Food and Agriculture Organization of the United Nations

Initiative on Soaring Food Prices

Southern Africa Regional Synthesis Report:

Beneficiary Satisfaction and Impact Assessment of National Input Supply TCPs

FAO Subregional Office for Southern Africa
Harare, Zimbabwe

June 2010

The Regional Synthesis was based on national evaluation reports from Angola, Lesotho, Madagascar, Malawi, Swaziland, Tanzania and Zambia, which were carried out by **independent consultants**[1], even though the primary data collected for Mauritius and Seychelles were not finalized by the time this report was concluded, preliminary findings and document review of progress reports from these countries were incorporated in this report. Primary data for Madagascar was not collected in the same format as all the other countries and therefore is not included in this report. This regional synthesis therefore covers Angola, Lesotho, Madagascar, Malawi, Mauritius, Swaziland, Seychelles, Tanzania and Zambia. Irrespective that these countries are in different geographical regions, this report refers to the regional analyses covering the southern **African** region.

Independent consultants led the key informative interviews, which included household data collection, key informant interviews with input suppliers and implementing agencies, data entry, national data analyses, conducted qualitative data collection and wrote up the national reports. A validation workshop was also held that was attended by these consultants including those from Seychelles, Madagascar and Mauritius. Detailed reference on authors is included in the reference section.

The Regional Synthesis was written by **Ms Leila Oliveira** (Regional Synthesis Consultant), who provided advice on the design of the study, supported the training of independent consultants, carried out further analyses on primary collected data and wrote this report. **Ms Laura Lopez** drafted the executive summary and **Ms. Claudia Perez** edited the grammar of the report.

Ms. Perpetua KatepaKalala (FAO Sub-Regional Office for southern Africa – Senior Policy Officer) provided overall guidance for the studies. **Mr. Gregory Chilufya** (Consultant – Regional ISFP Coordinator for Sub-Regional TCP project) played a major role on the design, organization and coordination of all impact assessment national evaluation and regional synthesis. **Mr. Gregory** also edited the report for content and provided priceless inputs in all sections.

At Headquarters level, **Mr. Takashi Takahatake** (FAO Rome – Programme Officer) led and supervised the global evaluations and provided most inputs on design and analyses of the TCP projects in southern Africa. **Mr. Luis Dias Pereira** (FAO Rome) and **Mr. Faiq Chahin** (FAO Rome) also gave overall guidance and valuable comments and editions to southern Africa evaluations.

The FAO Sub Regional Emergency Office for southern Africa Coordination, through **Ms. Cindy Holleman** (FAO Sub-Regional Emergency Coordinator) and **Mr. Per Spolander** (Disaster Risk Reduction Regional Officer) gave valuable comments to this report.

Finally, 1,201 households spared their valuable time to answer our questions.

[1] Independent consultants include: Calinengue, Ermelinda (Angola); Mkamanga, Gilbert (Malawi); Mokitimi, None (Lesotho); Mondlane, Sibusiso (Swaziland); Nakaponda, Bethel (Zambia); Moses Maro (Tanzania).

TABLE OF CONTENTS

LIST OF TABLES

LIST OF GRAPHS

LIST OF ACRONYMS

EMO	Effective Micro-Organism
FAO	Food and Agriculture Organization
FISP	Fertiliser Input Support Programme
FSP	Fertiliser Support Programme
GOL	Government of Lesotho
HDI	Human Development Index
HH	Household
ISFP	Initiative on Soaring Food Prices
ITFs	Input Trade Fairs
MoA	Ministry of Agriculture as a generic term for national ministries responsible for agricultural matters in studied states.
MT	Metric tonnes
NGO	Non-Governmental Organization
OPV	Open Pollinated Varieties
PPS	Population Proportional to Size
SES	Socio-Economic Status
SWOT	Strengths, Weakness, Opportunities and Threats analyses
TCP	Technical Cooperation Programme
UN	The United Nations
UNDP	United Nations Development Programme
USD or US$	United States Dollar
VAC	Vulnerability Assessment Committee
WFP	World Food Programme

EXECUTIVE SUMMARY

1. Introduction

Between 2006 and 2008, international prices for basic food commodities shot up by as much as 60 percent and by mid-2008, food prices had peaked at a 30-year high. Fuelling the increases were a complex and often interlinked set of factors, including high oil prices, a lack of investment in the agricultural sector and the increased amount of agriculturally productive land diverted away from food production in favour of bio-fuels.

The price of agricultural inputs, affected by many of the same factors, also skyrocketed; fertilizer, for example, increased by as much as about 560 percent in Lesotho. Price hikes like these in inputs translated to diminished production and again, put pressure on the cost of foodstuffs.

In December 2007, the Food and Agriculture Organization of the United Nations (FAO) responded to the crises, launching its high- profile Initiative on Soaring Food Prices (ISFP). The ISFP was comprised of two components: (i) Emergency response through FAO's Technical Cooperation Programme (TCP), which focused on the immediate distribution of inputs; and (ii) Long-term policies and structural changes to address soaring prices in collaboration with partners such as the International Fund for Agricultural Development (IFAD), the New Partnership for Africa's Development (NEPAD), the World Food Programme (WFP) and the World Bank. In total, 74 agriculture input distribution projects as well as 45 technical assistance programmes were launched as part of ISFP around the world.

In southern Africa, US$ 4,250,000 was used to support input distribution TCP activities in 10 southern African countries: Angola, Comoros, Eritrea, Lesotho, Madagascar, Malawi, Mauritius, Seychelles, Swaziland, Tanzania and Zambia.[2]

This report critically assesses these national ISFP TCP programmes, except for Comoros and Eritrea as no national evaluations were carried out. It should be noted that although primary data collection for Mauritius and Seychelles was not finalised by the time this report was completed, preliminary findings and document review of progress reports from these countries have been incorporated in this report.

2. TCP projects in southern Africa

Aimed at mitigating the impacts of rising food and input prices on the region's small- and medium-scale farmers, TCP projects were run in partnership with ministries of agriculture throughout the region, which allowed efficient use of resources, the fast-tracking of activities and proved one of TCP's strengths.

Inputs distributed by country TCP projects varied by country but were comprised of seed, fertilizer or a mix of both. In the case of Lesotho and Seychelles, agricultural tools were also distributed. In total, TCP projects distributed a total of about 624 metric tonnes of seeds and about 1,250 metric tonnes of fertilizer to the region's beneficiaries. (A detailed description of country programmes can be found on page 12-19 of the report)

Targeted areas and/or beneficiaries were also selected from one or a combination of five methods:

1. Current acute vulnerability: Governments and FAO in Lesotho, Malawi, Mauritius, Swaziland and Tanzania chose to target areas that represented the most vulnerable in terms of acute food insecurity,

[2] The east African country of Eritrea also received support, although results of this programme as well as Comoros are not presented in this report, as data from these countries was unavailable at the time of publication.

and that were especially prone to weather shocks. Beneficiaries within these countries were also selected based a minimal degree of agricultural potential.

2. Pre-existing government choices: TCPs in Angola, Madagascar, Tanzania and Zambia all selected beneficiaries aligned with on-going government initiatives that focused on long term agricultural development. In Angola, beneficiaries received inputs through their participation in farmer field schools while those in Madagascar and Zambia had previously been included in programmes aimed at increasing national food production. While these areas were not necessarily those with the greatest degree of food insecurity, pairing short-term TCP input projects with longer-term programmes helped capitalise on the potential of the TCP project.

3. Cost-effectiveness: Zambia's TCP attempted to reach as many as about 17,190 beneficiaries and therefore focused on the most cost-effective areas, initially three districts near the country's capital, Lusaka, which lowered monitoring costs. The report notes that proximity to an urban centre may have also been an advantage in Zambia's case as the urban poor are often more affected by rising food prices than producer households.

4. Universal coverage: Seychelles focused on supporting the government's existing national input subsidy programme, hence there was no pre-determined beneficiary criteria.

These beneficiaries then received inputs via input packages or vouchers. In some cases, recipients were allowed to choose a particular type of pack over another. Beneficiaries received inputs free of charge in all countries, except for Seychelles and Zambia. The TCP in Seychelles sold inputs as part of an input subsidisation programme and input package recipients in Zambia were part of a revolving scheme where beneficiaries received 10 kg of seeds and had to return 5 kgs of seed to the programme at the end of the agricultural season.

2. Assessing ISFP's impact in southern Africa

At the request of FAO Member States, impact assessments for ISFP input supply projects were undertaken. In southern Africa, this process was complicated by the fact that national TCP projects had not been designed to include assessment components and, consequently, standardised baseline data for all projects was unavailable. Furthermore, primary data was not available for analyses for Comoros, Eritrea, Mauritius, and Seychelles during the execution of this report, while data for Madagascar was not compatible with database developed for the remaining countries and used in this exercise.

In light of this, it was decided that the best way to establish projects' impacts was to survey beneficiaries' views as to how the projects affected their lives. The ISFP Secretariat developed a generic questionnaire and methodology to guide assessments and facilitate the comparison of data across countries. Given the heterogeneity in distributed inputs, questionnaires and methodology were then adjusted to country-specific contexts.

Broadly, the objectives of the ISFP TCP impact assessment were to:

- Assess beneficiary satisfaction with the projects as well as ways the project impacted their lives;
- Collect information from partners and input suppliers on major challenges they faced in project implementation as well as possible solutions; and
- Document lessons learned.

3. Assessment Methodology

In the absence of baseline data, beneficiary surveys were conducted using a simple post-test method, which did not include the use of control groups that were financially beyond the assessment's reach. Sample size varied by country but remained small, not exceeding more than 145 households. Selection of villages for the survey was based on beneficiary populations proportional to size, where cumulative population of beneficiaries of each village was randomly selected based on sample interval. Within these communities, interviewees were selected based on lists (in Lesotho, Swaziland, Malawi and Angola) or meeting attendance in Tanzania and Zambia. The number of interviews per site was largely a function of available personnel on data collection teams.

Finally, regional weighting was necessary to reflect differences in number of beneficiaries from country to country. In total, 1,201 households took part in the surveys. In addition to survey responses, national evaluation reports, project documents and feedback gathered at a two-day regional workshop were also used in the revision of this report.

4. Impact assessment results

Beneficiary profiling: Interventions reached the poor productive farmer

According to beneficiary surveys, TCP input projects as part of the ISFP reached a pool of beneficiaries that was 44 percent female, largely married and with varying degrees of education. The survey also showed that a large proportion of beneficiaries knew why they had been selected for the project. These in turn varied in accordance with the selection target and method used by the country project.

Most beneficiaries had access to at least 2 hectares of land. Furthermore, beneficiaries said that they were able to meet about 7 months worth of their food requirements through own production on average. Finally, survey data also showed that only TCPs in Angola and Malawi had purposively targeted the poorest household.

Evaluation of distribution methods: Input packs, Input Trade Fairs and Subsidized Sales

Input packs were found to show a surprising potential for sustainability, as highlighted by the Zambia case study in which most input recipients were able to contribute to the continuation of the programme through a donation of 5 kgs of seed. Additionally, the input pack system showed the potential for increasing the diversity of inputs utilised by beneficiaries.

The use of vouchers with Input Trade Fairs (ITFs) delivered multiple positive results, including allowing beneficiaries the opportunity to select their own inputs, which resulted in greater diversity among inputs used as well as decreasing some logistical and administrative costs. The use of ITFs, through their involvement of local suppliers, also stimulated local economies and interactions between agricultural extension officers, traders and purchasers.

However the use of ITFs also raised concerns including the monopolization of prices and inputs by traders, especially in Lesotho and Swaziland. Thus, it is suggested that this kind of pricing is discouraged through, for instance, the establishment of pricing guidelines. Concerns were also raised regarding logistical difficulties attached to staging ITFs in remote areas and the related lack of access of some communities. Forged vouchers were also reported in Lesotho and Swaziland.

Lastly, subsidized sales – only implemented in Seychelles – showed promising results for beneficiaries with some economic potential who could afford the initial investment.

Project implementation: TCPs demonstrated a strong capacity to adapt projects to country needs but were, in some cases hampered by delays

Flexibility was a major strength of TCP in southern Africa. Country projects had to make major changes to original project designs as many project proposals were done under extreme time pressure and without proper stakeholder consultation. Consultations between FAO and stakeholders after the acceptance of proposals meant major changes but also guaranteed programmes were appropriate for local contexts.

However, many TCP programmes experienced difficulties in procuring and distributing inputs in a timely manner. Although FAO launched ISFP in December 2007, southern African countries only requested TCP projects in their countries between April and September 2008. Because of the late request for TCP projects, most national TCP project were approved only mid to late 2008, which did not align with the region's planting season.

Input Quality: Inputs were largely of acceptable quality

Input quality was found to be good, and was assured by either government agricultural officials or experts. Angola was found to be the exception as limited input availability coupled with major quality concerns. According to the national evaluation report, a large proportion of distributed bean seeds were found to be inappropriate for planting. As a result, quality control should be explicitly included as an activity of TCP to ensure resources are utilised effectively.

Increasing beneficiaries' awareness: Projects promoted increased awareness about inputs, increased access and revealed a latent demand for new seed varieties however training on new varieties was lacking

TCP projects in southern Africa were also shown to be successful in prompting crop diversification through the promotion of new seeds to about 50 percent of all beneficiaries. The projects also showed a good degree of latent demand for new seeds as about 30 to 40 percent of voucher-receiving beneficiaries in Lesotho and Swaziland, for instance, chose seed varieties they had never planted before. The project showed less remarkable results when it came to promoting increased fertilizer knowledge with the exception of Tanzania, where only 17 percent of beneficiaries had used the types of fertilizer distributed by TCP programmes previously although this may be attributable to product price and availability.

Availability of seeds in local markets was not a major issue in Angola, Lesotho or Malawi where about 80 percent of beneficiaries said that the seeds they received as inputs were readily available. Access was, however, a major issue in Tanzania and Zambia, where about 30 percent of beneficiaries responded that seed varieties received as inputs were easy to access. In these countries, TCP projects positively impacted the availability and diversity of seed.

Input recipients across all countries except Angola and Zambia also cited a lack of income to purchase improved or diversified seeds as a major issue. More than 70 percent of those surveyed in Angola and Zambia stated that they would be able to purchase seed. While limited seed availability in Zambia may still justify a TCP programme amid such a high number of respondents who said they could obtain inputs without assistance, the case for a TCP input programme in Angola – where seed is available and accessible in all regions – becomes less clear.

Unfortunately, training to back this increased awareness and access was found to be lacking. Because TCPs operated within an emergency response framework, formal training was not included as a major component of most projects, with the exception of selected training in Mauritius. Therefore misuse of seeds and fertilizer was commonly reported in national evaluation reports.

The report highlights that this lack of training was not an issue for some TCPs, like Angola, that were supporting already adopted crops or building upon past capacity-building activities, such as farmer field schools.

Beneficiary satisfaction with timeliness, and input quantity, quality and variety

Most beneficiaries across the region reported being satisfied with the timeliness of input deliveries, the major exception being those in Malawi, Tanzania and Zambia, where inputs were received about a month after the start of the agricultural season. Interestingly, recipients in Angola, who experienced a delay of about a year, did not cite timeliness as a concern, but this is most probably due to the fact that inputs arrived in time for the 2009/2010 seasons.

Most beneficiaries also reported that they were satisfied with the quantity of inputs distributed by TCP projects. In Lesotho, where 85.4 metric tons of seed was distributed, 94 percent of recipients reported that they were satisfied with the amount of inputs that they had received. Conversely, Zambia's high number of targeted recipients meant that these beneficiaries received less seed and, not surprisingly, represented the greatest proportion of households that reported being dissatisfied with input quantities.

Previous assertions as to the quality of inputs were also born out in high levels of beneficiary satisfaction regarding both seed and fertilizer varieties distributed, which ranged from 79 to 100 percent being either satisfied or highly satisfied. Interestingly, only 6 percent of Angolan recipients expressed dissatisfaction with input quality. Similarly high satisfaction levels were reported when beneficiaries were asked to describe their opinion as to the variety of inputs provided.

Beneficiary perceptions of project impacts: Mixed results

While beneficiaries scored the project well overall in many aspects of implementation, reviews were more mixed when beneficiaries were asked to gauge the projects' impacts. Regionally, about 53 percent of all beneficiaries reported that their crop production had improved during 2008/2009 agricultural season as compared to the previous season. The majority of the 25 percent regionally who reported that their crop production had deteriorated came from Tanzania, where as many as 4 out of 6 beneficiaries districts were unable to harvest anything. It is believed that this is largely attributable to major dry spells suffered by the country during the project period.

The project also scored well on improving beneficiary access to food with almost 67 percent of beneficiaries regionally reporting increased access to food in 2008/2009. The project's impacts on household ability to sell food was, however, less obvious. While about 45 percent of households regionally reported an improved ability to sell food, at least 50 percent of respondents reported a decrease in their ability to sell food in Tanzania and Swaziland. This may have been tied to poor weather condition in Tanzania and to banning of maize sales in some ITFs in Swaziland as to support greater crop diversity.

Gender

Knowledge and experience of newly introduce seed and fertilizer inputs, as well as levels of satisfaction, were largely the same between male and female respondents. However, findings from the household assessment show that even though the same amount of male and female beneficiary would be willing to purchase seed varieties distributed by TCP, slightly less female beneficiaries reported that they would be able to have the means to do so. Because no gender lenses were included in the design of the projects, no differences were expected to be found between genders of beneficiary.

5. Conclusions and recommendations

Overall, findings show that the ISFP TCPs have been well accepted by beneficiaries throughout southern Africa. Major strengths included government involvement; project flexibility and the linkages formed between TCP emergency activities and long-term policy and development projects.

Nevertheless, this report highlights several of the project's shortcomings, including delays, problematic input choices and weakly conceptualized and communicated selection criteria. Key recommendations for future ISFP TCP input distribution projects include:

Align projects to the agricultural calendar: Due to time pressures, many country projects experienced delays in input delivery that jeopardised harvests. Meanwhile, time for crucial aspects of the project process, including stakeholder consultations, community mobilisation and procurement was severely constrained. In the future, it is crucial that the period designated for project implementation allow for activities to be well planed, implemented and monitored.

Inputs need to respond to local realities*:* The TCP focused on distributing seeds that would support a greater diversification of crops and increased yields. However, the choice of types and varieties of crops calls for a careful assessment of those that are best suited for local contexts, especially when new varieties of inputs are being introduced. Wherever possible, suitability studies for proposed inputs should be conducted that include, among other factors, beneficiaries' preferences, nutritional value and marketing potential should be carried out prior to project inception.

Beneficiary targeting criteria is clearly understood: Due to a variety of factors, including the limited amount of time for community mobilization and sensitization among targeted beneficiaries, many input recipients lacked a clear understanding as to TCP selection criteria. This should be remedied in the future and may involve adopting selection criteria exhibited in Madagascar (adapted to agricultural potential), Angola (based on participation in capacity-building programmes) or Seychelles (universal access).

Ensure that training is included in project design: Even though emergency projects are usually constrained by time and funding, capacity-building through formal and informal trainings as well as technical support are crucial for the success of activities, especially those that introduce new types and varieties of crops. Therefore, at least a minimal training component should be included in future project designs. Whenever possible, distribution systems should merge with existing agricultural projects that include training components.

Develop detailed project planning: Project design documents were overly simplistic and focused on identifying outputs, therefore activities such as procurement, monitoring and evaluation and input selection were not detailed. A comprehensive project planning and implementation document, describing selection criteria, inclusion of gender component, training aspects, monitoring and evaluation activities among others are necessary to ensure that projects are efficiently implemented.

1. INTRODUCTION

1.1 Brief background on soaring food prices in southern Africa[3]

Between 2006 and 2008, international prices for basic food commodities shot up by 60 percent while grain prices doubled. By mid-2008, food prices had reached the highest levels seen in nearly 30 years (FAO/ISFP).

The reasons for such an increase are complex and interlinked, including decreased availability of food in major producing countries, declining global food stocks, high oil and energy prices raising the cost of inputs, irrigation and transportation costs, decreased land for food production because of subsidized production of bio-fuels that substitute food production, lack of investment in the agricultural sector, global climate changes, political and economic policies for exportation and importation and speculation.

Added to the soaring prices, was the fact that the 2007/08 agricultural production levels were average to below average in various southern African countries. Thus, the impact of global soaring prices was compounded by poor production, decreased national food production and therefore further increasing food prices.

Furthermore, the price of agricultural inputs also rose, contributing to the contraction of food production and supply. In the period from 2007 and 2008, global prices and global fertilizer prices increased from 165% to 558% depending on the type[4].This was reflected in increased agricultural production costs. For example, the estimated cost to plant a hectare of maize in Lesotho increased by 358% from 2006/07 to December 2008 (TCP Lesotho Evaluation Report). Thus, the high cost of inputs limited national production of food.

The global phenomenon of soaring food prices impacted disproportionally on the poorest countries, including some in southern Africa. Most southern African countries have production levels below the internal requirement, making them highly dependent on food imports.

The net effect was increasing prices, sporadic low levels of stock in the region and a feeling of insecurity amongst the population regarding the availability of major food items.

