?

I) Improving health and safety around the home is something achievable for most caregivers. The ECD program could make a real difference to young children's lives if the Masungukate focus on this aspect of child caring.

3. Recommendations

The recommendations have been structured under headings that will allow them to be integrated into an implementation plan.

Training

- Masungukate have had training to emphasize that they are to be the “trusted adults” that caregivers lack in their community but the role they need to play in providing psychosocial support to caregivers needs to be continually emphasized in any training interactions.
- Training is needed on the differing needs of caregivers of different ages, particularly on the needs of young and elderly caregivers.
- Training on how to broaden a young child’s diet within the constraints of poverty has been given but this needs to be continually emphasized.
- Training to help Masungukate explain why play, song and storytelling are important for child development is important. We also need to help Masungukate role-model this.
- Caregivers need to understand that language and cognitive stimulation do not need literacy on the part of caregivers. Building caregivers' confidence in their ability to ‘teach’ children, whether they are educated or not, is key. A module in the Masungukate training on how people learn and learned things outside school both in the past and present day would be a useful thing. It would be important to develop this module with the Masungukate themselves.
- Another important thing is to show how play can be integrated into a caregiver’s workday; it does not have to be a separate activity taking the caregiver away from essential work for survival.
- It is important that Masungukate to understand what positive discipline is and why it is important for young children’s development.
- The quantitative and qualitative findings seem to suggest that most caregivers show affection to their young children. This should be the focus of praise by Masungukate. It is an important principle to keep reminding Masungukate that most caregivers love and wish the best for their children – this prevents a culture of blame from entering the dialogue between Masungukate and caregiver – something we want to avoid at all costs.
- Short modules with illustrations on the above points to include in the regular Masungukate learning circle meetings need to be developed.

Research

Understanding more about the following topics would help in the development of clear messages for caregivers, this research could be done by project staff:

- Why are mosquito nets NOT used?
- What traditional medicines are supposed to be given to babies and when should they be administered. What is their real impact on children’s health and nutrition?
- Identification of caregivers who DO use positive discipline and a discussion on how to use them as a role model in the community
- What traditional singing and storytelling exist and why caregivers are not singing and telling stories more often to young children?
- What is the form and impact of the name giving ceremony on birth registration and what are other potential barriers to birth registration?

Program implementation
The following are some specific implementation actions that need to be taken:

- Develop a system for identifying and monitoring those children who do NOT have an Under-5 Health Card and regular immunization.
- The results suggest that the ECD program could make a real difference to young children's lives if the Masungukate focus on creating a safe and hazard free home environment. The qualitative research reveals that some of the communities face problems accessing clean water but behavior such as using clean water containers are in the control of caregivers. It may be useful for Masungukate to look at the issue of "what is in our power as caregivers to change and what isn't" and work with caregivers on aspects they can change.
- Keep focusing on the importance of caregivers joining PROSAN projects.
- Make sure Masungukate keep encouraging dietary diversity with what food is presently readily available in the two program areas. Linked to this is the need to make sure Masungukate understand why and how height stunting occurs and are able to identify children who could be height stunted.
- Implement some local advocacy with Masungukate and local leaders around water services.
- Organize mobile birth registration units to visit all project sites
- Organize a focus month for all Masungukate to educate and role model the creation of a safe and hazard-free home environment.