# Table of Contents

INTRODUCTION ......................................................................................................................... 3

METHODOLOGY .......................................................................................................................... 4
  Study population ......................................................................................................................... 4
  Sample Size ............................................................................................................................... 4
  Data collection tools ................................................................................................................. 6

RESULTS AND DISCUSSION .................................................................................................... 6
  School survey ......................................................................................................................... 6
    Enrolment ................................................................................................................................. 7
    Attendance ............................................................................................................................... 7
    Drop Out ................................................................................................................................. 7
    Food Preference ..................................................................................................................... 7
      Taste ....................................................................................................................................... 7
      Smell ..................................................................................................................................... 8
      Colour ................................................................................................................................... 8
      Food combination .................................................................................................................. 8
      Choice of food ....................................................................................................................... 8
  Farmer survey ........................................................................................................................... 8
    Preliminary Results .................................................................................................................. 9
      Knowledge of the HGSF Programme ...................................................................................... 9
      Production and productivity .................................................................................................. 10
      Income ................................................................................................................................... 10
  Parents Survey ........................................................................................................................... 11
    Preliminary findings ................................................................................................................ 11
      Awareness of the HGSF Programme ...................................................................................... 11
      HGSF Programme support .................................................................................................. 11

CONCLUSION AND RECOMMENDATIONS .............................................................................. 12
INTRODUCTION

The Revolutionary Government of Zanzibar illustrated commitment to developing and implementing a Home Grown School Feeding (HGSF) pilot programme as an effective means of improving the human capital on the island for the long-term development of all Zanzibaris. The Government of Zanzibar recognizes the key role of school feeding and improving child nutrition generally through Growth and Poverty Reduction policy, Food Security and Nutrition policy and Education Policy. The desire for home grown school feeding is also illustrated by the drive from within the ministries of education, health and agriculture for this, and the willingness of a programme to fit within the innovative food security and nutrition policy framework and act. The Government of Zanzibar has recently passed a Food Security and Nutrition Act putting into law the rights of the Zanzibar people to good levels of food and Nutrition.

The government of Zanzibar through the ministry of Education and in collaboration with the Ministry of Health and Agriculture spearhead the implementation of the home grown school feeding programme. This programme was flagged off in May, with funding from Table for two International(TfT) through the Partnership for Child Development (PCD).

The programme objectives include:

1. Improving enrolment, retention, and educational attainment and life skills of preprimary/primary school children.
2. To improve family feeding practices and promote children nutrition and health status;
3. To increase agriculture production, productivity and income of small-scale farmers.

As part of the programme activities, PCD supported the Zanzibar government to carry out a midterm review to measure the extent to which the programme has contributed to achieving its objectives.

The survey research questions were;

1. What are the changes in enrolment, drop out and attendance in the target schools?
2. What is the children’s food preference?
3. How are smallholder farmers benefiting from this programme so far?
4. What are the parent’s views about the programme?
Respondents for the survey were parents of children attending the target schools, small scale farmers that supply food commodities to the target schools, and school children from the upper primary classes. Key Informant interviews were conducted with key players within the ministry of Education and Agriculture. Focused group discussions with the school parents’ teachers’ association (PTA) were also conducted.

**METHODOLOGY**

This section presents the methodological and research approaches that were used to collect required information from respondents for the survey. It also includes the nature of sample, sampling procedures, types of data, data analysis and analysis tools and techniques used in the study.

*Study population:*
Zanzibar has a total of 329 shehia (communities). These are the smallest units of administration. 118 shehia are in Pemba and 211 are in Unguja Island. Out of these, 26 shehia are located in Micheweni while 36 shehia are in North A’ district. Home Grown school feeding is implemented in ten shehias, five shehias from each of the two districts.

*Sample Size:*
Five schools out of the ten that are targeted for the HGSF were purposively selected for the review. A hundred children were sampled proportionately using a systematic simple random sampling technique from the five schools. Five parents and two cooks from each of the schools were sampled based on availability. Thirty-five farmers that have been supplying food to the schools for the last three years were randomly selected from both Pemba and Unguja Islands to participate in the study.

Table 1 below shows the distribution of the respondents.
<table>
<thead>
<tr>
<th>Respondents</th>
<th>Sampling frame</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Children</strong></td>
<td>• Mfurumatonga</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>• Kijini</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>• Kidagoni</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>• Mgogoni</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>• Mkia wa ngombe</td>
<td>10</td>
</tr>
<tr>
<td><strong>Farmers</strong></td>
<td><strong>Unguja</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Tutaharakiwa</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>• Jiendeleze na maisha</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>• Jitenge na umaskini</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>• JUWA</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td><strong>Pemba</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• SubiraMgogoni</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Umoja ni nguvu</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Tusaidiane</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>• Tushilamane</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Parents</strong></td>
<td><strong>Mfurumataonga</strong></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>• Kijini</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>• Kidagoni</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>• Mgogoni</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>• Mkia wa ngombe</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
Data collection tools:
Structured questionnaires were used for the purposes of gathering data from the school children, parents, and farmers. Focus Group discussion guide was used to get information from the parents’ teachers association (PTA) and an in depth interview guide from the key informants.