1.2 Summary of government responses to the soaring food prices in southern Africa

Most governments in southern Africa attempted to address the soaring prices as illustrated in table 1. Even though governments saw the importance of responding to the price hikes, and some even established committees to oversee the government response or to re-target existing programmes, most of the responses were limited by resource availability. In addition to these, there were on-going food assistance programmes to the most vulnerable households in most countries.

[3] Southern African region refers to the following countries for the purposes of this report: Angola, Lesotho, Madagascar Malawi, Mauritius, Seychelles, Swaziland, Tanzania and Zambia. Even though Seychelles and Mauritius are not part of the Southern Africa Development Community, the implementation of the TCPs were overseen by the Sub-regional Office for southern Africa and therefore are included in this report.

[4] Action Plan of the Task Force, 2008. Excerpted from Zambia National Report

Table 1: Brief overview of government measures taken in each country.

Country	Government Response
Angola	The government continued its programs without any major changes. The programs included the Special Programme for Rural Development to improve agricultural production and food security totalling US$ 1.8 to 2 million, the National Program for Poverty Reduction and the National Strategy for Food Security.
Lesotho	Developed a programme to respond to the soaring prices with two basic responses: (i) short term programme that provided immediate assistance to people who were unable to meet their short term food and essential non food requirements by availing agricultural inputs through Input Trade Fairs (ITFs), provision of food and expenditure voucher and introducing cash for work initiatives. (ii) medium/long term programme supporting food security through scaling up agricultural practices that result in intensified production, up-scaling special programme for food security, production of open-pollinate seed varieties, increasing old age pension, and subsidizing agricultural inputs.
Malawi	Government increased funding for the on-going Input Subsidy Programme to maintain the targeted 1.7 million beneficiaries which was 50% of the farm families eligible for assistance. The total inputs amounted to 170,000 metric tons of both types of fertilizer plus 4,500 metric tons of maize hybrid seed for the 2008/2009 agricultural season. Government banned export of maize and restricted sale of maize to the government marketing agency.
Madagascar	The government started implementing the Green Revolution Programme in 2007 funded by WB and IMF which aimed at doubling production in five years through distribution of machinery, development of seed production and training on improved techniques.
Mauritius	The government launched a national campaign in June 2008 to motivate domestic food production, with the slogan "Produce what we eat and eat what we produce". Government increased supervision in prices and access to food items in shops to avoid hoarding. The government also announced the Food Security Policy in the budget speech of 2008/2009 to increase production of potatoes, onion, milk, other vegetables and fruits.
Seychelles	The government developed a long term national food security strategy in 2007/2008 with five pillars to increase local food production: (i) revision of agricultural land tenure, (ii) revision of policies and legislations for agricultural and livestock production, (iii) agricultural infrastructure, (iv) input support, and (v) human resource development. The pillar on agricultural inputs supply was supported by the FAO and ISFP resulting in government being able to better stock agricultural inputs and to provide a wider variety of agricultural products to commercial farmers as well as home growers.
Swaziland	Established a food prices committee in 2007 that comprises of several ministries and led by Ministry of Agriculture (MoA) to address the soaring prices. Within the Ministry of Agriculture, activities included tractor hire subsidies for farmers, liming program to reclaim soil, lifting of import levies on agricultural products and inputs.
Tanzania	The government discouraged export of maize and removed import levies for maize. In 2007/2008 government re-assigned internal funding from non-agricultural sector to agricultural sector as to increase its resources, in order to increase subsidies for fertilizer, seed and small tractors. Government also improved the distribution system for fertilizer distribution by introducing voucher system.
Zambia	In order to adjust on-going efforts to increase access to inputs, the Zambian government established a Task Force on Rising Food Prices comprising of six working groups which addressed both short term and medium term measures. The government funded importation of maize valued at US$ 120,000 for sale at a subsidized price. The Zambian government doubled the number of subsidized beneficiaries for seeds and fertilizer to 250,000 under the on-going Fertilizer Support Programme by reducing to half the quantity of inputs given to each beneficiary. The government also added a 16% value added tax for production of food and cash crops, which was levied for exported volumes. In addition, the government supported price stabilization with K137 billion.

1.3 FAO response to the crisis in southern Africa

FAO also responded to the soaring price crisis in southern Africa by launching the Initiative on Soaring Food Prices (ISFP). The ISFP was meant to sound the alarm to the world's decision-makers that a crisis was at hand. The ISFP included two major components: (i) Emergency response through the Technical Cooperation Programme (TCP), which focused on immediate distribution of inputs, and (ii) Long term policies and structural changes addressing the soaring prices done in a collaborative effort between participating Government, FAO, IFAD, NEPAD, WFP, World Bank, which was carried out in various countries.

Even though this impact assessment only focuses on the activities related to the supply of agricultural inputs supported by TCP activities, one must understand that the input support TCP was addressing was only the short-term emergency needs and that other short term and long term interventions have also been included in FAO responses as mentioned above.

In total, input support TCP were implemented for 11 countries in southern Africa with a total cost of US$ 4,250,000. Table 2 details projects and values.

Table 2: Key information on input support TCP projects in southern Africa[5]

Country	Project No.	End of Project Date	Amount allocated (USD)
Angola	TCP/ANG/3202	31.12.09	500,000
Comoros	TCP/COI/3202	31.10.09	250,000
Eritrea	TCP/ERI/3202	02.07.09	500,000
Lesotho	TCP/LES/3202	30.06.09	500,000
Madagascar	TCP/MAG/3202	30.09.09	500,000
Malawi	TCP/MLW/3202	31.10.09	500,000
Mauritius	TCP/MAR/3202	31.12.09	250,000
Seychelles	TCP/SEY/3201	31.12.09	250,000
Swaziland	TCP/SWA/3202	30.06.09	500,000
Tanzania	TCP/URT/3201	31.07.09	500,000
Zambia	TCP/ZAM/3201	30.06.09	500,000
Total			**4,750,000**

1.4 Purpose of the ISFP TCP project assessments[6]

As an emergency response to the rising price of food in late 2007 and 2008, a large number of FAO-supported Technical Cooperation Programme (TCP) projects were initiated. In total, there were 74 agriculture input distribution TCP projects as well as 45 technical assistance TCPs that were launched around the world. As the input supply TCPs were coming to a close in 2009, the FAO Member States requested the implementation of a standard beneficiary satisfaction and impact assessment for the input supply projects in order to gauge the usefulness and impacts that such TCPs have had on the beneficiaries.

The national TCP projects that had been developed and implemented did not have a beneficiary satisfaction and impact assessment component integrated into the original project design. This meant that the collection of

[5] Even though TCPs in Comores and Eritrea are not evaluated in this regional synthesis, their basic information is presented in this table
[6] Excerpted from the Malawian National Evaluation Report

standardized baseline data had not been conducted for all the input supply projects. While some countries incorporated an impact assessment activity for the input supply TCPs, the methodologies used and level of information collected differed.

In light of this situation, it was felt that the best way to gauge the impact of the TCPs was to focus on the collection of beneficiaries' views of how they felt the projects have positively or negatively impacted on their lives. The ISFP Secretariat thus developed a generic questionnaire and methodology to help guide the assessment of input distribution of TCPs projects and also facilitate comparisons between countries and regions. Given the heterogeneity of the inputs that were distributed and the large number of countries, the questionnaire and methodology were adjusted to best suit the nature and context of the project being assessed.

Therefore the objectives of the ISFP TCP evaluation were to:

- Assess the level of satisfaction of beneficiaries with the FAO, ISFP and TCP projects and the impact that it has had on their lives;
- Collect the views of project beneficiaries, implementing agencies and input suppliers on the major constraints or problems they faced with the projects and suggestions for improving them; and
- Contribute to a lessons learning process that will be useful for optimizing future emergency responses.

1.5 Brief description of beneficiary satisfaction and impact assessment

The regional synthesis for the TCP final evaluation was based on the following sources of information: (i) primary data from beneficiary survey, (ii) national evaluation reports, (iii) national progress reports and other project documents, and (iv) a two days regional workshop entitled 'validation workshop' where all national consultants, regional synthesis consultant, FAO Sub-Regional Office and the Lead Technical Unit from the FAO regional Emergency Response Unit were present.

Table 3: Data and information source used for regional synthesis

Country	Beneficiary Survey Data	National Final Evaluation	National Progress Reports	Validation Workshop
Angola	Yes	Yes	Yes	Yes
Comoros	No	No	No	No
Eritrea	No	No	No	No
Lesotho	Yes	Yes	Yes	Yes
Madagascar	Yes[1]	Yes	Yes	Yes
Malawi	Yes	Yes	Yes	Yes
Mauritius	No	No	Yes	Yes
Seychelles	No	No	Yes	Yes
Swaziland	Yes	Yes	Yes	Yes
Tanzania	Yes	Yes	Yes	Yes
Zambia	Yes	Yes	Yes	Yes

[1] Data from beneficiary survey was collected for Madagascar but because of different data collection instruments they were not included in this report.

Table 3 details source of information for each country. Because of delays on hiring of national consultants and standardization of reports, quantitative analyses from beneficiary survey data are included for six countries only. TCPs for Comoros and Eritrea were not included in this regional synthesis as no source of information was available at the time of this report.

In the absence of a baseline assessment, the method used during the final evaluation was a simple post-test. No control groups were added during the final evaluation due to budget constraints. This type of evaluation has its limitations because it does not allow for findings to be attributed to the intervention.

Nevertheless, because focus is given to beneficiaries' perception, this weakness may not be relevant to this report.

Box 1: Sample Size calculation

Assuming:

Z = 1.96 (assume 2-sided test with $\alpha = .05$)

D = maximum tolerable error of 10% (for national estimates), 4.5% for southern Africa estimates

P = expected population proportion is 0.50; (*the most conservative estimate)*

d = design effect is 2

Sample size:

$n \geq d[Z^2 (P) (1-P) / D^2]$

$n \geq 2 [1.96^2 (0.50) (1-0.50) / 0.05^2]$

$n \geq 118$ for National Analyses

$n \geq 668$ for Regional Analyses

The sample was constructed independently for each country. The sample size for each country was designed to tolerate the maximum error of 10% and thus was relatively small and varied between 118 and 145 based on adaptation of sample size for small populations, which in turn depended on the total number of beneficiaries. Table 4 details sample size per country.

Table 4: Sample size per country and gender

Country	Gender	Sample Size per Gender	Total Sample Size
Angola	Male	44	117
	Female	73	
Lesotho	Male	61	122
	Female	61	
Malawi	Male	69	120
	Female	51	
Swaziland	Male	61	129
	Female	68	
Tanzania	Male	104	143
	Female	39	
Zambia	Male	76	134
	Female	58	
Total	Male	415	765
	Female	350	

Because of relatively small national sample sizes, the analyses done by gender within countries are not informative as estimates for indicators by gender were found to have low precision.

The selection of the villages to be surveyed followed a random approach based on beneficiary population proportional to size (PPS), where the cumulative beneficiary population of each village in a certain country was randomly selected based on the sample interval. The number of interviews per site was a function of logistical issues related to number of enumerators per team.

The selection of beneficiaries at village level was done randomly based on the list of beneficiaries for Lesotho, Swaziland, Malawi and Angola. Selection of beneficiaries for Tanzania and Zambia was done randomly based on beneficiaries attending the meeting that was called for the purposes of the beneficiary questionnaire administration.

Because the number of interviews per country was done independently, regional weighting was necessary to ensure that countries with large number of beneficiaries were assigned larger weights. These weights were taken into account when regional averages are presented, so that countries with many beneficiaries – such as Zambia – have a greater value on regional averages. Table 5 details weights assigned for each country.

Table 5: Sample weights assigned for Regional Analysis

Country	Sample Size	Beneficiary population	% of total Beneficiary Population	Assigned Sample Weight
Angola	117	2,700	6.9%	0.451413
Lesotho	122	4,019	10.5%	0.655782
Malawi	120	2,790	7.1%	0.454798
Swaziland	129	6,290	16.1%	0.953799
Tanzania	143	6,050	15.5%	0.82759
Zambia	134	17,188[1]	44.0%	2.509091
Total	765	33,733	100.0%	n/a

[1] Value does not necessarily reflect number of beneficiaries but number of input packs distributed

2. SUMMARY OF TCP PROJECTS IN SOUTHERN AFRICA

This section briefly discusses the key aspects of the TCPs' input supply projects in southern Africa. For easier reading, this section is separated into: (i) Overview of TCP Projects in southern Africa, (ii) Input distribution systems used in TCP projects, and (iii) Farmers' impressions of receiving agriculture inputs. Although regional analyses are presented for each component, country comparisons are also reviewed in order to ascertain most efficient methods of input distribution. Gender comparisons are presented separately in section 3.2 as most analyses done by gender within countries are not informative as estimates were found to have low precision (see section 1.5 above).

2.1 Overview of TCP Projects in southern Africa

2.1.1 Brief Project description

As displayed in table 6, most TCPs shared similar objectives and outputs. All countries aimed at decreasing the impact of soaring prices through distribution of agricultural inputs to small scale farmers. The total cost of each project was also similar, valued at either US$ 250,000 or US$ 500,000. The main difference between the TCPs in southern Africa consisted on the type of agricultural inputs distributed and the method for implementation of the project.

Table 6: Overview of TCP projects in southern Africa

Country	TCP Project code	Brief project description			
		Overall Objectives *(as per Project Proposal)*	**Outputs** *(as per Project Proposal)*	**Target areas and households**	**Total budget (USD)**
Angola	TCP/ANG/3202(E)	To provide targeted input support to mitigate the negative effects of rising food and input prices	To distribute maize and beans seeds as well as fertilizer and agricultural tools to most vulnerable agricultural households	4,750 households in the provinces of Malange *(changed provinces to Huambo and Bié and decreased to 2,700[1])*	500,000
Lesotho	TCP/LES/3202(E)	To mitigate the impact of soaring input and food prices in Lesotho	Provide agricultural inputs to vulnerable households by the start of the 2008/09 farming season.	3,950 households in the districts of Mokhotlong, Thaba Tseka and Qachas Nek *(increased to 4,019)*	500,000
Madagascar	TCP/MAG/3202(E)	To improve food security of most vulnerable farming families and strengthen farmers' resilience to soaring of food prices and recurrent natural calamities in disaster prone areas.	Increase production of beans, and rice seeds. Train farmers Ministry of Agriculture staff on seed multiplication.	5,000 households (increased to 12,000)	500,000
Mauritius	TCP/MAR/3202	To help planters absorb the sudden increase in price of inputs required for agricultural production.	Distribute agriculture inputs namely seeds and fertilizer, to distribute feed supplements to dairy farmers, and to demonstrate the uses of organic fertilizer	2,000 households, 200 growers, 782 ensured planters *(revised to 7,475 household)*	250,000
Malawi	TCP/MLW/3202(E)	To complement other government initiatives aimed at improving smallholders food security through	Provide basic farm inputs to vulnerable households at the beginning of the 2008/09 agricultural	5,000 households in the districts of Phalombe and Zomba *(decreased to*	500,000

		provision of basic farm inputs to the most vulnerable households	season	*2,790 households)*	
Seychelles	TCP/SEY/3201(E)	To help planters absorb the sudden increase in price of inputs and to provide a wider range of products at subsidized prices.	To ensure that government outlets are well stocked with a variety of inputs at affordable prices	6,000 households and 350 commercial growers	250,000
Swaziland	TCP/SWA/3202(E)	To improve household food security through provision of quality drought tolerant seed and small livestock	(i) Increase access to quality seed, small livestock and inputs to 2,375 households affected by the food price crisis, (ii) to improve food availability in local markets through crop production of drought tolerant crops	2,375 households in the Lowveld and dry areas of Middleveld *(increased to 6,290 households)*	USD 500,000
Tanzania	TCP/URT/3201(E)	To mitigate the impact of soaring input and food prices in the United Republic of Tanzania	Provide agricultural inputs to vulnerable households by the start of the 2008/09 farming season.	10,000 households in Makete, Kilolo, Rombo, Mwanga Same, Korogwe and Bagamoyo districts *(did not include Kilolo and Rombo and decreased to 6,050 households)*	USD 500,000
Zambia	TCP/ZAM/3201(E)	Hasten agricultural productivity and production among the resource poor small scale farmers through urgent input support	Contribute to national and household food security and income generation through improved access to seeds and a diversified fertilizer support programme input pack	8,845 housheolds in Mumbwa, Chibombo, Kafue, Serenje and Samfya *(increased to 17,188 households)*	USD 500,000

[1] The TCP in Angola has not spent all funding at the time of compilation of this report thus the number of beneficiaries is likely to increase at time of complete implementation.

2.1.2 Overview of inputs distributed

Table 7 details the type of inputs distributed per country. A few TCP projects distributed significant amounts of fertilizer, including Madagascar, Malawi, Seychelles, Swaziland and Tanzania. The total quantities of inputs distributed in those countries were similar, totalling 199, 279, 42, 298 and 267.5 MTs of fertilizer for Madagascar, Malawi, Seychelles, Swaziland and Tanzania respectively.

Projects in Malawi and Tanzania were similar and further to fertilizers, both TCPs focused on the distribution of maize where 27.9 MTs and 20.5 MTs of seeds where distributed in Malawi and Tanzania respectively. The main difference between these two countries was on the type of maize seed distributed, as in Malawi the choice was for hybrid maize while Tanzania TCP focused on the distribution of OPV seeds. Furthermore, 10 MTs of sorghum seed was also distributed in one district in Tanzania.

Although the TCP in Zambia also envisioned distributing fertilizers and hybrid maize seed, its merging with the government input distribution project - which was already distributing maize seed and fertilizers - made it unnecessary for the TCP to also distribute fertilizers and maize. Because of its complementarity to the on-

going government programme, the TCP in Zambia only distributed legumes seeds as to support crop diversification and nutrition, totaling 171.9 MTs.

Table 7: Summary of inputs distributed in southern Africa

Country	Total Inputs distributed under TCP					
	Inputs Type	Input Pack	Disaggregated MTs of inputs	Total MTs of Seeds	Total MTs of Fertilizer	Total # of tools
Angola	Beans and vegetable seeds	27 kgs of beans seeds 0.1 kgs of five type of vegetable seeds	74.5 MTs of beans seed 0.27 MTs of vegetable seeds	74.8 MTs	-	-
Lesotho	Various crop seeds, tools and effective micro-organisms	Total voucher of M 800.00 (equivalent to approximately US$ 85)	13.9 MTs of hybrid maize 60.7 Mts of potatoe 4.5 MTs of wheat 6.3 MTs of legumes (5.2 beans, 1.1 peas) 0.04 MTs of vegetable seeds Unknow small quantities of effective micro-organisms	85.4 MTs	Unknown small quantity of effective micro-organism	2,599 tools
Madagascar	Rice, maize, beans, groundnuts and vegetable seeds and fertilizer	Input packs: Avg 18 kgs of hybrid maize seed Avg 24 kgs of rice Avg 28 kgs of beans Avg 20 grms of vegetable 25 to 262 kgs of Urea fertilizer 25 to 262 kgs of NKP fertilizer	0.064 MTs of vegetable 69 MTs of rice 34.5 MTs of beans 5.5 MTs of maize 5 MTs of groundnuts 42 MTs of Urea 157 MT of NPK	114.1 MTs	199MTs	-
Mauritius	Vegetables, cotton seed cake, soy bean and fertilizer	50 kgs NPK 0.5 kgs Onion 0.4 kgs Carrot 0.4 kgs of soy bean 50 kgs Cotton seed cake 5 kgs of bio fertilizer	130 MTs of NPK 0.439 MTs of vegetable 85 MTs of cotton seed cake 1 MTs of bio fertilizer	215.4 MTs	1 MTs of bio fertilizer	-
Malawi	Hybrid maize seeds and fertilizer	10 kgs of hybrid maize seed 50 kgs of Urea fertilizer 50 kgs of NKP fertilizer	27.9 MTs of hybrid maize seed 139.5 MT of Urea fertilizer 139.5 MT of NPK fertilizer	27.9 MTs	279 MTs	-
Seychelles	Assorted vegetable and fruit seeds, fertilizers and water pumps	Not applicable	0.342 MTs of seeds 100 water pumps 50 MTs NPK 13 MTs Urea 12 MTs Mono amonium phosphate 5MTs Potassium Nitrate	0.3 MTs	42 MT	100 water pumps
Swazi-land	Dry beans, sorghum, maize, Jugo beans, groundnuts, cowpeas and mung beans seeds and fertilizer	Total voucher of E 650 (equivalent to approximately US$ 69.1)	7.4 MTs of Sorghum 6.5 MTs of Maize 20.3 MTs of Legumes (11.2 dry beans, 5.5 Jugo beans, 2.6 groundnuts, 0.9 cowpeas, 0.1 mung beans) 298 MTs of fertilizers	34.2 MTs	298 MTs	-
Tanzania	OPV maize and sorghum seeds and fertilizer	10 kgs of OPV maize seed 50 kgs of Urea fertilizer 50 kgs of DAP fertilizer 2.5 kgs of sorghum for 4,000 beneficiaries in one district	20.5 MTs of OPV maize seed 10 MTs of sorghum seed 155 MTs of DAP fertilizer 102.5 MTs of Urea fertilizer	30.5 Mts	267.5 MTs	-
Zambia	Groundnuts, beans and cowpeas seeds	10 kgs of one type of seed (depending on farming system)	171.9 MTs of Legumes (94.5 bean, 60.8 groundnuts, 16.56 cowpeas)	171.9 MTs	-	-

[1]Dollar rate for December 2008 was E/M 9.45 to 1 USD

The TCP in Angola was similar to the Zambian TCP as it distributed mainly only beans and vegetable seeds. However, the amount of seeds distributed in Angola was significantly lower and added to 74.8 metric tons only. Nevertheless, it should be noted that, because of procurement issues including the unavailability of quality assured inputs the TCP in Angola has only spent 37.4% of its total budget, adding to US$ 187,000 out of US$ 500,000.

In Swaziland, the TCP distributed in total 34.2 MTs of seeds through input trade fairs (ITFs) with significantly more legumes seeds being distributed than sorghum and maize. Maize seeds were only included in the ITFs for the area of Swaziland that has presented favorable climate to maize production. As a result, dry beans alone accounted for as much as 32.7% of the total volume of seeds distributed.

In Lesotho 85.4 MTs of seeds were distributed through ITFs together with 2,599 tools. No fertilizers were available for purchase in the ITFs in Lesotho.

In total, 624.4 metric tons of seeds were distributed under the TCPs in southern Africa. These seeds benefited about 64,387 small and medium scale farmers, not including those from Seychelles as, because of the system used, the number of beneficiaries cannot be accounted for. Further 1,249.5 metric tons of fertilizers have also been distributed in Madagascar, Malawi, Seychelles, Swaziland and Tanzania. The total value of the projects in the countries evaluated in this report added to US$ 4,000,000. Table 8 details direct outputs of activities undertaken in southern Africa.

Table 8: Summary of inputs distributed per country under the TCP project

Input Distributed	Volume (MT)	Countries
Seeds		
Beans (all types)	MT 225.5	Angola, Lesotho, Madagascar, Swaziland, Zambia
Cotton seed cake	MT 85	Mauritius
Groundnuts	MT 68.4	Madagascar, Swaziland, Zambia
Maize	MT 74.3	Lesotho, Madagascar, Malawi, Swaziland, Tanzania
Peas	MT 18.6	Lesotho, Swaziland, Zambia
Potatoes	MT 60.7	Lesotho
Rice	MT 69	Madagascar
Sorghum	MT 17.4	Swaziland, Tanzania
Vegetable and fruits	MT 0.97	Angola, Lesotho, Madagascar, Mauritius, Seychelles
Wheat	MT 4.50	Lesotho
Total	MT 624.4	
Fertilizer		
Urea/MAP [3]	MT 520.5	Malawi, Seychelles, Swaziland, Tanzania
DAP/NKP [3]	MT 728.0	Madagascar, Malawi, Mauritius, Seychelles, Swaziland, Tanzania
Effective Micro Nutrient	MT 1	Lesotho and Mauritius
Total	MT 1249.5	
Tools		
Various tools	2599 tools 1,000 water pumps	Lesotho and Mauritius
Pesticides		
Any type	-	None

2.2 Input Distribution Systems used in TCP Projects

2.2.1 TCPs approach for selection of geographical areas

Even though the selection of geographical targeting is a complex process where many issues are taken into account, for comparability purpose the main differential aspect is drawn in this section. There were basically four non-mutually exclusively methods of geographical selection: (i) based on most vulnerable areas, (ii) based on pre-existing governmental choices, (iii) based on cost and efficiency, and (iv) universal coverage. While a discussion of the methods, weaknessed and strengths of each approach is presented below, table 9 highlights selection systems used in each country.

i. Based on most currently vulnerable areas (TCPs in Lesotho, Malawi, Mauritius and Swaziland, Tanzania): The Governments and FAO in Lesotho, Malawi, Mauritius, and Swaziland chose to target the areas which presented worse levels of acute food insecurity, especially due to weather shocks. While the Lesotho and Swaziland TCP targeted areas with chronic food security problems, the TCP in Malawi focused on the districts that presented the highest level of food deficit during the 2007/08 agricultural season. In Tanzania, the six selected districts were aligned with governmental priorities, which in turn were based on food insecurity levels. In Mauritius, the areas selected were the most affected by natural hazards. Selection of areas based on their acute vulnerability to food insecurity was good method for selection as it allowed TCP emergency project to directly respond to acute needs.

ii. Based on pre-existing medium to long term governmental choices (TCPs in Angola and Madagascar): The TCP in Angola and Madagascar adhered to the governmental on-going priorities. The reason for the final choice of targeted provinces in Angola, which were changed from the original TCP plan, was based on merging the TCP to the areas where the government already had the Special Programme on Food Security implemented through farmer field schools. In Madagascar, seven areas were selected from the pre-selected governmental programme for increasing national production based on their agricultural potential and inexistence of other supporting activities. Even though targeted governmental areas may not be necessarily the areas with greatest acute food insecurity, by merging with long-term project and interventions, the linkage between relief and development may be further incentivized maximizing the potentials of the targeted area and project.

iii. Based on effectiveness & cost (TCP in Zambia): Although the Zambian TCP was merged to the large Fertilizer Support Programme (FSP[7]), which targeted rural vulnerable areas and spread out in the country, the TCP in Zambia targeted five districts. Because of the revised attempt to target a large number of beneficiaries and thus to achieve as much as 17,188 beneficiaries with its relative small budget, the TCP in Zambia focused on the most cost-efficient areas for intervention. Thus the TCP initially focused three districts based on their proximity to Lusaka, so that monitoring costs would be decreased. However, in late January 2009, there were still some unused funds, so that two further districts were added. This time the geo-ecological characteristics, especially rainfall patterns, were the driving force for the choice. Choices based on cost-efficiency can be powerful when indirect impact, such as having greater food available in the market at lower prices, are desired. Furthermore, the proximity to urban centers might have been a strength of the choice, as urban poor households tended to suffer more with the rise of food prices than producer households. In emergency projects, where long term development is not the main objective, working with feasibility and cost-efficiency should be an option taken into consideration.

[7] The FSP distributed maize seed and fertilizer to 125,000 small farmers in 2007/08 and 250,000 small scale farmers in 2008/09.

iv. Universal coverage (TCP in Seychelles): The TCP in Seychelles focused on supporting the on-going government subsidized sale of inputs at government owned requisite shops. Four sale points are found in the country (one in each region) and are accessible to any member of the society who can purchase inputs at subsidized prices[8]. Thus, geographic areas were not limited to a certain selection and coverage was planned to be potentially universal.

Table 9: Selection process for geographical targeting

Country	Selection process of target areas
Angola	**Based on pre-existing governmental choices:** Aligned with governmental priorities, which in turn were based on food insecurity levels
Lesotho	**Based on most vulnerable areas**: areas with chronic food security problems
Madagascar	**Based on pre-existing governmental choices**: Aligned with governmental programme for increasing national production
Malawi	**Based on most vulnerable areas:** Areas with highest food deficit during the 2007/08 agricultural season
Mauritius	**Based on most vulnerable areas:** Areas with large occurrence of hazards during 2007/08
Seychelles	**Universal coverage**
Swaziland	**Based on most vulnerable areas**: Areas with chronic food security problems
Tanzania	**Based on pre-existing governmental choices:** Aligned with governmental priorities, which in turn were based on food insecurity levels
Zambia	**Based on cost and efficiency:** Merged to the large Fertilizer Support Programme (FSP) but focusing on 3 districts based on their proximity to Lusaka. Further added districts (2nd round) chosen based on geo-ecological characteristics because of the later delivery of inputs

2.2.2 Approach for selection of beneficiaries

Similarly to the choice of geographical area, the selection of beneficiaries also varied between countries. Selection of beneficiaries for emergency projects is extremely difficult because there is only a short time for awareness raising and field organization. Therefore, emergency activities usually require a detailed and coherent list of characteristics for selected households.

Table 10: Key characteristics of beneficiary selection used in each country.

Country	Selection criteria of beneficiary households	Selection method
Angola	**Vulnerable households with agricultural potential:** Farmers linked to Farming Schools that had low harvest from 2007/08.	Selection done by farmer field schools
Lesotho	**Vulnerable households with agricultural potential:** Vulnerable but viable households, not chronically food insecure (i.e. recognized history of being productive, affected by soaring food prices, accessing at least 0.2 ha of arable land, accessing labor, willing to work on fields and demonstrating good follow-up to crops). Preference to be given to female headed households and households with orphans.	Selection done by MoA staff and community chiefs and councillors
Madagascar	**Vulnerable households with agricultural potential:** Preference was given to members of associations, farmers interested in use of inputs, willingness to adopt improved farming practices.	Selection was done by MoA extension officers and community chief
Mauritius	**Vulnerable households with agricultural potential:** Target included: i. Farmers who had lost their crops due to weather events; ii. Lower income groups and more vulnerable; iii. Small farm size and dairy farmers having cows; and Low level of investment and those more at risk	Selection done by local extension officers and officers from the SPWF
Malawi	**Vulnerable households with agricultural potential:** Households affected by natural disasters in the 2007/08 season, not benefiting from other government input	Selection done by Community Chief with support from MoA extension

[8] Subsidized value includes the net cost of the input plus 5% to cover administrative and logistical costs.

	subsidy program, poor, member of a village/community, and own some land.	officers
Seychelles	**Universal Coverage:** Beneficiaries were self selected as inputs were available for sale at subsidized prices to anyone that was willing to purchase them	Not applicable
Swaziland	**Vulnerable households with agricultural potential:** Households with arable land, with members physically able to farm. Head should be single headed households (widow, child, orphan), elderly or disable or be carrying for orphans or vulnerable children. Household not benefiting from other external support.	Selection done by Community Leadership Committee with support from MoA extension officers
Tanzania	**Vulnerable households with agricultural potential:** Most vulnerable households able to utilize the inputs and unable to buy the inputs from their own resources.	Selection done by the district, ward and village authorities in collaboration with the district, ward and village agriculture extension officers
Zambia	**Households already targeted in on-going governmental projects:** Households receiving inputs from Governmental Fertilizer Support Programme to which the TCP was merged to.	Selection done by camp agriculture committees (comprised community members) using criteria from MoA

As noted in table 5, the method for identification of beneficiary can also be divided into three categories: (i) Vulnerable households with agricultural potential, (ii) based on pre-existing governmental choices; (iii) no selection (self selecting).

Vulnerable households with agricultural potential (TCPs in Lesotho, Malawi, Swaziland and Tanzania). Because the main objective of the TCP project was to increase agricultural production which in turn should alleviate the impact of soaring prices, called for targeting households with agricultural potential. Nevertheless, to ensure that the most vulnerable were also benefited by the project, issues of vulnerability were also taken into account. The choice of vulnerable households that, at same time have a good agricultural potential, may be a difficult combination of characteristics to administer.

By comparing issues in the countries that used this method, it seems that the most straightforward method of selecting vulnerable households with good agricultural productivity was done by Malawi, where vulnerable geographical areas were targeted and, within those areas, households with agricultural potential were targeted.

Maybe because of the difficulty on merging vulnerability and agricultural potential, various TCPs that followed this type of selection failed to give a coherent list of characteristics of selected households. For example, the criteria used by Lesotho TCP highlighted that beneficiary should be “vulnerable but viable”.

Even though the selection criteria was detailed for a few TCP countries, including Swaziland and Malawi, it was found that criteria were not being adhered to and complaints about incorrect selection were common. The process of selection of beneficiaries usually involving community chiefs, leadership councils or local government in the process tended to raise issues of selection bias. In various instances, implementing agencies said that the process for beneficiary selection has been politicized.

Households already targeted in on-going governmental projects (TCP in Angola and Zambia). Because the TCP in Zambia was revised to support crop diversification through distribution of legumes seeds to households already receiving maize and fertilizer from the governmental project, the selection of beneficiaries was primarily based on their participation in cooperatives or associations that were also benefiting from the MoA inputs. Within cooperatives, not all members received inputs from the TCP because inputs were not sufficient to include all members. The final selected beneficiaries had to be receiving inputs from government and also be classified as vulnerable. It is important to note that not all members of selected cooperatives received support

from MoA (and thus from TCP) because to be included in the MoA support project households have to pay for 25% of the subsidized cost of inputs, which is not affordable for some. A few internal conflicts arose from this approach, where members of cooperatives who were not benefiting from any project were dissatisfied. Informally, it was commonly found that beneficiaries were sharing their inputs with other members of the cooperative so as to minimize conflict.

Even though Angola followed a similar method of selection, all farmer field schools in the selected areas were included in the TCP support project. All active members of the farmer schools received inputs from the TCP, voiding the need for selection of beneficiaries within schools.

This method of selection was considered to be one of the most efficient methods, as targeting was facilitated by the participation of members in groups. Nevertheless, based on review of the beneficiary targeting in those countries, it seems that selection of beneficiaries from selected groups, such as cooperatives and schools, may raise internal conflict and disrupt the well being of the group. Thus, it might be more effective to target all members of selected groups even if at the expense of decreasing the number of groups selected.

Universal Coverage (TCP in Seychelles). The TCP in Seychelles focused on replenishing inputs at governmental supply stores to be sold at subsidized prices. Thus, all members of the population were potential beneficiaries and were not necessarily aware that they were purchasing inputs brought with TCP funding. This method of selection may be the easiest method and the one that raises least issues. However, because usual clients of these stores are usually commercial farmers, this group might have benefited more from the TCP inputs than members that usually do not purchase inputs in these stores. Thus, if this method is to be used in input distribution systems, it is necessary to ensure that awareness raising activities are included in the design of the project so that access to these shops are facilitated to uncommon clients who do not usually buy inputs there.

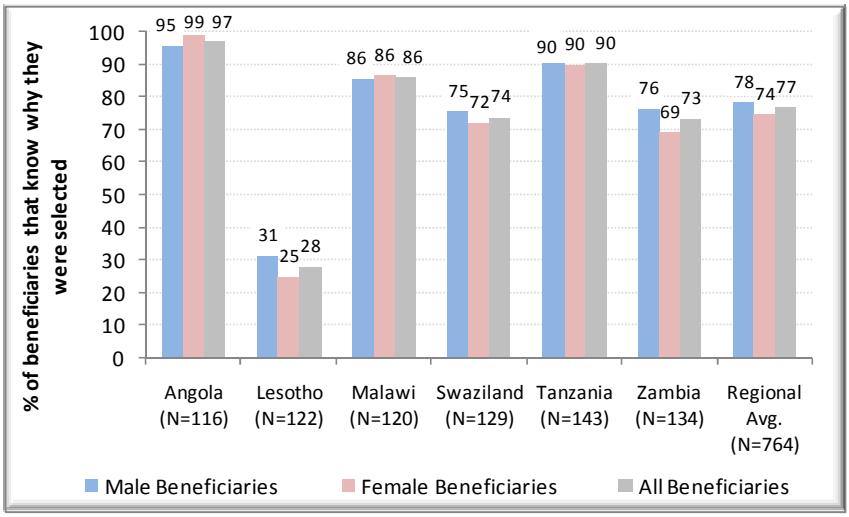
Because of the late development of TCP projects as they were emergency programmes and the need to implement it with a certain rush as to merge into agricultural calendar, the process of beneficiary selection was not given the necessary time. Community mobilization and organization is a relatively long process that is usually led by existing community structures, such as traditional leaders or grassroot organizations. Nevertheless, most TCPs relied on a short process based solely on traditional leadership, local government and MoA extension officers for the selection of beneficiaries.

Indeed, various national reports highlighted the weakness of the selection process and the dissatisfaction of communities with it. In Lesotho for example, the report stated that “the selection criteria is done by local authorities… Chiefs want to select their own people…” (Lesotho National Evaluation pg 34).

2.2.3 Beneficiary awareness of selection process

Most of the beneficiaries in the TCP countries thought that they knew what the criteria was for their selection, except for Lesotho, were less than 30% of the beneficiaries said that they were aware of the selection criteria. Given that the time of delivery of inputs in Lesotho was quickly done, taking as little as one month from signature to delivery, the reason for the lack of beneficiary awareness selection was linked to the fast track implementation of the project. Due to the timing of delivery of inputs being crucial for the success of agricultural production, the timely delivery of inputs at the expense of accurate beneficiary targeting may be understandable.

Graph 1: Percentage of beneficiaries that know why they were selected by gender



In Zambia, where the TCP was merged to the on-going governmental programme which had already selected beneficiaries, a moderate number of beneficiaries were aware of why they were selected. Although the TCP in Zambia had the greatest cost-effectiveness because it was merged to on-going programme, the lack of clear targeting selection of that project seemed to be a major issue.

In Angola, the only TCP that targeted all members of selected groups (i.e. farm schools), virtually all beneficiaries knew why they were being selected. Graph 1 details the percentage of beneficiaries being aware why they were selected (segregated by gender).

As expected, beneficiaries identified different reasons for being selected between countries. Because the Angola TCP was merged with farming schools, almost all beneficiaries (85%) said that they were selected because they participated in the farmer school.

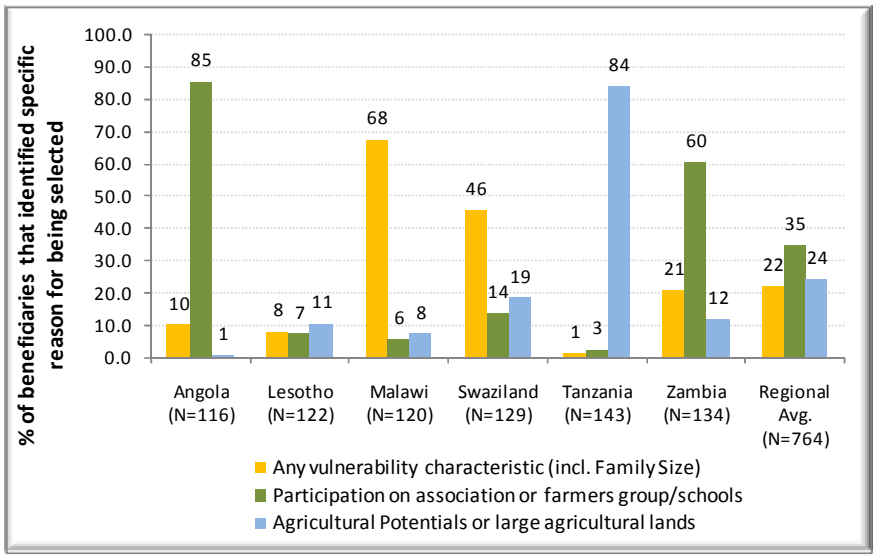
A similar pattern was seen in Zambia where 60% of the beneficiaries believed that they were selected based on their participation in cooperatives and associations. The reason for this difference lies in the fact that even though the first level of selection was done based on participation of cooperatives and receipt of government support, vulnerable households or households with agricultural potential were targeted to receive TCP inputs within eligible households.

In Malawi, the vast majority of beneficiaries (68%) said that they were selected based on their vulnerability characteristics. Even though the targeting criteria also included agricultural potential, only 8% of households said that this mattered for their selection. The reason for this may lay in the fact that the geographical area selected for TCP in Malawi is the most vulnerable area of the country, and even households with agricultural potential are usually highly vulnerable to food insecurity.

Even though vulnerability status was also identified by various beneficiaries in Swaziland (46%), more beneficiaries also highlighted their agricultural potential as the main reason for being selected.

In Tanzania, the vast majority of beneficiaries (84%) believed that they were selected only because of their agricultural potential. Graph 2 displays the reason why beneficiaries believed they were selected.

Graph 2: Percentage of beneficiaries by perceived reason why they were selected by country



2.3 Beneficiary Profiling

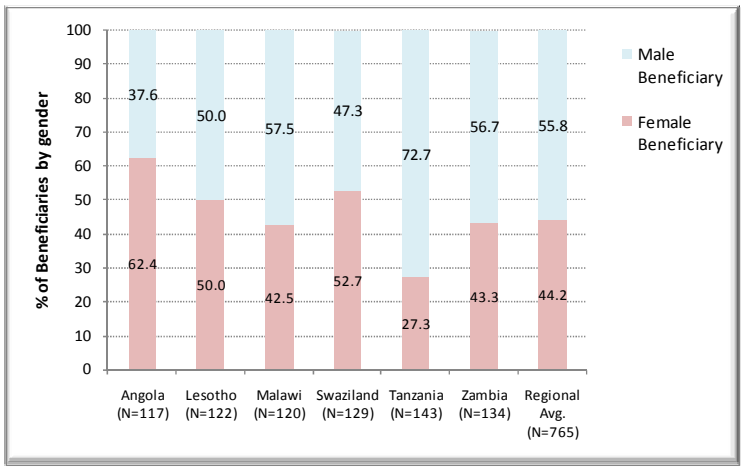
Because households were targeted based not only on their food insecurity status but also on their capacity to produce moderate areas of crops, it is not expected that beneficiaries households' were extremely vulnerable.

Socio & Demographic Status of Beneficiaries

Research has shown that women-headed households are likely to be more vulnerable to food insecurity in southern Africa. Reasons usually include lower access to education, especially among the older population, cultural gender differences and lower access to services, such as credit and income opportunities.
Gender component is particularly important in southern African, where cultural norms disempower women. Although women's relative higher vulnerability to food insecurity has been widely accepted, only the Lesotho TCP explicitly targeted women headed households.