RESULTS AND DISCUSSION
School survey

The survey sought to:

a) Determine enrolment in the target schools
b) Establish the drop out cases at the schools
c) Determine attendance at the schools.
d) Assess the food preference for the school children

A monthly reporting tool was used to compile data on enrolment, drop out and attendance. The data was compared with previous data to measure the changes. A food preference questionnaire was used to collect data from the school children. Upper classes (iv-vi) were selected because they were assumed to understand the questions and respond more accurately. They also have been in the programme for the longest time.
Results of the survey indicated almost equal enrolment rates of 49.9% and 50.1% for the boys and girls respectively. The average attendance for the children was 84.3%. A total of 76 cases of school dropout were recorded in 2013. 36 dropouts were recorded in the first term of 2014.

**Enrolment:**
There is a notable increase in the enrolment figures across the three years of programme implementation. At the beginning of academic year 2016, the programme had a total of 5,069 children enrolled in the nine target schools. This number has continued to increase, with end of year 2017 school population recorded as 5,376 children, equating to a 6% increase for 2016. Before the programme increased the number of target schools in September 2018, the total number of children across the nine schools was at 6338 and has since then increased to 6498 translating to a 21% increase.

**Attendance:**
At baseline, the average attendance was 84.3%. There has been a trend of increased attendance since the programme was rolled out at the target schools in 2015. The average attendance has improved from 87.55 in 2017 to 91.46 from 2017 to 2018.

**Drop Out:**
At baseline there was a total of 76 cases of school dropout across the nine targets schools. Of these, 34 were male and 42 were female. Furthermore, in the first term of 2014, about 36 school dropout cases were reported. Of these, 23 were boys and 13 were female. During the midterm review, there were no drop out cases reported across the HGSF programme target schools.

**Food Preference:**
This questionnaire sought to understand the children’s food preference. The questionnaires listed locally available food and food combinations that children were expected to rank based on the taste, texture, colour and smell.

**Taste**
Majority (74%) of the children liked the taste of rice. 72% liked the taste of beans. 66% Orange Fleshed Sweet and 65% of the children liked the taste of sorghum and cowpeas porridge. From
the current food basket, this review shows that children prefer the taste of OFSP to the sorghum and cowpeas porridge.

Smell
The highest percentage of children (67%) liked the smell of rice. 65% liked the smell of beans. 60.4% liked the smell of OFSP and 49% Cowpeas and Sorghum porridge. From the food basket there’s a clear indication that children prefer the smell of OFSP.

Colour
68.3% of children liked the colour of rice. 67% liked the colour of OFSP. Colour of Fish(dagaa) (48.5%), sembe (48.5%), and Colour of Beans (61.4%).

Food combination
Majority of the children (50.7%) ranked a combination of rice and beans. A significant percentage (44.8%) preferred OFSP and dagaa, 42.9% OFSP and beans, OFSP and vegetables 37.8% while 26.9% liked sorghum and cowpeas combination.

Choice of food
When asked what affects them most when choosing a food type, 67.7% of the children stated that the taste of food affects them. 23.2% are affected by smell, 2% by texture and 7.1% by colour.

Children generally preferred rice most, then beans then OFSP and finally the Cowpea and sorghum porridge. The results indicate that although children like the current food menu offered by the HGSF programme, majority would prefer an alternative menu.

Farmer survey

Respondents of the farmer survey were randomly selected from the list of farmers that supply food commodities to the target schools. These farmers were engaged in the production of the HGSF programme food items particularly, cowpeas, sorghum, fruits and vegetables. A total of 20 respondent farmers were randomly selected and interviewed in the two districts of North A and North B in Unguja Island. 15 respondents were randomly selected in Micheweni district. The total number of farmers interviewed was 35.
The farmer survey’s objective was to establish if farmers are benefiting from the programme and identify changes in living conditions that could be linked to the programme.

**Preliminary Results:**
The farmers interviewed were of equal gender where both male and female were 50%. Most of the farmers married 79.4% while the least were divorced 2.9%. Most of farmers’ highest level of education was secondary 44.1% while the least was tertiary 2.9%.

**Knowledge of the HGSF Programme:**
It is expected that the procurement process for the HGSF is transparent. Fifty percent of the farmers ranked the procurement process to be very good. Reasons that made the process very good include timely payments and involving farmers at all stages. 8.8% of farmers however thought that the payment is not made on time. This calls for the programme supervisors including the ministry of Education to look at the few instances that payments delay and improve.

This review sought to understand if the current food basket has the best according to the farmers’ perspective. 52.9% of farmers indicated the advantages of including the above foods in school menu is that they were readily available, drought resistance (29.4%), cheap (8.8%), nutritious (82.4%), easy to prepare (35.3%) and indigenous acceptable taste (27%). From the results, farmers appreciate that the food served at schools by the programme is nutritious and it is readily available.