Graph 3: % of beneficiaries by gender of beneficiary

As displayed in graph 3, 44.2% of beneficiaries were women in southern Africa. Although Lesotho was the only country that explicitly highlighted the preference for women headed households, it did not present relatively higher proportion of women being headed by female.



Malawi, Tanzania and Zambia presented lowest level of women beneficiaries ($p<0.05$ as compared to others). Angola presented highest level probably because of women's higher participation in farmer field schools. [9]

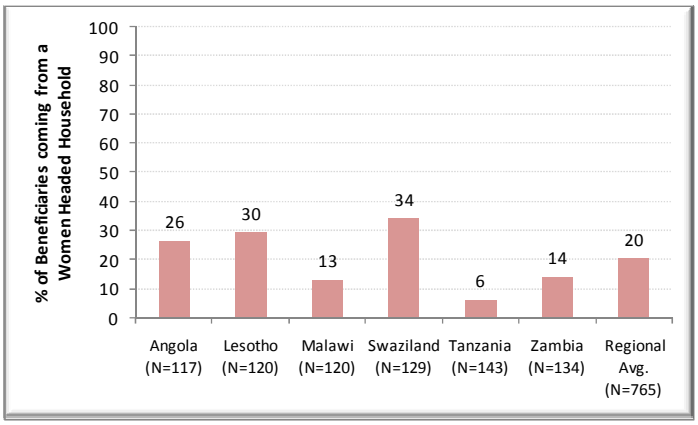
The relatively lower proportion of women beneficiaries found in Tanzania is believed to be because of cultural and traditional issues, where women are prevented to attend programmes.

As a general cultural norm, households headed by married couples the male partner will always be considered the "head of household" and will make most decisions and participate in community events. Thus, it is not the gender of the beneficiary that should matter, but the gender of the head of household hosting the beneficiaries. Even though women may be the beneficiary of the TCP project, if she is married, the head of the household will be her male partner and will therefore enjoy access to most social assets. Analyses done comparing the gender of the beneficiary with its civil status showed that more than half of the female beneficiaries (55.7%) were married and thus expected to live in households headed by male (see table 11).

Table 11: Gender of Beneficiary and Civil Status

Gender of beneficiary	Civil Status			
	married	Divorced	Widow	Single
Male beneficiary (N=415)	89.2	2.4	3.4	5.1
Female beneficiary (N=350)	55.7	9.4	28.6	6.3

Graph 4: Percentage of beneficiaries coming from female headed households

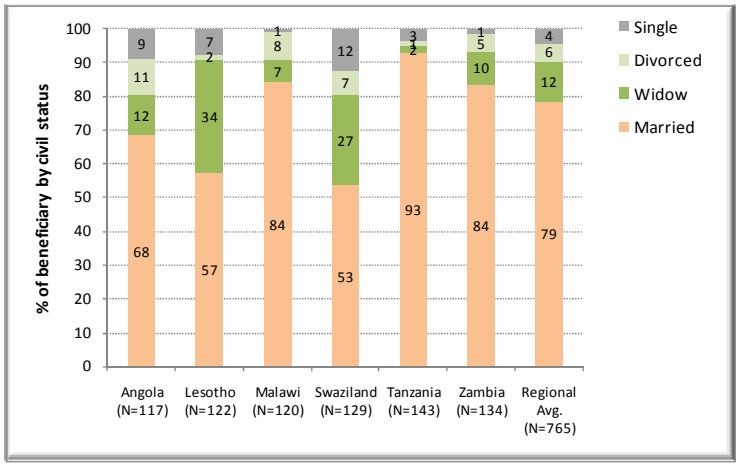


Thus, even though the TCP project reached similar proportion of males and females, it only targeted a small proportion of female headed households, accounting for 20.3% of beneficiaries. TCPs in Malawi, Tanzania and Zambia targeted the least proportion of female-headed households. Graph 4 shows the proportion of beneficiaries by gender of head.

[9] Female beneficiaries may not come necessarily from female headed households.

Civil status of households also need to be highlighted as a major contributing factor to chronic vulnerability, with households headed by single, divorced or widow heads being more likely to be poor. Lesotho and Swaziland were the only countries that explicitly targeted households with single heads.

Graph 5: % of beneficiaries by civil status of beneficiary



Based on primary data analyses, it was found that as much as 78.6% of the beneficiaries were married.

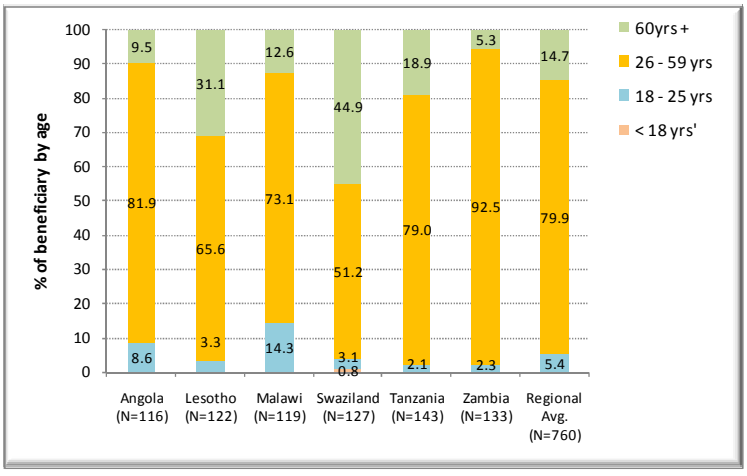
Once more, the TCPs implemented in Malawi, Tanzania and Zambia presented lowest levels of single headed beneficiaries, with as much as 84 to 93% of beneficiaries being married ($p<0.05$ as compared to others). Lesotho and Swaziland, the two TCPs that explicitly targeted single headed households, and at a lesser extent Angola, presented highest proportion of them as beneficiaries. Graph 5 illustrates findings.

Elderly headed households were explicitly targeted in Swaziland. Even though elderly households were targeted in Swaziland, they needed to have members physically able to work in the fields to be also classified as households with agricultural potential.

Overall analyses for southern Africa show that as little as 14.7% of beneficiaries were elderly (Confidence Interval 12.2 to 17.2%).

As expected, Swaziland TCP reached the greatest proportion of elderly beneficiaries, achieving almost 45% of beneficiaries[10]. Although fewer elderly beneficiaries were reached in Lesotho, rates were higher than all other countries ($p<0.1$). Graph 6 illustrates findings.

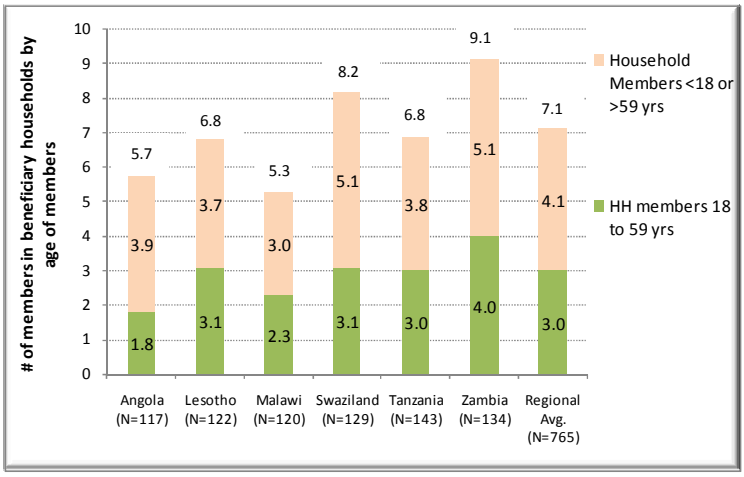
Graph 6: % of beneficiaries by age of beneficiary



[10] Significance of ANOVA comparison through Pearson's coefficient (p) was highly significant as $p<0.1$ and $p<0.01$ when comparing Swaziland to Lesotho and other countries respectively)

Size of Beneficiary Households

Graph 7: Mean number of members per household disaggregated by age

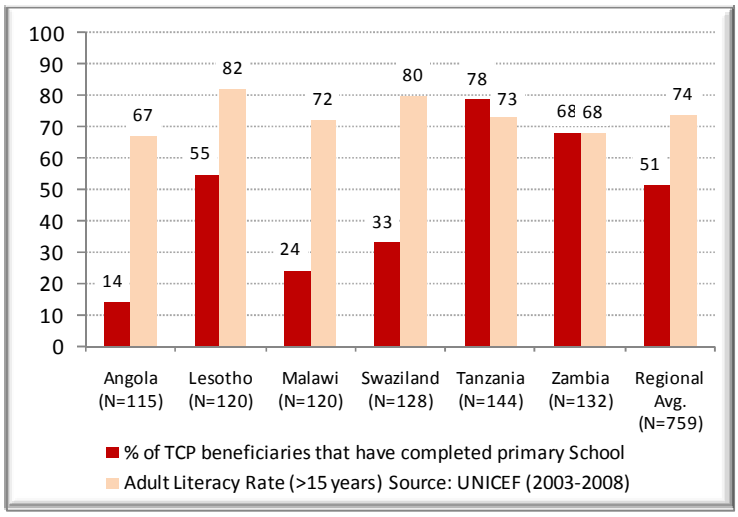


A known relationship has been found in southern Africa between agricultural land size and number of productive members. The relationship is usually direct, with households, with more members being able to cultivate larger plots. The main reason for this relationship lies in the nature of labour demanding agricultural practices and lack of access to animal or mechanical traction. Because the TCP project focused on households with a history of good production in most countries it was expected to find large households sizes among beneficiaries.

In total, the average household size was 7.1 members, with 3.0 being in productive age (see graph 7). The country that presented highest number of productive members was Zambia, where the average was 4.0 members between 18 and 59 years per beneficiary household. The reason for such high amount of members in Zambia may have been driven by the fact that the government distribution program (FSP) used to give 8 bags of fertilizer, what is usually able to cover around 1 hectare of maize. Thus, only households with access to large amount of labour or traction could be able to participate in the programme and therefore be eligible for the TCP. In Zambia, polygamy issues might have further contributed to this large number of members per household.

Education Level of Beneficiaries

Graph 8: % of beneficiary by level of education



Various economic researches have shown that education is one of the most important elements/factors of human capital; where a direct relationship is seen between education level and wealth. Therefore, lack of education has been used as an indication and cause of vulnerability to food insecurity.

Graph 8 illustrates percentage of beneficiaries that have completed primary schools in the TCP countries. Beneficiaries in Tanzania and Zambia tended to be significantly more educated than beneficiaries in other countries.

In Zambia, the selection of beneficiaries was done based on the pre-selected pool of households through the on-going government input distribution system (FSP), to which the TCP was merged to. The FSP in turn, targeted associations or cooperatives, which had to have a history of production. In general, the procedures for registration of association require a set of filled forms, constitution and minutes of general assembly. On the other hand, on-going association activities also require a certain level of accountability, finance, coordination and market skills. Therefore one could expect that households participating in associations are likely to be more educated than those not participating in associations. Furthermore, the proximity to Lusaka may have also contributed to such high levels of primary education found among beneficiaries.

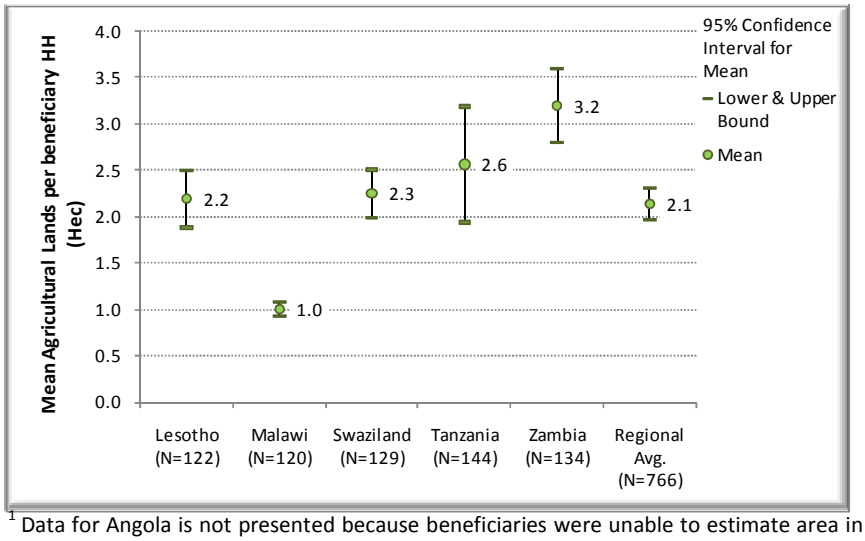
In Tanzania, the National overall education system has ensured an overall good access to education everywhere, explaining the lack of difference between overall rates and beneficiary education.

TCPs in Angola, Malawi and Swaziland targeted lowest levels of beneficiaries with basic education, with 14 to 33% of beneficiaries having completed primary school. As the TCP in those areas targeted either the most vulnerable areas or vulnerable households, it was expected to find lower level of education among beneficiaries.

Landholding of beneficiary households

TCP projects usually targeted households with potential for agriculture, which in turn is expected to be linked to a minimal size of agricultural land owned. Thus, it was not surprising to find that beneficiaries had permanent access to large amount of land. Graph 9 and 10 detail land size of beneficiaries by countries.

Graph 9: Mean size of agricultural land that beneficiary households have accessed[1]

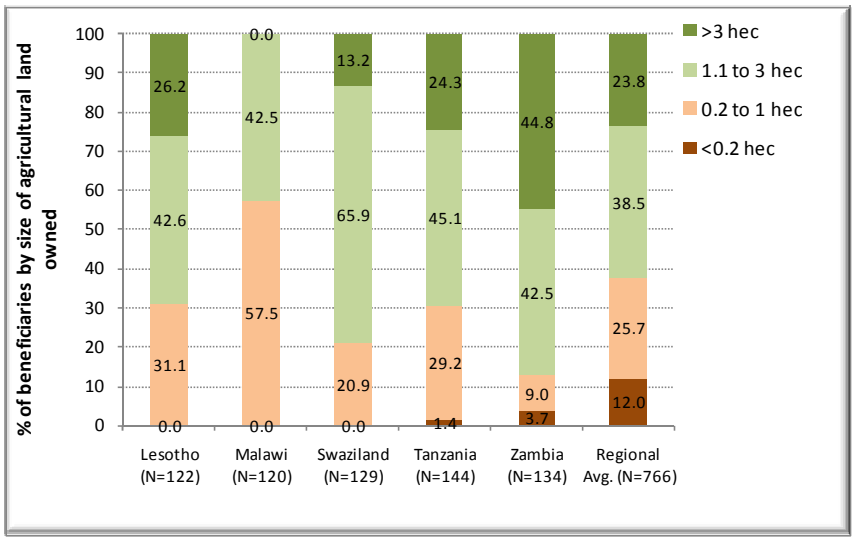


[1] Data for Angola is not presented because beneficiaries were unable to estimate area in hectares and thus only number of fields were captured.

In Zambia beneficiaries had on average as much as 3.2 hectares of agricultural land (CI 2.8 to 3.6 ha). Although a few households used small lands in Zambia (with 3% not owning any land), the vast majority owned large amount of lands, with 87.3% of beneficiaries owning 1 or more hectares.

The TCP in Malawi was the one that most reached farmers with small lands, with 57.5% of beneficiaries owning less than 1 hectare of agricultural land. No beneficiaries owned more than 3 hectares in Malawi.

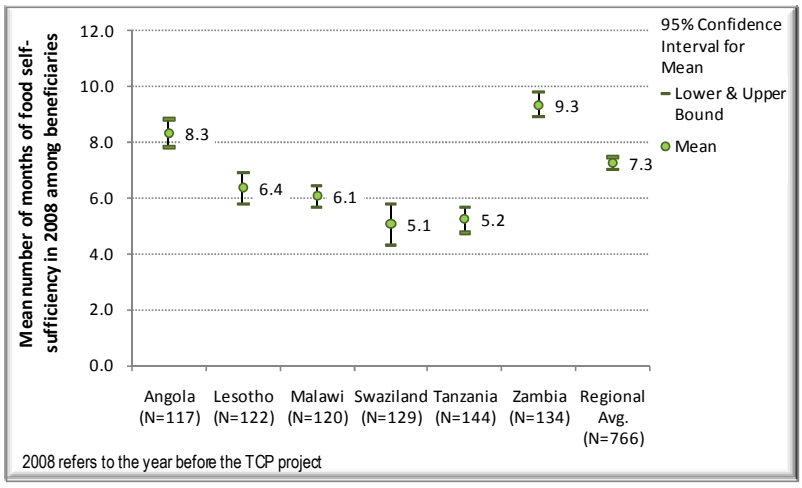
Graph 10: % of beneficiaries by size of agricultural land owned[1]



[1] Data for Angola is not presented because beneficiaries were unable to estimate area in hectares and thus only number of fields were captured.

Months of food self sufficiency of beneficiary households

Graph 11: Mean number of months of food self-sufficiency by beneficiary households



On average, beneficiary households said that they had 7.3 months of sufficient food access from their own productions and purchases in 2007/08, the agricultural year preceding the TCP projects. Beneficiary households in Zambia had a significantly higher amount of self-sufficiency, with beneficiary households having an average of 9.3 months of food self sufficiency. This high rate was the product of targeting farmers participating in associations/ cooperatives and by the fact that the TCP was implemented in the most productive areas of Zambia.

Beneficiaries in Angola presented the second higher rates of food self-sufficiency. Beneficiaries in all other countries (except Zambia) averaged 5.1 to 6.4 months of self sufficiency. Graph 11 illustrates findings.

Even though Malawi is considered to be a productive country, which usually has surplus maize production, the areas targeted for TCP were the most vulnerable and thus households had limited production.

Livestock Ownership of beneficiary households

Livestock ownership by beneficiaries differed between countries. Beneficiary households living in Lesotho, Swaziland and Zambia had a significant larger number of animals than households living in other countries. The main differences may be because of the difference in livelihoods of the areas. The areas targeted in Lesotho, Swaziland and Zambia are characterized by pastoralism, where households are expected to have greater number of animals. Therefore, the difference between those countries and the others do not necessarily mean that beneficiary targeting in those countries failed to reach the most vulnerable. Table 12 details the mean number of animals among beneficiaries per country.

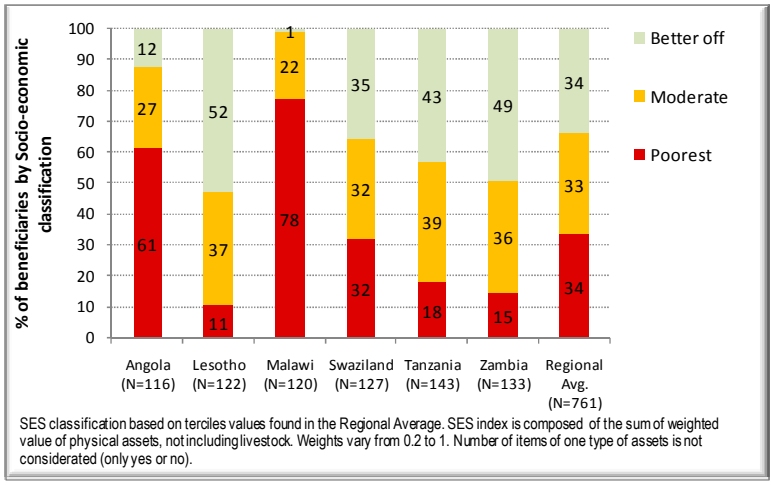
Table 12: Mean number of animals owned among beneficiaries per country.

Country	Mean number of livestock owned by beneficiaries						
	Draught power	Cows	Goats and sheep	Pig	Poultry	Donkey	Horse
Angola (N=117)	0.2	0.1	1.4	1.3	4.9	0.0	0.0
Lesotho (N=122)	1.6	1.8	21.6	0.8	3.0	1.0	0.7
Malawi (N=120)	0.0	0.0	1.2	0.3	4.9	0.0	0.0
Swaziland (N=129)	0.6	5.4	6.4	0.2	15.2	0.3	0.0
Tanzania (N=144)	0.0	0.9	4.3	0.4	14.0	0.2	0.0
Zambia (N=134)	0.0	3.4	6.0	1.7	15.9	0.1	0.0
Regional Avg. (N=766)	0.3	1.6	6.2	1.0	10.1	0.2	0.1

Socio-Economic Profile of beneficiary households

The weighted sum of physical assets was used as a proxy to socio-economic status (SES). This method for estimating SES has been widely used in southern Africa by WFP (Community and Household Surveillance), national Vulnerability Assessment Committees (VAC) and other humanitarian agencies. As suggested by WFP and because of the high difference in livestock ownership – which may be more related to livelihood patterns than SES – only physical assets were included in this proxy.

Graph 12: Percentage beneficiaries by socio-economic status per country



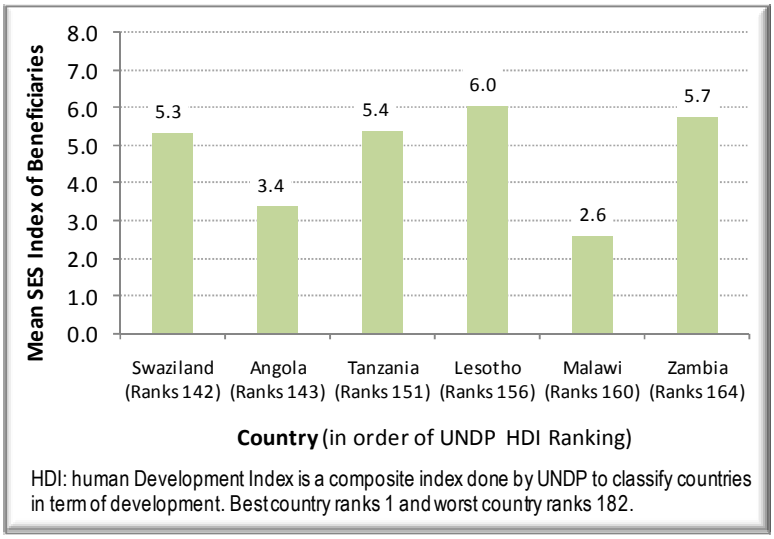
SES classification based on terciles values found in the Regional Average. SES index is composed of the sum of weighted value of physical assets, not including livestock. Weights vary from 0.2 to 1. Number of items of one type of assets is not considerated (only yes or no).

In accordance with SES, TCPs targeted the poorest households in Angola and Malawi as compared to other countries. In these two countries the SES index averaged 2.6 to 3.4. and between 61% and 78% of beneficiaries were classified as poorest based on a regional common classification. Even though the national report from Angola highlighted that the project might have not targeted the most vulnerable Angolan population as all beneficiaries have been targeted through FFS, the selected beneficiaries owned relatively less physical assets (and were therefore classified as poorer) than beneficiaries selected in neighbouring countries.

In Malawi, no beneficiaries were classified as better off and in Angola, only 12% of beneficiaries were classified as better off.

In Lesotho, Tanzania and Zambia around half of beneficiaries were classified as better off. Graph 12 and 13 illustrates findings.

Graph 13: Mean socio-economic status index per country and HDI ranking



All six analysed TCP countries in southern Africa rank between 142 and 164 in terms of their ranking of the Human Development Index (HDI) done by UNDP. While Swaziland and Angola score the best levels of HDI, Malawi and Zambia score the worse levels.

Findings analyzing the SES status of beneficiaries show that although Zambia scores the least in HDI, beneficiaries presented one of the highest SES index. On the other hand, beneficiaries in Angola, one of the countries scoring highest HDI, scored one of the lowest SES index. These comparisons show that, while Angola and Malawi successfully targeted the poorest households, other countries did not do so, especially Zambia.

3. ANALYSIS OF TCP PROJECTS

This section of the report critically discusses key components of the TCP project. This section will begin by analysing the systems used in the various countries and their strengths, weakness, opportunities and threats. Thus, it is separated into three sections critically evaluating the TCP projects: (i) approach for distribution of inputs, including administrative, logistical and management issues of the project, (ii) the effectiveness of the systems used, where findings from household survey, review of documents and discussions are merged to critically assess the system used, and finally (iii) a SWOT analysis of the TCP projects.

3.1 Types of input distribution systems used in southern Africa

3.1.1 Approach for distribution of inputs

The system for distribution of inputs in TCP Projects in southern Africa varied between countries, as systems were usually adapted to local circumstances. Nevertheless, all TCPs were done in close coordination with governmental bodies and were always implemented by the Ministry of Agriculture or institutions affiliated to it. The close collaboration with governmental institutions was a main strength of the TCPs in southern Africa. Table 13 details key characteristics of input distribution systems used in each country.

Table 13: Key characteristics if input distribution systems used in each country.

Country	Description of agriculture input delivery system	Input Suppliers	Implementing Agencies
Angola	**Input pack** given to participants of farmers schools	Various small and medium size agricultural input supplier traders	Ministry of Agriculture (Special Programme on Food Security - PESA)
Lesotho	**Voucher** to be used in Agricultural Input Trade Fairs	Various small and medium size agricultural traders	Ministry of Agriculture and Food Security
Madagascar	**Input pack** given directly to beneficiary **Voucher** to be used in private dealerships (for one region only)	Various small and medium size agricultural traders registered at local FAO officers	MoA
Mauritius	**Input pack** given through vouchers to farmers for receipt of inputs at collection centers.	Local input suppliers	MoA through the Agriculture and Research and Extension Unit
Malawi	**Input pack** given through vouchers to farmers for receipt of inputs at collection centers.	Rab Processors and Monsanto Malawi	Ministry of Agriculture and Food Security (with field support from Village Development Committees and Community Polices)
Seychelles	**Sold** through requisite shops	Imported by Government	Seychelles Agricultural agency
Swaziland	**Voucher** to be used in Agricultural Input Trade Fairs	Various small and medium size agricultural traders and seed venders	Ministry of Agriculture and Food Security (with field support from traditional leaders)
Tanzania	**Input pack** given directly to beneficiary	Phase I: Locally sourced from local seed and fertilizer companies Phase II: Locally sourced from local seed companies. Fertilizer from international dealer	Ministry of Agriculture, Food Security and Cooperative with the Local Government
Zambia	**Input pack** given to members of associations/cooperatives	Ronezi Seed Entrerprise and Zambia Seed Company	Ministry of Agriculture and Cooperatives (Linked to the Fertilizer Support Programme)

Most of the inputs procured by the TCPs were supplied by national small and medium scale traders. This method of procurement may be seen as a major indirect economic benefit of TCPs.

There were basically three approaches for input distribution in southern Africa: (i) input packs and (ii) vouchers for purchase of selected inputs, and (iii) sale at cost.

Input packs: Input packs were mostly based on free distribution and were done by most of the countries in southern Africa (Angola, Madagascar, Mauritius, Malawi, Tanzania and Zambia). Input packs were usually made up of a pre-selected quantity of specific inputs. Except for Angola and Malawi all countries had various packs that were distributed throughout the target areas. The inputs packs were usually adapted to the different agro-ecological zones. In some cases, beneficiaries in Zambia were also given a choice of packs based on their personal preference. Interestingly, the TCP in Madagascar adapted the packs not only in relation to agro-ecological zones but also in terms of beneficiaries' potential agricultural production through varying sizes of input packs. The varying size of input packs allowed more vulnerable farmers, whom may not be able to plant large fields, to also be targeted in the project.

Because the areas targeted in Angola were in the same agro-ecological zones, there were no differences on the type of input pack distributed to beneficiaries. The TCP in Malawi, which was only approved in November 2008, had to fast track all procurement activities and therefore limited seeds to hybrid maize which was readily available in country.

The TCP in Zambia was the only one that did not distribute input packs free of charge. Even though beneficiaries did not have to pay for the inputs up-front, of the 10 kg of seeds they received they were expected to return 5 kilos of seeds. The returning of seed was to be part of a revolving scheme. In reality, it was found that most beneficiaries indeed returned the seeds. This method highlights the potential for increasing sustainability of input distribution systems. If beneficiaries were required to return all 10 kg, then this input distribution system could become a continual process.

While most TCPs focused on the direct distribution of inputs to beneficiaries, the TCPs in Mauritius and in Tanzania distributed vouchers to be exchanged by pre-conceived input packs to the beneficiaries. Receivers of vouchers were responsible to collect their packs at distribution points.

In all TCPs that distributed national input packs, tenders were awarded to local suppliers, with the exception of Tanzania, where fertilizers used during the unplanned second phase were procured from an international dealer. The choice of seed types distributed was always a function of decisions done in-countries as to the most needed variety, most available variety and envisioned impact.

Voucher: Done only by Lesotho, Madagascar and Swaziland, vouchers with monetary denominations were distributed to beneficiaries to be used as money in Input Trade Fairs (ITFs), which were organized by the government and FAO. The vouchers could be exchanged for any of the inputs that the farmers chose at ITFs. All TCPs that distributed vouchers to be used in agricultural input fairs procured inputs from various small and medium size agricultural traders. This system had various strengths and, among others, ensured greater diversity and free-choice of inputs while decreasing logistical and administrative cost.

A few positive indirect impacts of ITFs should also be accounted for. First indirect benefits could be seen at the procurement level, where local small, medium or large scale traders could participate in ITFs. The suppliers benefited from a greater demand of goods as farmers had access to funds to purchase inputs. This motivated

the local economy. Furthermore, ITFs also increase availability of inputs at community level as purchases can also be done with cash. The interactions between agricultural extension officers, traders, and purchasers stimulate exchange of knowledge and ideas, working as informal training to beneficiaries and traders.

In Madagascar, the only country that distributed inputs through both input packs and ITFs, choice of distribution system was done at regional level. While most regions chose from a small variety of input packs, one region preferred ITFs because fairs have been implemented in that area with positive experiences. However, the lack of past experiences with ITFs in other areas and the need to rapidly implement the TCP, limited the distribution of inputs through fairs in other areas.

Even though ITFs have shown to be a positive approach to distribution of inputs, it also raised some concerns. The first difficulty was related to monopolization of prices and inputs sold by traders. This was especially the case in Lesotho and Swaziland, where traders set fixed prices for all agricultural inputs voiding the healthy and necessary competition among supplier. Thus, it is necessary to ensure that price manipulation by traders is avoided through guidelines on maximum prices or other innovative actions.

The second difficulty related to cost-effectiveness of sale of inputs from traders, especially when suggested location of fairs was remote. In various cases in Lesotho, fairs had limited traders present with limited inputs because of inaccessibility, making beneficiaries unable to purchase desired quantities and types of inputs. In those cases, it might be necessary to support traders with transport so as to minimize their cost and ensure that ITFs are carried in remote areas.

The third difficulty related to quality control. Because various unregistered traders are part of ITFs, issues with quality and confidence of inputs were raised by beneficiaries, implementing agencies and FAO. In Swaziland, traders were found to be mixing eating beans with beans seeds. Quality control is a major activity needed in all ITFs to ensure that inputs are of good value.

Another problem was related to the availability of fertilizer in Lesotho. Although households seemed to be willing to purchase basal and top fertilizer with their vouchers in Lesotho, those commodities were not available for purchase in the ITFs in Lesotho. Even though input traders said that fertilizers were not available because demand was low, beneficiaries statements disagreed with such conclusion. The fact that in Swaziland, where the amount given to each farmer to purchase inputs in ITFs was relatively lower than Lesotho, the relatively high amount of fertilizers purchased (total fertilizer sold adds to MT 298 while total maize seeds sold adds to 6.5 MTs that should require only 130 MT) shows that farmers might be willing to prioritize fertilizer over seed purchase. FAO and government should therefore ensure that traders have the demanded inputs.

Furthermore, in Lesotho, "*traders persuaded farmers to purchase effective micro-organism (EMO*)". Although research has shown that correct EMO may increase yields, its composition and use is crucial for ensuring a positive impact and even safety. While farmers in Mauritius were given a formal training in the correct use of bio-fertilizer before its distribution, no training occurred in Lesotho. Furthermore, the lack of quality control of EMO may have incurred issues with its quality. Thus, there is a need to include quality control and training if new technologies are being motivated through ITFs.

Lastly, problems related to forging of vouchers were also documented in Swaziland and Lesotho, where vouchers were being replicated illegally or distributed directly to traders without inputs being delivered. Thus, it is necessary to ensure that a careful fraud prevention system is included in ITFs systems.

Subsidized Sales: implemented by Seychelles TCP only, the input distribution system focused on supporting on-going national government input support program, which focus on the sale of inputs at subsidized cost. The cost of input includes the direct value of purchase plus a 5% administrative fee. Thus, inputs are procured with revolving money from sale of previous goods, ensuring a long term sustainable approach for distribution of inputs. Thus, it seems that the system used in Seychelles, where inputs were sold at subsidized prices rather than distributed free of charge, are the most economically viable, avoiding the creation of the dependency syndrome.

Nevertheless, in this kind of system, beneficiaries need to have access to a minimal income to purchase inputs. Because farmers in Seychelles have a relative higher economic potential, this approach seems to be suitable for this kind of environment. However, one would have to be careful before recommending this approach to poorer countries, where farmers may not have the means to access inputs even at subsidized price.

3.1.2 TCP Design and Re-Design

Designing the TCP emergency input supply distribution projects in detail was likely to be inaccurate due to the uncertainties of this type of crisis. Soaring prices crisis are highly volatile as different partnering stakeholders usually design similar projects simultaneously, there is typically a lack of certainty about the availability of inputs for procurement at the time of intervention, and the unstable tendencies of the input's prices are likely to impact on the costs of project.

Furthermore, as it is the case of most emergency responses, the time available to design the national TCP projects were limited as to ensure that responses were timely delivered. This aggravated the design of the TCP projects as inadequate time was spent with consultations with partnering stakeholders.

Therefore, under emergency settings, there was a need for space to re-designs the TCP projects after inception, allowing them to take into consideration local issues only seen during the implementation phase.

One of the main strengths of the TCPs in southern Africa was that, once the project proposals were approved, much consultation occurred between national FAO representation, governmental authorities, input suppliers, and other various partnering stakeholders. The extensive consultations between FAO and stakeholders and the characteristics of the crisis at time of intervention resulted in major changes being necessary in the conceptualization of most TCPs in southern Africa. Changes related mainly to the type of inputs to be distributed, these being a function of complementarily to governmental projects, price and availability of inputs at time of inception of project. Because of these changes, there were accompanying changes on the number of beneficiaries reached. Table 14 illustrates the key changes between project proposals and actual project implementation.

Table 14: Key changes between project proposals and actual project implementation

Country	Planned Project Target		Actual Project Achievements	
	Inputs	# of beneficiary farmers	Inputs	# of beneficiary farmers
Angola	Maize seeds, fertilizer and agricultural tools	4,750	Beans and vegetable seeds	2,700
Lesotho	Non specified crop seeds, fertilizer and tools	3,950	Various crop seeds and tools and small quantities of effective micro-organisms	4,019
Madagascar	Rice and beans seed	5,000	Maize, rice, beans, groundnuts and vegetable and fertilizer	12,000
Mauritius	Vegetables, cotton seed cake, soy bean and fertilizer	2,982	Vegetables, cotton seed cake, soy bean and fertilizer	7,475
Malawi	Hybrid maize seeds and fertilizer	5,000	Hybrid maize seeds and fertilizer	2,790
Seychelles	Assorted vegetable and fruit seeds, fertilizers and water pumps	6,350	Assorted vegetable and fruit seeds, fertilizers and water pumps	6,350
Swaziland	Sorghum, sesame, mung beans, cowpeas, groundnuts seeds, fertilizer and small livestock	2,375	Dry beans, sorghum, maize, Jugo beans, groundnuts, cowpeas and mung beans seeds and fertilizer	6,290
Tanzania	Maize, rice and beans seeds and fertilizer	10,000	Maize and sorghum seeds and fertilizer	6,050
Zambia	Hybrid maize seeds and fertilizer	8,845	Groundnuts, beans and cowpeas seeds	17,188

In Zambia for example, the inputs planned to be distributed by the TCP were entirely changed based on consultations done with the Ministry of Agriculture (MoA). The TCP for Zambia was designed to target 8,845 farmers with hybrid seeds and fertilizer. However, as in 2008/2009 MoA had doubled to 250,000 the number of beneficiaries targeted by the on-going national wide Fertilizer Support Programme (FSP) which delivered maize and fertilizer, the further delivery of maize and fertilizers by the Zambia TCP project would be a waste of resources as it would be replicating on-going interventions. Therefore, it was mutually decided by MoA and FAO to reorient the TCP project to complement the FSP input pack with legumes, which would support diversification of production, promote food and nutrition security and increase farm income.

Although types of inputs to be distributed in Malawi and Tanzania were not largely changed, the numbers of beneficiaries were significantly decreased because the price paid for inputs were higher than the planned value due to inflated prices and exchange rate fluctuations.

3.2 Effectiveness and impressions of input distribution systems

3.2.1 Timing of Activities

Although FAO launched its Initiative on Soaring Food Prices (ISFP) in December 2007, all countries in southern Africa only requested for ISFP support through TCP during the second quarter of 2008. Some countries, such as Madagascar, Malawi, Mauritius, Seychelles, and Tanzania only requested the project during the second

semester of 2008. Therefore, most National TCP project were only approved in July or August 2008, with Malawi only having its project approved in November 2008. Given that the main agricultural season in southern Africa begins around November, the time of initiation of TCP projects implementation were not aligned with agricultural season. Table 15 illustrates the dates for governmental requests, approval and implementation dates.

Table 15: Project approval dates and implementation dates

Country	Govt request	Project approval	Proposed EOD - NTE	Actual EOD - NTE
Angola	28 Apr 2008	01 Jul 2008	01 Jul 2008 – 30 Jun 2009	01 Dec 2008 – 31 Aug 2010
Comoros	05 May 2008	01 Jul 2008	01 Jul 2008 – 30 Jun 2009	01 Jul 2008 – 31 Dec 2009
Eritrea	08 May 2008	01 Jul 2008	03 Jul 2008 – 02 Jul 2009	03 Jul 2008 – 02 Jul 2009
Lesotho	14 May 2008	01 Jul 2008	01 Jul 2008 – 30 Jun 2009	01 Jul 2008 – 30 Jun 2009
Madagascar	16 June 2008	01 Jul 2008	01 Jul 2008 – 30 Jun 2009	01 Jul 2008 – 30 Sep 2009
Malawi	10 Sept 2008	10 Nov 2008	12 Nov 2008 – 31 Oct 2009	12 Nov 2008 – 31 Oct 2009
Mauritius	11 Aug 2008	10 Oct 2008	14 Oct 2008 – 30 Sep 2009	01 Mar 2009 – 31 Dec 2009
Seychelles	30 June 2008	15 Jul 2008	15 Jul 2008 – 30 Jun 2009	01 Sep 2008 – 31 Oct 2009
Swaziland	16 May 2008	01 Jul 2008	01 Jul 2008 – 30 Jun 2009	01 Jul 2008 – 30 Jun 2009
Tanzania	11 Jul 2008	21 Aug 2008	25 Aug 2008 – 31 Jul 2009	25 Aug 2008 – 31 Jul 2009
Zambia	06 May 2008	01 Jul 2008	01 Jul 2008 – 30 Jun 2009	01 Oct 2008 – 1 Mar 2010

Reasons for the delay on the delivery were usually connected to conclusion of consultations between FAO and Governments, which usually took a few months. In Zambia, the delay in the conclusion of consultations between FAO and MoA from July to October delayed all following activities, including procurement and distribution of inputs.

Organizational procedures were also not clear for various countries and, in Lesotho the main reason for delay was the organizational time required to hold Input Trade Fairs. A similar pattern was found in Malawi, where, even though the implementation of TCP was extremely fast and inputs were delivered to farmers only one and a half months after starting date of project, the TCP project started at the same time as the normal planting time, this being in November 2008.

The extreme case of Angola, where the inputs were only distributed one year and two months after the starting date of the project, is an exception in the region; nevertheless attention must be given to this occurrence. Even though the reason for this extreme delay has not been well documented anywhere, including in the national evaluation, informal discussions show that the delay was not necessarily connected to the start up of operations, as this was achieved about two weeks after project signature. It seems that the likely reason for the delay was the coincidence of the start up of the TCP project and the absence of an FAO Representative.

The TCP project in Swaziland and Tanzania were the only projects where inputs were distributed before the planting period.

Independent of the reason, a delay on distribution of inputs in this kind of emergency project is a major constraint as it impacts the final outcomes. The time needed for bilateral discussions and agreements and logistical issues must be adequately planned for in any input distribution project. The lack of time between the global ISFP TCP blanket call, did not allow countries in southern Africa to have the necessary time to cater for expected delays resulting from those bilateral discussions and inputs procurement. The lack of time between inception of projects and planting season in southern Africa compromised the implementation and impacts of national projects. Table 16 details dates of distribution of inputs in each country and its relationship to the agricultural calendar and start date of the project.

Table 16: Dates of distribution of inputs in each country and its relationship to the agricultural calendar and start date of the project

Country	Approval Date of Project	Date of Inputs Delivery	Month of start agricultural season	Deliver of Inputs in Relation to Agricultural Season
Angola	July 2008	Aug/Sep 2009	May (vegetables) Oct/Nov (beans)	*4 months late (or 9 months earlier) for vegetable* *12 months later (or on time for 2008/09)*
Lesotho	July 2008	Aug/Sep 2008	Aug/Sep	*1 month late*
Madagascar	July 2008	Aug/Sep (rainy season) May/Jun (winter season)	Nov/Dec (rainy season) Apr/May (winter)	*on time* *1 month late*
Mauritius	August 2008	Mar 2009	May Carrot seeds Feb Onion	*on time* *1 month late*
Malawi	November 2008	Dec 2008	Nov/Dec	*1.5 month late*
Seychelles	July 2008	Sep/Oct 2008	Nov/Dec	*on time*
Swaziland	July 2008	Phase I: Sep 2008 Phase II: Dec 2008	Phase I: Oct/Nov Phase II: Dec/Jan	*on time*
Tanzania	August 2008	Phase I: Nov 2008 Phase II: Dec 2008	Phase I: Oct/Nov Phase II: Feb/Mar	*1.5 months late* *On time*
Zambia	July 2008	Phase I: Dec 2008 Phase II: Jan/Feb 2008	Phase I: Nov/Dec Phase II: Jan	*Phase:: 1 to 1.5 months late* *Phase ii: 2 months late*

3.2.2 Quantity of Inputs Distributed

It is expected that the total value of the nine evaluated TCP projects (US$4,000,000) has reached over 58,498 farmers in all countries except for Seychelles which could not account the number of beneficiaries because of the system used. Based on countries which could account the number of beneficiaries, in total, the average cost to cover one beneficiary was US$ 80. However, regional average masked great differences in amounts and type of inputs between and within countries. As displayed in table 17, the cost per beneficiary varies between US$ 29 in Zambia to US$ 179 in Malawi.