This review sought to find out what other food items could be served at the schools and what reasons farmers would recommend the items. The highest percentage of farmers (73.5% and 58.8%) responded that fruits and vegetables should be included in the food basket respectively. Other recommendations included fish (11.8%), beans (8.8%), sembe (2.9%), rice (2.9%), banana (14.7%) and cassava (5.9%).

Reasons that farmers listed for recommending the above foods in school menu were that they were more readily available (44.1%), drought resistance (17.6%), cheaper (14.7%), more nutritious (94.1%), easy to prepare (20.6%), available all the time (64.7%) and indigenous acceptable taste (41.2%).
Production and productivity:

At baseline majority of the farmers (59%) had a freehold land tenure system but without Certificates of Ownership. 29% carried out their farming activities on communal land (without Title deeds).

The Kgs on average of sorghum that the farmers were producing per year before the school feeding programme started was majorly 101 to 500 Kgs (41.9%). Midterm review showed that the greatest percentage of farmers now produce 501 to 1000 Kgs (35.5%), and only 19.4% produce the range of 101 to 500 Kgs. At baseline, most of the farmers sold their Orange sweet potatoes immediately after harvest. Currently the quantity supplied to schools was above 1000 Kgs (72.7%).

At baseline, nearly half of the household farmer respondents (47%) had never received any training on good agricultural practices. The mid-term review indicated 73.5% of the farmers have received training on improved farming methods while 26.5% had never received training.

PCD in collaboration with the ministry of agriculture and other partners has trained farmers on farming practices and specifically on farming OSFP which was a new concept in Zanzibar.

A great percentage of farmers (84.8%) indicated they have applied the technology that they were trained on. The review sought to confirm how many farmers benefited from these trainings.

82.4% of farmers indicated that their productivity has improved in the last three years. All farmers linked the increased production to the availability of ready markets and improved knowledge on farming practices. The farmers indicated that before the school feeding market, they were selling to Local market, Middlemen/Brokers and Household consumption.

Income:

To gauge changes in income and livelihood of the small holder farmers, the review assessed ownership of the farmers houses and how long they have lived in these houses and linked that to the programme. 85.3% of farmers indicated that they owned the houses they lived in now and that they built them using the money from selling to food items to schools. 64.5% of the
farmers indicated they have stayed in the house for less than 2 years (64.7%) this confirmed that the houses were built after the programme inception.

Parents Survey

The objective of this survey was to establish parent’s views on the implementation design, the food basket and levels of involvement in the HGSF programme.

Preliminary findings:
Twenty-five parents formed a representative sample for this study. 57.6% of the parents interviewed were male. Most of parents were married The highest level of education was secondary school.

Awareness of the HGSF Programme:
All the parents confirmed that they are aware of the HGSF programme in the schools. The assess the parent’s perspective on the programme, they were asked if they thought the programme had any outcomes. 100% of the parents stated that the programme does have outcomes. 89.5% listed improved nutrition, 92.9% improved attendance, 83.3% reduced drop outs, 100% improved performance, and 92.9% improved health status as the perceived outcomes.

A big percentage (60%) of parents thought it’s the responsibility of the government to feed children at schools. 20% thought NGOs should be responsible ,20% said that it’s the community’s responsibility while 33.3% said parents should feed children at schools. All parents however said it is a joint responsibility for government and NGOs,

HGSF Programme support:
At baseline, parents committed to supporting the HGSF programme. They indicated their support will be preparing meals (50.0%), collecting firewood (92.3%), sorting/ cleaning grains (20.0%), financial contribution for kitchen/store construction (57.1%), donating of vegetables/fruits (20.0%), helping at the school garden (100.0%) and in-kind contribution e.g.
build the kitchen (100. 0%). The review found out that most parents (84.2%) support school the feeding programme. 15.8% do not offer any support. 37 % of them contribute cash. Other forms of contributions were cooking (28%), sorting or cleaning the delivered food (21%), supplying food (1%). Although most parents committed to collecting firewood, most parents now contribute money to support building the school kitchens instead, the other bigger percentage cook at the school.

CONCLUSION AND RECOMMENDATIONS

School Outcomes
There is notable improvement across all areas of the school feeding programme. Teachers, parents and government representatives link the improvements to the school feeding.

Food Preference
Nutrition, culturally acceptable and availability of food items are key considerations in selecting any food item to be included in a school feeding program that seeks to source food locally. While the children preferred the taste, texture, colour and smell of rice, most farmers on the other hand did not recommend the same for a food basket. The farmers might not consider rice very nutritious and or readily available. Rice and beans is the combination that most children would prefer. There is therefore a need to review the nutritional values of rice and beans and the cost of the same to make a decision if it can be served in Zanzibar schools. Fruits and vegetables have been recommended highly. The programme provided fruits and vegetables in the pilot phase. The expectation was that local community and schools would take over the provision of the same as a first step to sustainability

Farmers and parents
There is still need for continuous training on proper farming practices for farmers who are new to the programme. Parents have so far provided a lot of support, however more advocacy will be needed to gather more support and especially from parents who are also farmers.