Table 17: Key figures on cost-effectiveness of TCP projects

Country	Number of MTs of Seeds	Number of MTs of fertilizer	Number of tools	Number of Beneficiary	**Estimated cost to cover one beneficiary [1]**
Angola	40.6	0	0	2,700	**$69**
Lesotho	85.4	0	2599 tools	4,000	**$125**
Madagascar	114.1	199	0	12,000	**$42**
Malawi	27.9	279	0	2,790	**$179**
Mauritius	215.4	1	0	7,475	**$33**
Seycheles	0.3	42	100 water pumps	not applicable	**not applicable**
Swaziland	34.2	298	0	6,290	**$79**
Tanzania	30.5	267.5	0	6,050	**$83**
Zambia	171.9	0	0	17,188	**$29**
Regional Total	390.5	844.5	2699	58,498	**$80**

[1] Based on the formula: $ 500,000 / # of beneficiaries
[2] Angola has only spent US$ 187,000 of its US$ 500,000 budget. Thus formula refers to $ 187,000 / # of beneficiaries

The country with least cost per beneficiary was Zambia, where 17,188 households received 10 kilos of seeds at an estimated cost of US$ 29 per household. The low cost per beneficiary is a function of saving funding through merging the project to the governmental on-going Fertilizer Support Programme (FSP) and to the low cost of inputs distributed as there was no fertilizer included in the package.

In Tanzania where seeds and limited fertilizer were inputs distributed, 2,050 beneficiary received 10 kilos of OPV maize and 100 kilos of fertilizer (half being top and half being basal), and 4,000 beneficiaries received 2.5 kilos of sorghum seed, the average cost per beneficiary was US$ 83.

On the other hand in Malawi, where 2,790 beneficiaries received 10 kilos of hybrid maize seed and 100 kilos of fertilizer, the average cost per beneficiary was US$ 179.

By reviewing these findings, it becomes clear that projects that focus on the distribution of fertilizer are significantly more expensive. Thus, either projects that distribute fertilizer need to be more funded than projects that only focus on distribution of seeds, or the number of beneficiaries will be significantly smaller.

3.2.3 Quality of inputs distributed

Most of the TCPs did not record any major issue with quality of inputs distributed (Malawi, Tanzania, Swaziland and Zambia). In those countries, the seeds distributed germinated well and, where weather conditions were positive, yields were good. Because of weather shocks and/or high occurrence of pests in Tanzania and Zambia, seeds' germinations were negatively affected. Even though weather shocks impacted those two countries, the generalized drought highly limited production in Tanzania.

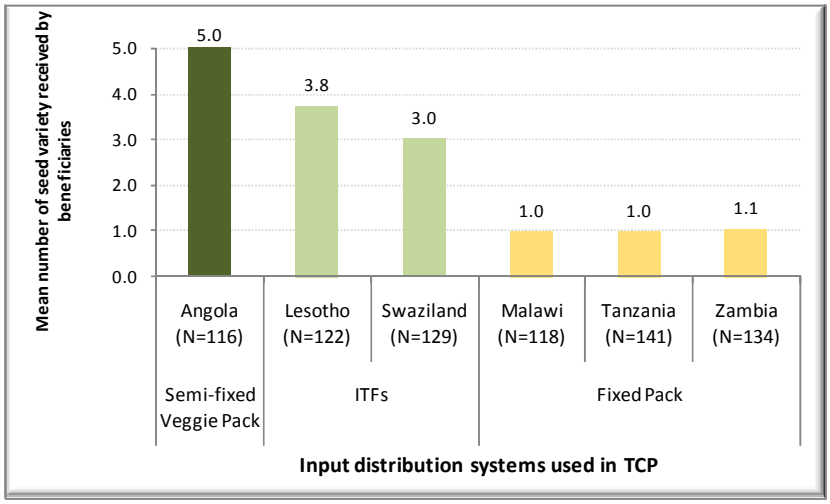
Most countries had governmental bodies being responsible for quality control of seeds. In Swaziland, where distribution of inputs was done through trade fairs and voucher, the Seed Quality Control officers from MoA were responsible for assessing the quality of seeds supplied by vendors and were always present during the fairs. In all other countries, the central procurement of seeds, done in close collaboration with experts in quality control, ensured that purchased seed was of high quality.

The only country that highlighted major problems with inputs of quality was Angola. Although inputs in Angola were purchased by FAO at provincial level through a clear procurement process, the limited availability of seeds and the lack of quality control raised major quality issues. In accordance with the national evaluation report, a large proportion of distributed beans seeds were found to be inappropriate for planting. In fact, primary data analyses of the perceptions of the surveyed beneficiaries showed that in average, each household discarded 10 kilos of received seeds, accounting for about 40% of received seeds[11].

Based on these findings, it is clear that quality control has to be explicitly included as an activity of TCP to ensure that impacts are maximized.

3.2.4 Diversity of type of inputs distributed

Graph 14: Mean number of seed type received by beneficiary by country in relation to input distribution system



The type and quantity of seeds distributed in the TCPs in southern Africa differed between countries. Because this, the diversity of types of seeds being distributed in each country was also expected to differ. Graph 14 and table 18 illustrates types of seed distributed in each country.

The diversity of types of seeds varied in accordance with the type of system used for distribution of seeds. Even though the TCPs in southern Africa were based mainly on three systems distribution of inputs, the impacts they had on diversity of types of seeds can be separated into two groups:

Input Packs – TCPs in Angola, Madagascar, Malawi, Mauritius, Tanzania and Zambia. The TCPs in Malawi, Tanzania and Zambia usually offered only one type of seed for each beneficiary. While the TCP in Malawi only offered one type of seed pack (only hybrid maize) for all beneficiaries, the TCP in Zambia offered three different types of packs having different seeds each. Thus in Zambia, beneficiaries received beans, groundnuts or cowpeas. Even though the TCP in Zambia aimed at improving crop diversification by not giving maize seeds, it did not distribute diverse seeds for each household and each beneficiary received only one type of seed. A similar system was implemented in Tanzania, where households received either maize and fertilizer or

[11] Angola Evaluation

sorghum. In Madagascar and Mauritius, a combination of 2 to 5 seeds were included in the inputs packs. Except for Zambia, which gave limited choice to beneficiaries, the choice of seeds delivered was based on the agro-ecological characteristics of the areas in each of these countries.

Although the TCP in Angola focused only on a set input pack, it combined various vegetable seeds and beans. Thus, most beneficiaries (85.3%) received between 4 and 6 types of seeds. The pack usually was made up of tomato, onion, cabbage, carrots and less often, beans. Although beneficiaries received a pack with various seeds, they were mainly vegetable seeds as the only non-vegetable seed distributed was beans. Nevertheless, the high variety of seeds and the potential for seeding is a great strength of this system.

Inputs distributed through agricultural Input Trade Fairs (ITFs) or Sale Points: TCPs in Lesotho, Madagascar, Swaziland and Seychelles: These countries presented the highest diversification of types of seeds being distributed, with beneficiaries in Lesotho receiving in average 3.8 types of seeds and in Swaziland 3.0 types of seeds. Not only the diversification of types of seed per beneficiary was high, but also the variety of individual packs. Because households were able to choose their seeds from an array of options, the pack was diverse. The beneficiaries in Lesotho had access to as much as 13 different types of seeds. Although the beneficiaries in Swaziland also accessed a highly assorted pack of seeds (7 types), the diversification was substantially lower than the one found in Lesotho.

The most common seeds accessed were Maize (70% of beneficiaries accessed it) and potatoes (68% of beneficiaries accessed it) in Lesotho. In Swaziland the most common seeds were significantly different and included beans, groundnut, and cowpeas (being accessed by 62%, 58% and 52% of beneficiaries respectively) probably because maize seeds were limited to one area as to support crop diversification in Swaziland.

Table 18: Detailed variety of seeds received. Refers to percentage of beneficiaries receiving specific seed variety in a country

Country	Beans	H.Maize	Cabbage	Groundnut	Carrots	Tomato	Onion	Cabbage 2	Potatoes	Sorghum	Spinach	Peas	Cowpeas	Beetroot	JugoBeans	Turnip	MungBeans	DryBeans
Angola (N=116)	68%	-	87%	-	86%	94%	88%	78%	-	-	-	-	-	-	-	-	-	-
Lesotho (N=122)	36%	70%	47%	-	34%	17%	10%	-	68%	1%	36%	21%	-	16%	-	11%	-	-
Malawi (N=118)	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Swaziland (N=129)	-	31%	-	58%	-	-	-	-	-	35%	-	-	52%	-	62%	-	36%	30%
Tanzania (N=141)	-	66%	-	-	-	-	-	-	-	34%	-	-	-	-	-	-	-	-
Zambia (N=134)	48%	-	-	58%	-	-	-	-	-	-	-	-	1%	-	-	-	-	-
Regional Avg. (N=760)	30%	40%	20%	19%	18%	17%	15%	13%	9%	8%	4%	3%	2%	2%	2%	2%	1%	1%

3.3.5 Knowledge of agriculture inputs received

Past Experience and Introduction of new seed types and varieties[12]

Although the types of the seeds distributed in the TCPs in southern Africa reflect commonly on food found available in local markets, various beneficiaries said that they never cultivated the type of seeds distributed under the TCP. Analyses on knowledge of input received are displayed in graph 15.

[12] Questions for all issues covered in this section include both varieties and types depending on countries. Questions regarded seed types for: Angola, Lesotho, Swaziland and Zambia. Question regarded specific seed variety for: Malawi and Tanzania

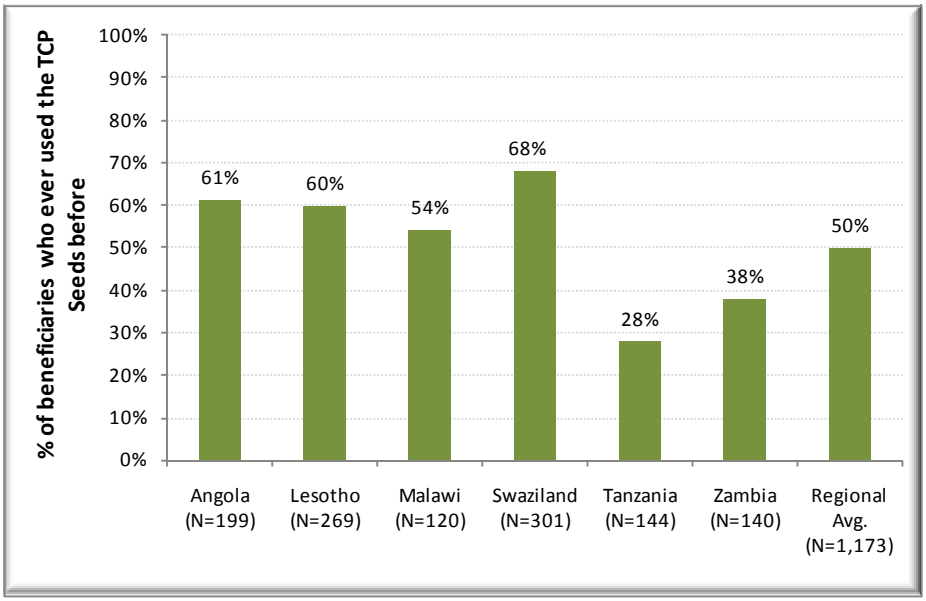
Overall findings show that only 50% of beneficiaries in southern Africa had used the inputs they received before. Thus, one can conclude that the TCP project has been successful in bringing new type of seeds to southern Africa.

In all TCPs which focused on the distribution of vegetables and legumes, the introduction of new types of seeds was to about half of the beneficiaries. In Zambia, where the TCP was focusing on diversification of crops by the introduction of beans, groundnuts and cowpeas, the findings were very positive as only 38% of beneficiaries had used those types of seeds before.

In Lesotho and Swaziland, where beneficiaries chose their own seeds through their vouchers, the willingness to try out new types of crops were clear as about 40 to 30% of beneficiaries had not used the chosen variety of seeds respectively.

The evaluation of TCPs in Malawi and Tanzania, which focused only on distribution of hybrid maize seeds and sorghum seed (in Tanzania) asked if the beneficiary had used specifically the variety of seed distributed rather than the type. The modification of this question for those countries was important to ensure applicability of the issue on knowledge as it is expected that all farmers have grown maize and sorghum at some point on their lives, because the seeds distributed in these countries were hybrid (Malawi) and OPV (Tanzania), the vast majority of beneficiaries said they have never grown those varieties. While in Malawi about half of the beneficiaries (54%) had used the variety of hybrid seeds distributed before, in Tanzania, the same was only true to 28% of the beneficiaries.

Graph 15: Percentage of beneficiaries who ever used the type or variety of seeds[13] received from TCP before by country[14]



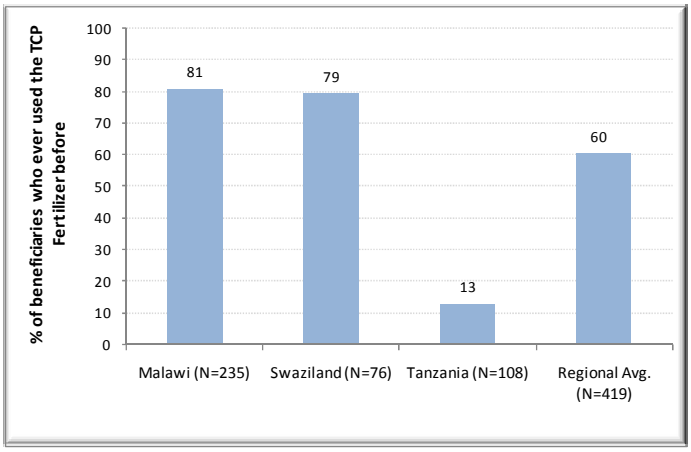
[13] Questions for previous use of seed types were asked for: Angola, Lesotho, Swaziland and Zambia. Question on previous use of specific seed variety was asked for Malawi and Tanzania.

[14] When a beneficiary received 2 or 3 seeds types or variety, answers for all varieties were analyzed. Thus, sample sizes reflect total number of answers among beneficiaries rather than the exact percentage of beneficiaries.

In Malawi and Swaziland, the rate of use and previous use of the types of fertilizer (i.e. basal or tops) before the TCP was high, with around 75% of the beneficiaries having used it before.

In Tanzania, the use of the types of fertilizers distributed through TCP before the project was rare and only 17% of beneficiaries had used those types of fertilizers before. The main reason for such difference might be related to the lack of availability of fertilizer in many areas of Tanzania because its price and geographic isolation of areas targeted through TCP. Graph 16 illustrates findings.

Graph 16: Percentage of beneficiaries who ever used the fertilizer received from TCP before by gender and country[15]



Training and support for introduction of new seed type or variety and fertilizer

Even though the findings on introduction of new and improved varieties and types of seeds are positive, the lack of previous utilization of seeds calls to the need of training or technical support. Due to the TCPs responding with urgency, training was not included as a major activity in most TCP in southern Africa, except for Mauritius where training on EMO was included and in Angola, where the distribution of inputs through farmer field schools ensured training of beneficiaries.

Thus, misusage of seeds and fertilizer was commonly reported in various national evaluation reports. In Malawi for example, the national evaluation found that "most beneficiaries had not grasped the concept of one/one seed technology and therefore used the existing knowledge based on maize planting by using three seeds per planting station" (Malawi National Evaluation Report, pg 30).

As displayed in graph 17, all TCPs included some form of informal training[16]. The only exception was in Angola, where the TCP project was merged to agricultural schools. In that country, even though the TCP project might not have addressed training directly, its assimilation to the farmer schools was responsible for almost all beneficiaries receiving training on seeds received through TCP.

Apart from Angola, the TCP in Malawi presented highest levels of training. Nevertheless, the national report states that "only in a few instances were there 'organized training' in the form of field demonstrations on plant

[15] When a beneficiary received 2 or 3 seeds types or variety, answers for all varieties were analyzed. Thus, sample sizes reflect total number of answers among beneficiaries rather than the exact percentage of beneficiaries.
[16] Because no primary data is available for Madagascar, Mauritius and Seychelles, findings on training are not included for those countries.

spacing and fertilizer application" (Malawi National Evaluation Report, pg 30). In all other countries, less than 25% of beneficiaries stated that they received any training from TCP projects.

The lack of training on new seed types and varieties would not be an issue if the TCPs were supporting already adopted crops or building upon past capacity building activities. However, except for Malawi, where 67% of beneficiaries were trained in the use of hybrid maize seeds before, other trainings were not common in the region. Graph 17 details percentage of beneficiary receiving training on inputs by source of training.

Graph 17: Percentage of beneficiaries that received specific or any form of training on received seeds per country[17]

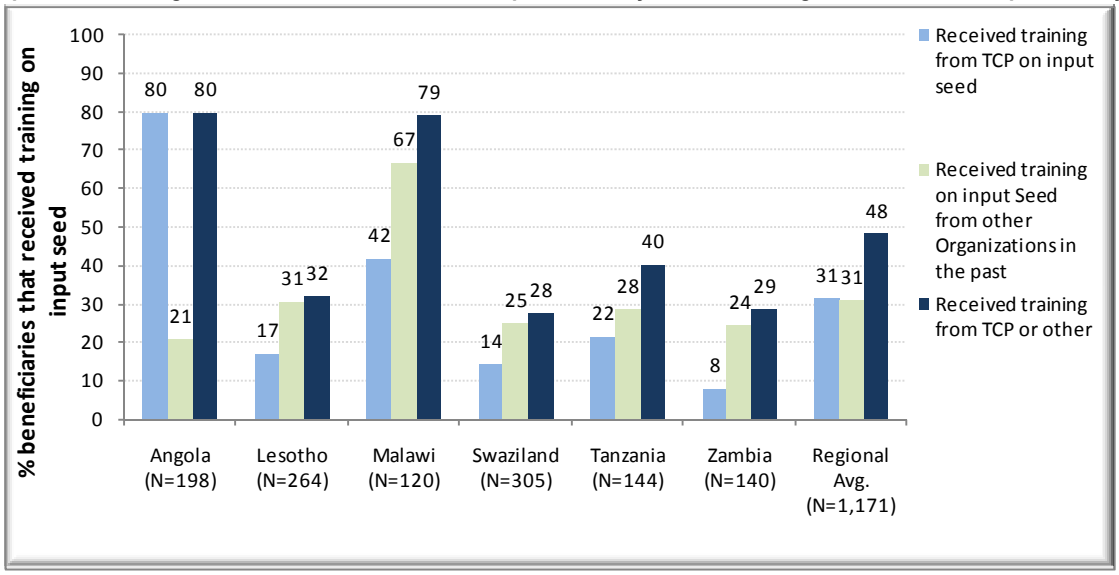


Table 19: Percentage of beneficiaries by knowledge and training levels of receiving seeds[15]

		Training: Beneficiary has ever been trained on specific seed type or variety [1]	
		Never received training (N=527)	Received training[1] (N=486)
Experience	Never Used Seed Before (N=512)	30.9	19.6
	Used Seed Before (N=501)	21.1	28.3

[1] includes training received during TCP project implementation or trainings received before through any other organization.
Training on seed types were asked for: Angola, Lesotho, Swaziland and Zambia. Training on specific seed variety was asked for Malawi and Tanzania.

In reality, it was discovered that, as displayed in table 18, 30.9% of all beneficiary households had never used the seed type or variety they received from TCP and have never received any form of training on the use of these inputs. Furthermore, 21.1% of all beneficiaries have never received any form of training on those seeds, but used them before based on their own perceived knowledge (see table 19). These findings show that misusage of inputs may have been indeed a common problem in the field.

As with the trainings for appropriate use of seeds, training on use of fertilizer was also lacking in the TCP projects. In total, only 33% of beneficiaries were trained under the TCP project on effective use of fertilizer (tops or basal). Nevertheless, previous trainings held in Malawi ensured that 77% of respondents beneficiaries

[17] When a beneficiary received 2 or 3 seeds types or variety, answers for all varieties were analyzed. Thus, sample sizes reflect total number of answers among beneficiaries rather than the exact percentage of beneficiaries.

have been trained in the use of fertilizer. On the other hand, previous trainings were uncommonly seen in Swaziland and Tanzania, and in total, less than half of the beneficiaries have ever been trained in the use of fertilizer in those countries. Graph 18 details trainings on use of fertilizer by country.

Graph 18: Percentage of beneficiaries that received specific or any form of training on received fertilizer per country[18]

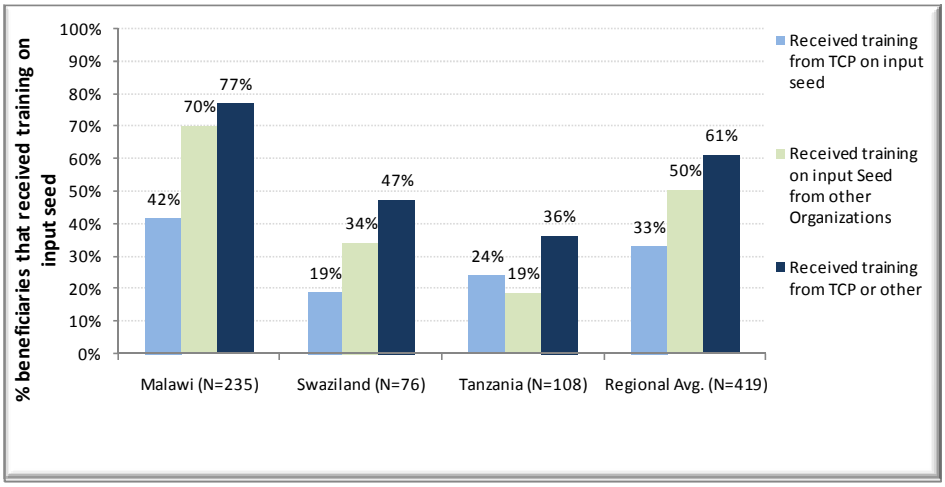


Table 20: Percentage of beneficiaries by knowledge and training levels of receiving fertilizer[16]

		Training: Beneficiary has ever been trained on specific use of fertilizer [1]	
		Never received training (N=527)	Received training[1] (N=486)
Experience	Never Used Fertilizer Before (N=167)	20.8	19.1
	Used Fertilizer Before (N=251)	17.9	42.1

[1] includes training received during TCP project implementation or trainings received before through any other organization

In total, 20.8% of all beneficiaries that received fertilizer in southern Africa have neither used it before nor ever received any training. A further 17.9% have used it but never had any training. Table 20 illustrates findings.

3.3.6 Access to Inputs & Willingness to Adopt

Access to inputs is a matter of three components: (i) availability of inputs at local market, (ii) willingness to purchase based on preferences and personal judgment, and (iii) income to purchase input. Three questions were added in the household survey to capture access to the types of inputs distributed by the TCP.

Access to Seeds and willingness to adopt

Availability of seeds in the local market was not a major issue for access in Angola, Lesotho and Malawi, where about 80% of beneficiaries said that seeds received were available for purchase. Availability of seeds was a major issue for Tanzania and Zambia, where only around 30% of beneficiaries said that those seeds were

[18] When a beneficiary received 2 or 3 seeds types or variety, answers for all varieties were analyzed. Thus, sample sizes reflect total number of answers among beneficiaries rather than the exact percentage of beneficiaries.

available. In those countries, the TCP project had the positive impact of taking unavailable seeds to local markets (see graph 19).

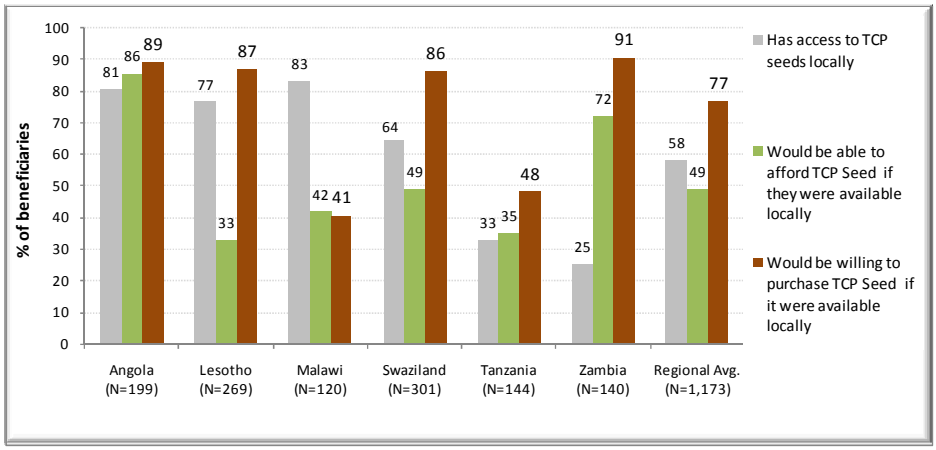
Surplus income to purchase improved or diversified seeds was a major issue in all countries except for Angola and Zambia, where 72% to 86% of beneficiaries stated that they would be able to purchase seeds. The potential purchasing power of beneficiaries in those countries may be connected to the relatively low cost of legumes and beans seeds. Nevertheless, one should note that, even though 72% of beneficiaries said to be able to purchase seeds in Zambia, the seeds distributed were often not available in the market. In Angola, seeds were available and accessible in the regions. Given the fact that beneficiaries in Angola would be able to purchase seeds which were available, the question on value added by the TCP in taking vegetable seeds to selected beneficiaries could be raised.

Most beneficiaries in all other TCP countries said that they would not be able to purchase seeds distributed even if they were available. The lack of purchasing power is therefore a major issue in those countries.

The beneficiaries' willingness to adopt seeds distributed in the future was clearly divided into two groups:

i. Group 1: Willing to Adopt Seeds (Angola, Lesotho, Swaziland, and Zambia TCP) Almost all beneficiaries in all TCPs distributing vegetable and legume seeds said that they would be willing to adopt seed variety distributed from TCPs.
ii. Group 2: Not willing to Adopt Seeds (Malawi and Tanzania TCP): Beneficiaries in TCPs distributing hybrid maize and sorghum were less likely to be willing to adopt those seeds. As little as 41% of beneficiaries in Malawi and 48% of beneficiaries in Tanzania were willing to adopt hybrid seeds probably because of the high price of hybrid and OPV seeds and the need to purchase fertilizer for their cultivation.

Graph 19: Percentage of beneficiaries by access to TCP seeds locally, ability to purchase and willingness to purchase by country[19]

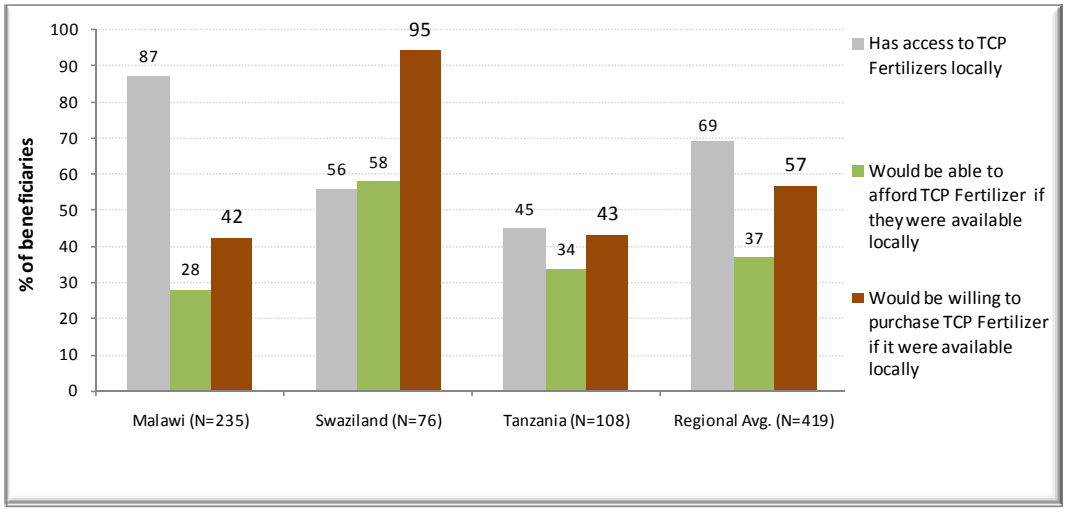


[19] When a beneficiary received 2 or 3 seeds types or variety, answers for all varieties were analyzed. Thus, sample sizes reflect total number of answers among beneficiaries rather than the exact percentage of beneficiaries.

Access to Fertilizer and willingness to adopt

Availability of fertilizer at local markets varied between countries. While the vast majority of beneficiaries in Malawi (87%) said that fertilizer was available at local markets, only 45% of beneficiaries in Tanzania said the same. Purchasing power of beneficiaries and willingness to purchase the fertilizer seemed to be the main factor on access to fertilizer in Malawi and Tanzania. In Swaziland, although beneficiaries would be willing to purchase fertilizer, their high cost and relative unavailability seemed to be the major issue. Graph 20 illustrates findings.

Graph 20: Percentage of beneficiaries by access to TCP fertilizer locally, ability to purchase and willingness to purchase by country[20]



3.3.7 Beneficiary Perceptions

Timeliness

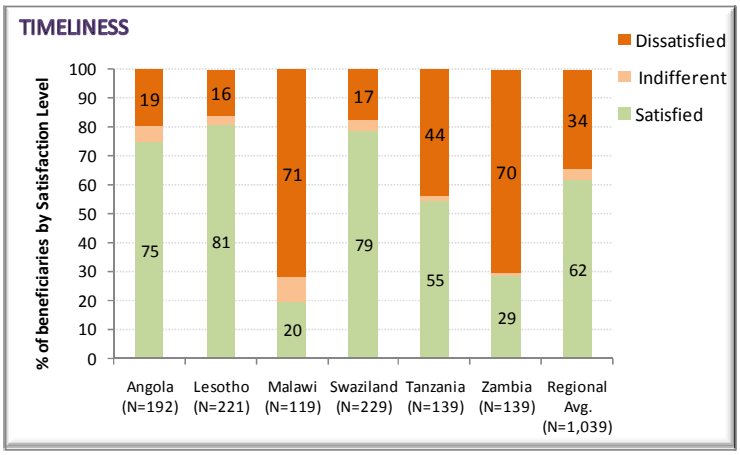
Primary analyses done with the sampled beneficiaries showed that the TCPs in Malawi and Zambia, where deliveries only took place in December (while the agricultural season started in November) presented the highest levels of households dissatisfied with timeliness of delivery of inputs. In those countries, as much as 70% of households were dissatisfied with the time of delivery of inputs.

Even though the TCP in Angola delivered inputs much later than the intended agricultural season (1 year), the timeliness of the distribution of inputs for the 2009/10 season may have affected the beneficiaries' perception as they believed that seeds were distributed for this season. Thus, beneficiaries in Angola did not highlight timeliness as a main problem.

Few beneficiaries in Lesotho and Swaziland were dissatisfied with the timeliness of seeds, as the inputs distributed in these countries were either on time or only one month late. Graph 21 illustrates findings.

[20] When a beneficiary received 2 or 3 seeds types or variety, answers for all varieties were analyzed. Thus, sample sizes reflect total number of answers among beneficiaries rather than the exact percentage of beneficiaries.

Graph 21: Percentage of beneficiaries by satisfaction level towards timeliness of seeds[20]



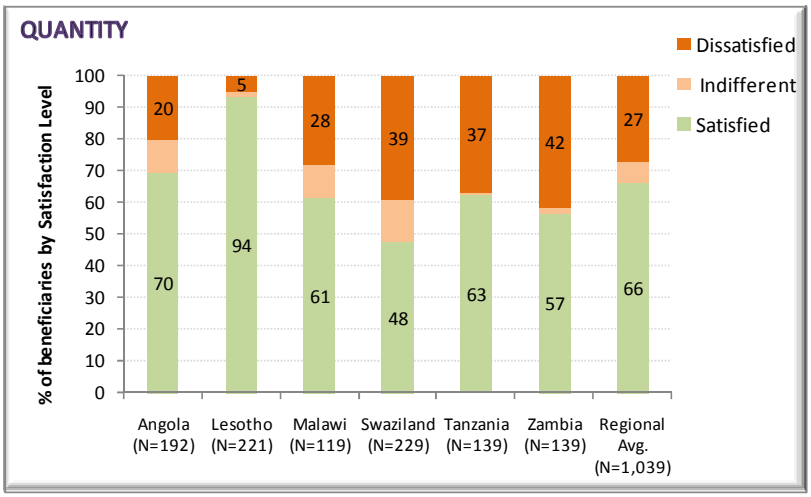
Quantity of Inputs Distributed

As expected, the TCP in Lesotho, where 85.4 metric tons of seeds were distributed, presented best reviews of beneficiaries in terms of quantity distributed. Nevertheless, it is important to highlight that households in Lesotho did not purchase any type of fertilizer in the ITFs as they said those were not available.

On the other hand, only 48% of beneficiaries in Swaziland were satisfied with the quantity of seeds distributed. The difference between Lesotho and Swaziland lie in the fact that all vouchers received in Lesotho had to be used for seeds or tools, as fertilizers were not available. In Swaziland, the voucher value could be used to purchase fertilizer. However, because of the high cost of fertilizer, the voucher in Swaziland may not have been enough to purchase adequate quantities of fertilizer and seeds.

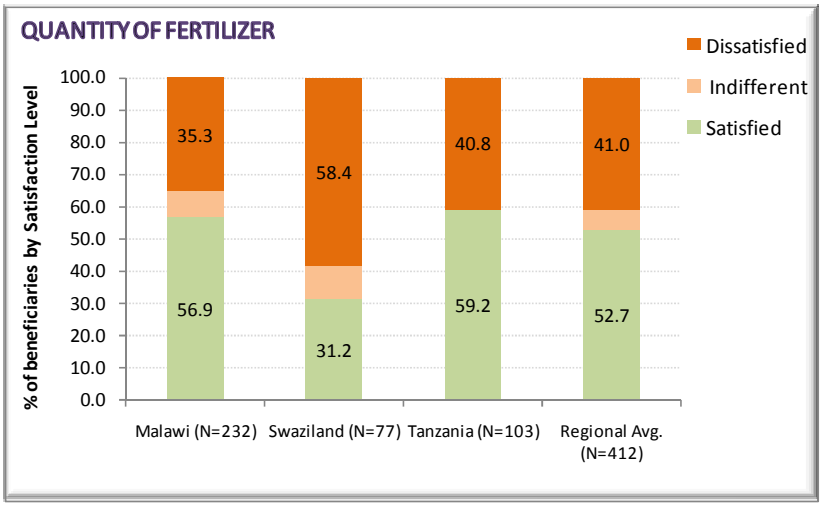
Even though the TCP in Zambia targeted significantly more households (17,188), the packs consisted of 10 kilos of seeds only. Therefore, it is not surprisingly that the greatest proportion of households being dissatisfied was found in Zambia (42%). Graph 22 shows the satisfaction level of beneficiaries per country.

Graph 22: Percentage of beneficiaries by satisfaction level towards quantity of seeds[21]



[21] When a beneficiary received 2 or 3 seeds types or variety, answers for all varieties were analyzed. Thus, sample sizes reflect total number of answers among beneficiaries rather than the exact percentage of beneficiaries.

Graph 23: Percentage of beneficiaries by satisfaction level towards quantity of fertilizer[21]

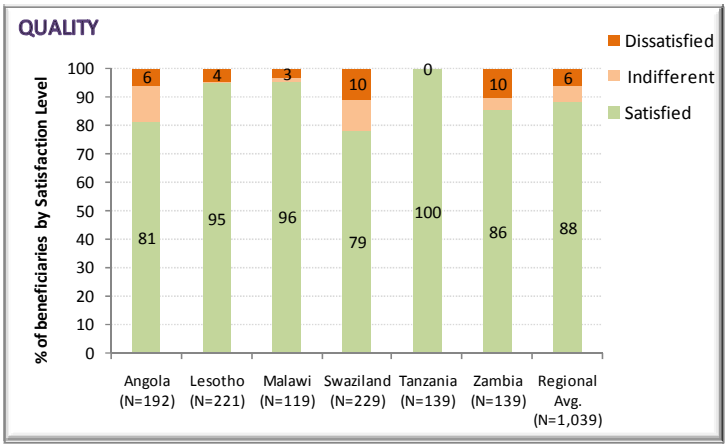


Graph 23 illustrates findings on dissatisfaction level with quantity of fertilizer distributed.

Beneficiaries that received the standard quantity of fertilizer (i.e. 2 bags of 50 kgs of fertilizer) tended to be more satisfied with the quanity of fertilizer than those whom were given vouchers whose value was inadequate to pay for two bags of 50 kilos of fertilizer. This can be seen by the fact that almost 60% of beneficiaries in Swaziland were dissatisfied with quantity of fertilizer against the 35-40% of dissatisfied beneficiaries in the other countries. The levels of dissatisfaction levels with quantity of seeds and fertilizer in Malawi supports previous conclusions that cost per beneficiary has to be increased when fertilizer is added.

Quality of Inputs Distributed

Graph 24: Percentage of beneficiaries by satisfaction level towards quality of seeds[22]

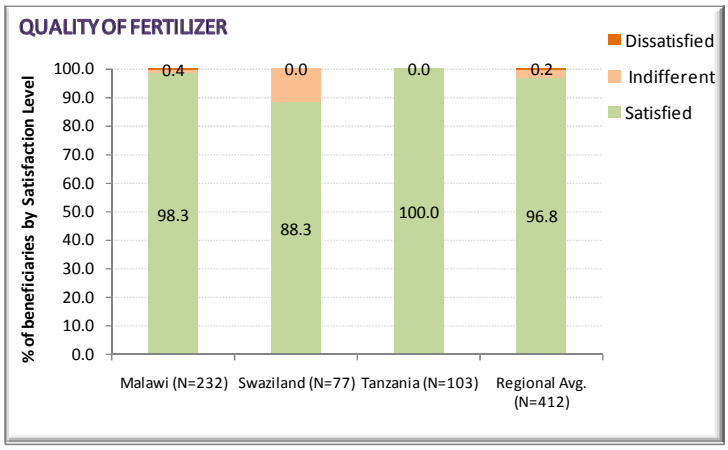


Analyses on primary data collected show that few beneficiaries highlighted dissatisfaction with seed quality in any country. Even in Angola, where seed quality issues were raised by implementing partners, only 6% of beneficiaries said they were dissatisfied with quality of seeds. Few beneficiaries (10%) in Swaziland and in Zambia highlighted seed quality problems. Graph 24 details findings.

No issues were raised about quality of fertilizer in any countries where TCP projects delivered them (see graph 25).

[22] When a beneficiary received 2 or 3 seeds types or variety, answers for all varieties were analyzed. Thus, sample sizes reflect total number of answers among beneficiaries rather than the exact percentage of beneficiaries.

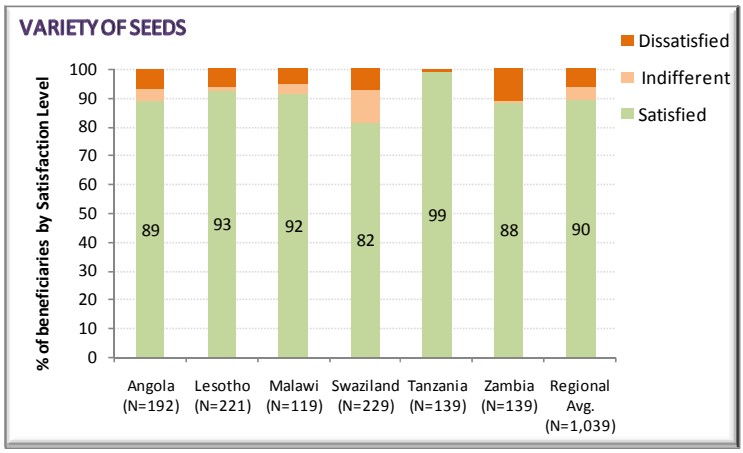
Graph 25: Percentage of beneficiaries by satisfaction level towards quality of fertilizer[22]



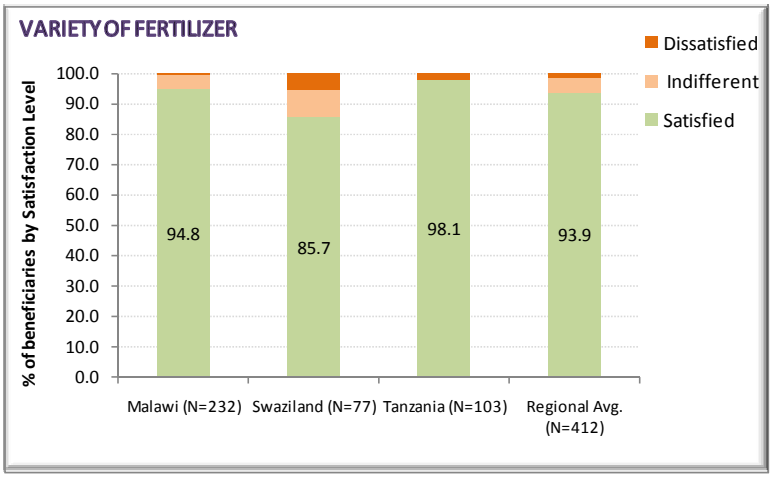
Variety of Inputs Distributed

Beneficiaries' perception of satisfaction with variety of seeds being distributed did not differ significantly between countries. The vast majority of households (82% to 99%) were satisfied with the variety of seeds being distributed and as little as 1% to 11% of households were dissatisfied with variety of seeds. Graph 26 and 27 illustrates findings.

Graph 26: Percentage of beneficiaries by satisfaction level towards variety of seeds [22]



Graph 27: Percentage of beneficiaries by satisfaction level towards variety of fertilizer[23]



3.3.8 Perceived Beneficiary Impact of TCP Projects

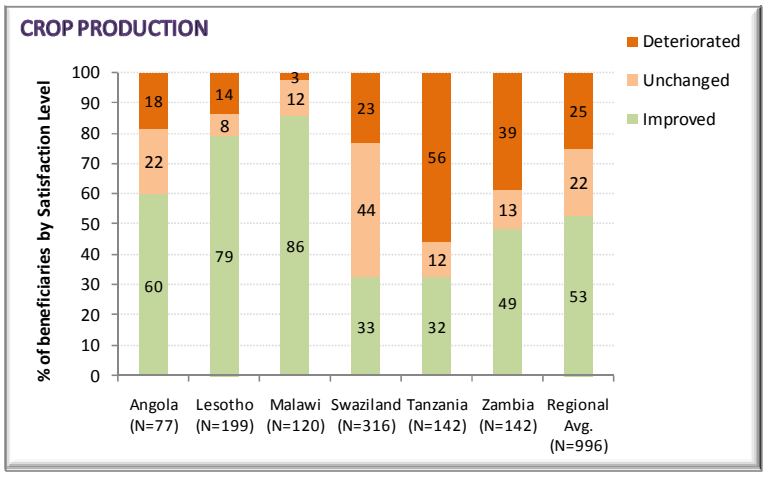
Improving access to food is a desirable direct outcome of TCP projects. Although the TCP project aimed at supporting farmers with access to seeds and in some instances fertilizers and tools, it did not support increased access to water, and agricultural techniques, which also affect food production. Access to food also include food which could be purchased by households, which in turn is dependent among other issues, on price, income generating activities and availability of food at local markets. Thus, even though perceptions on access to food are presented in this section, the reader must be aware that no causality between analyses and the TCP projects can be attributed. The lack of attribution is based on the fact that findings on crop production, access to food and sale of production are likely to be confounded by other factors, including the existence of other projects, weather patterns, and the trends of global food prices. With the lack of a baseline and control groups, the evaluation of TCP impacts is unable to separate the impact from TCPs projects from those extraneous factors.

In most southern Africa countries, food production and food access are highly interlinked as households usually do not have steady and significant non-farm sources of income. Although analyses done to assess food production and food access were based on different questions included in the beneficiary survey tool, the findings were almost identical.

As shown in graph 28, the only country where beneficiaries claimed to have a lower food production and access to food after the TCP project was in Tanzania. Even though 46% of beneficiaries in Tanzania said that they were able to plant larger areas, the areas where the TCP was implemented in Tanzania suffered major dry spells, impacting the agricultural production of those areas in general and of beneficiaries in specific. In reality, beneficiaries from as many as 4 out of the 6 targeted districts were unable to harvest anything. The final outcome of the TCP project in Tanzania was therefore jeopardized by weather factors.

[23] When a beneficiary received 2 or 3 seeds types or variety, answers for all varieties were analyzed. Thus, sample sizes reflect total number of answers among beneficiaries rather than the exact percentage of beneficiaries.

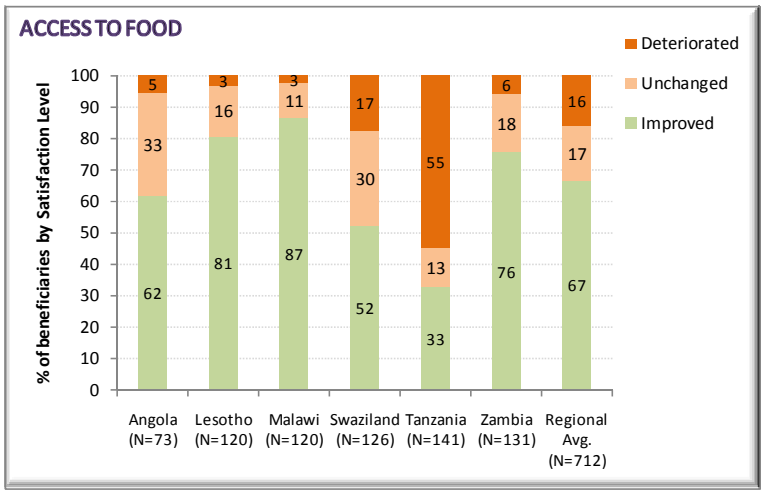
Graph 28: Percentage of beneficiaries by perception on change on crop production from the year before the TCP to the year after[21]



Most of the beneficiaries in other countries said that their access to food has improved from 2007/08 to 2008/09. In Lesotho and Malawi more than 80% of beneficiaries said that their food production and access to food has improved.

In Zambia, 76% of the beneficiaries said that their crop production had improved. There were a few reasons for the relatively lower level of improvement of crop production. First, one variety of beans distributed did not germinate well in the north as it seems that the soil conditions were not suitable for that variety. Therefore, almost all cultivated beans in that area failed to be harvested. Furthermore, water logging and pests were noted in one area of Zambia where TCP inputs were also distributed.
A less pronounced achievement was seen in Angola and Swaziland, where between 52 and 62% of beneficiaries said that their access to food has improved. In Swaziland one should note that part of the targeted regions suffered with dry spells. Graph 29 illustrates findings.

Graph 29: Percentage of beneficiaries by perception on change on access to food from the year before the TCP to the year after



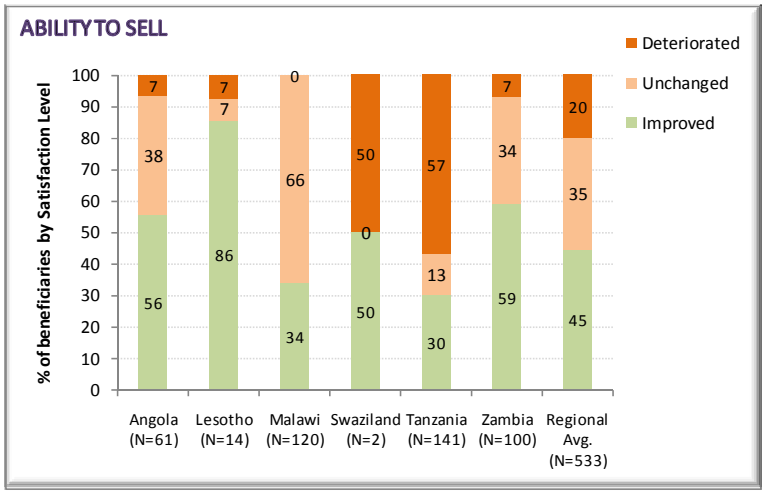
Slightly more beneficiaries said that food access improved more than food production, probably a result of the decreasing food prices seen in 2009 as compared to 2008.

No significant differences were noted in terms of gender of beneficiary in any countries as shown in graph 30 in appendix.

Ability of households to sell crop production was also highly correlated to crop production.

The only exception was Swaziland, where only half of the beneficiaries said that their ability to sell had improved. The reason for this discrepancy may be linked to the beneficiary's perception of food access. One should recall that, in order to encourage crop diversification, the TCP in Swaziland did not allow maize to be sold in some ITFs held in areas were history has shown that maize loses are common due to weather and soil conditions. Probably because traditional perception of access to food is synonymous of access to maize, a few beneficiaries might also have highlighted that access to food decreased and their ability to sell food.

Graph 30: Percentage of beneficiaries by perception on change on ability to sell crops from the year before the TCP to the year after



3.3.9 Gender Issues in TCP Projects

Because of the process of beneficiary selection, where beneficiaries were selected based on their agricultural potential and vulnerability by mainly local authorities and extension officers, households headed by women were not necessarily targeted. As noted in section 2.3 (beneficiary profiling) 44.2% of the beneficiaries in southern Africa were women. The country that reached most women was Angola which only focused on vegetable seed distribution, were 62.4% of beneficiaries were women. In all other countries, between 42 and 52% of beneficiaries were women.

No gender component was included in the design of the TCPs in any country, except for Lesotho. Thus, it would not be surprising to find little difference between male and female beneficiaries. Unfortunately, because of sample size in countries, analyses comparing gender issues are only meaningful at regional level and might therefore mask sub-regional variation (refer to Section 1.5 on methods).

Even though the expected differences on production between households should be more pronounced when comparing headship status rather than beneficiary gender, the analyses presented here focus on gender of beneficiary for sub regional and global comparability purposes (see tables 44 and 45 in appendix 1 for comparison between findings of gender of head and beneficiaries).

As demonstrated in table 21, female beneficiaries were more likely to live in households in high dependency ratio, were 1/3 more likely to be classified as poorest, were more likely to be illiterate and had significantly lower number of livestock. However, the amount of time that the households' own production lasted was not significantly different between gender of head of household (difference was also not significant between gender of head).

Table 21: Key Socio-economic characteristics of beneficiary household by gender of beneficiary

Gender of beneficiary	% HH with high dependency ratio	% HH classified as poorest	% beneficiary with at least primary complete	Avg. months sufficient food resources (before TCP)	Agriculture Land (Hec)	Avg. # of Draught power	Avg. # of Cows
Male beneficiary (N=415)	13%	30%	55%	6.8	2.4	0.4	2.2
Female beneficiary (N=350)	18%	41%	37%	6.7	1.6	0.3	1.8

Even though difference in socio-economic status of female and male beneficiaries was apparent, virtually no difference between outputs and perception of TCP projects was found between gender of beneficiary.

Use of income generated from production by gender

As shown in table 22, differences on the use of income generated from agricultural production was seen between the gender of beneficiary. While women beneficiary tended to spend more income in education, male beneficiaries tended to spend more income on house improvements and agricultural and livestock inputs.

Table 22: Use of income from sale of crops by gender of beneficiary

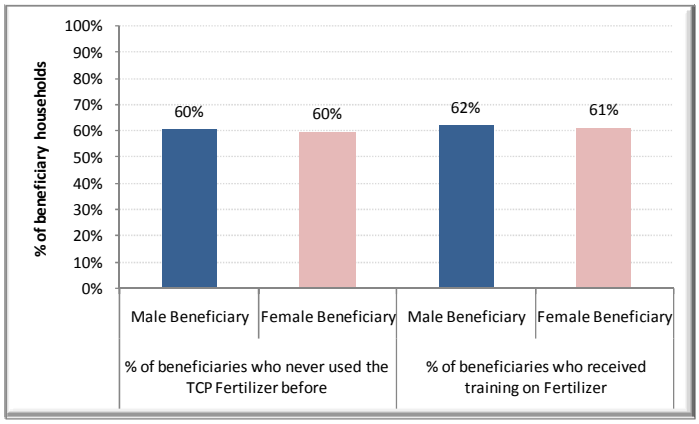
Beneficiary Gender	Used income from sale of products on					
	Education	House Improvement	Agr. Inputs	Livestock	Hire casual labor	Health
Female (N=48)	62.5%	12.5%	37.5%	27.1%	10.4%	7.4%
Male (N= 414)	49.4%	25.9%	45.9%	22.4%	11.8%	0.0%
All Beneficiaries (N=133)	54.1%	21.1%	42.9%	24.1%	11.3%	3.7%

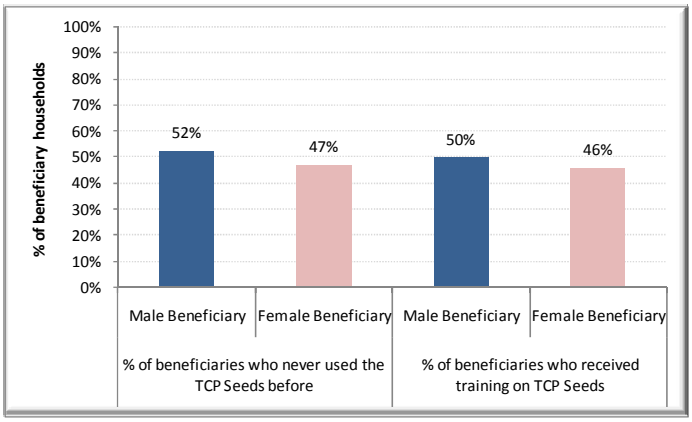
Table include only beneficiaries that responded positively to at least one of the expenses. Beneficiaries that said that they did not spend income on any of the sectors were excluded from analyses.

Past Experience and Introduction of new seed varieties by Gender

As shown in graph 31, a small difference was seen between the proportions of beneficiaries that have previously used seeds that they received from the TCP project. A similar difference was seen regarding the participation on training about received seeds. Although the difference is small (4 to 5 percentile points), it might indicate that males have usually better access to improved and more varied seeds and training. In fact, the countries with more women were Angola and Lesotho. In the case of Angola the women were part of farmer field schools and their level knowledge is not representative of that of the average rural "Southern African Women". This might have skewed the data towards a greater equality in knowledge between men and women than that it would be expected. However, further research would be necessary to certify this likely relation. No difference was noted on the proportion of households using fertilizer by the gender of beneficiary.

Graph 31: % of beneficiary by knowledge and experience about distributed inputs by gender of beneficiary[24]

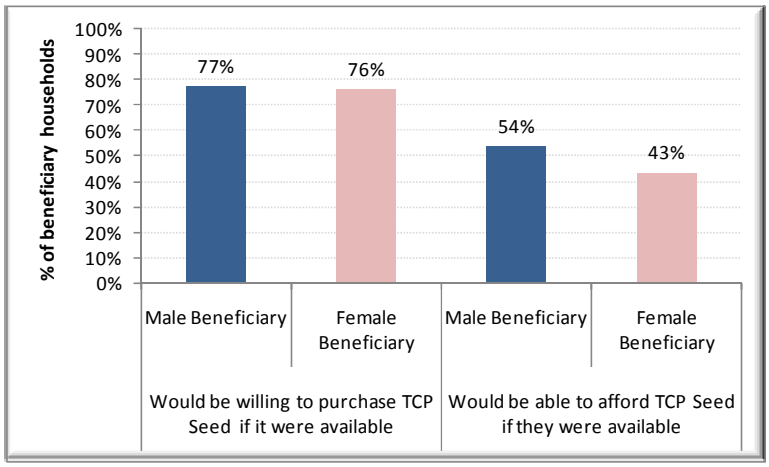




Access to Seeds and willingness to adopt by Gender

Findings from the household assessment shows that even though the same amount of male and female beneficiary would be willing to purchase the seed variety distributed by the TCP if they were available, slightly less female beneficiary said that they were likely to have the means to purchase such inputs. Thus, it would be important in the future that projects on distribution of inputs purposively target women (see graph 32).

Graph 32: % of beneficiary by willingness to purchase seeds and potential purchasing power by gender of beneficiary

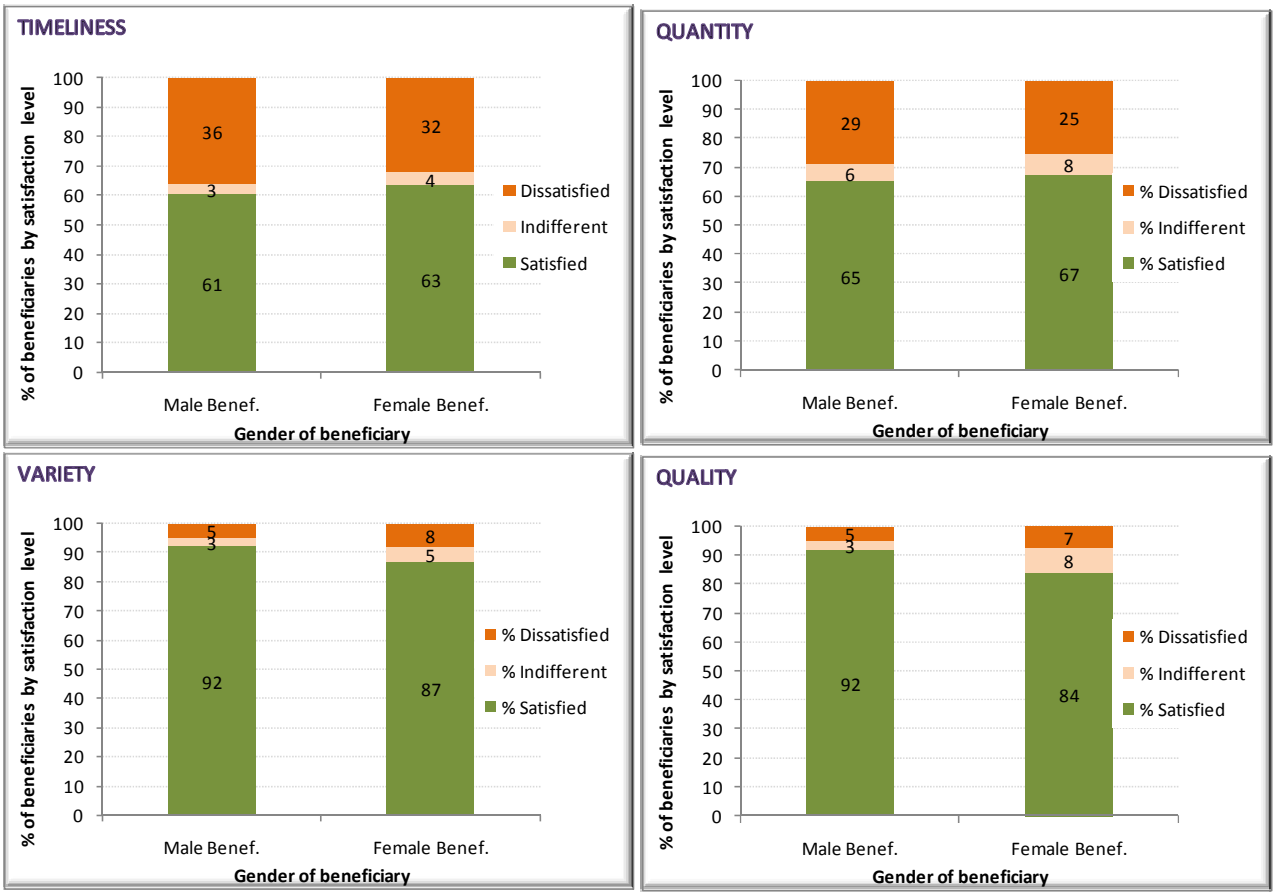


Beneficiary Satisfaction on TCPs input distribution systems by Gender

The proportion of satisfaction levels between genders of beneficiary was not significant for any issue. As displayed in graph 33, slightly larger proportion of male beneficiaries were satisfied with quality and variety of seed than female beneficiaries.

[24] When a beneficiary received 2 or 3 seeds types or variety, answers for all varieties were analyzed. Thus, sample sizes reflect total number of answers among beneficiaries rather than the exact percentage of beneficiaries.

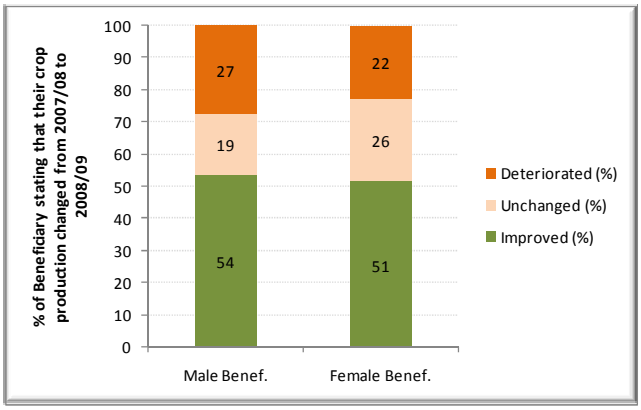
Graph 33: % of beneficiary by satisfaction level of distributed seeds by gender of beneficiary



Perceived Impact on crop production by Gender

Slightly less female beneficiaries said that their crop production improved from 2007/2008 to 2008/2009 after the TCP project. However, the difference was not significant. Graph 34 details perception of impact by gender of beneficiary.

Graph 34: % of beneficiary by perceived impact of crop production by gender of beneficiary



3.3 SWOT Analysis of Input distribution systems

	Strengths	Weakness
Input distribution projects	• Beneficiaries had easier access to inputs as goods were distributed directly to them at relatively shorter distances • Beneficiaries had better access to improved seeds • Introduced and promoted the use of new type of crops and varieties	
Emergency TCP project planning and management	• Input packs were adapted to local agro-ecological conditions • Size of input packs were adapted to relative potential of beneficiaries allowing even vulnerable households with limited productivity to access inputs (Madagascar) • Increased types and variety of seeds available to beneficiaries and communities through ITFs • The project implementation was well organized and presented few unexpected logistical and administrative problems • Issues of sustainability were included in project design through revolving seeds return and subsidized sale of inputs (Zambia and Seychelles respectively)	• Inadequate time invested in formulating the TCPs input supply projects adapted to national needs and opportunities resulted in non-applicable projects that had to be changed once implementation had begun resulting in further delays. • Lack of adequate consultation to ensure that inputs responded to farmer's needs and preferences • Introduction of new varieties in an emergency setting without training, capacity building and/or testing • Non alignment of inception of projects with agricultural calendar limiting adequate time for following activities and in most cases resulting in late delivery of inputs • Inadequate inclusion of gender issues in the design of projects • Lack of an M&E plans and activities to monitor outputs and evaluate impacts
Procurement systems	• Local procurement of seeds encouraged local seed production and entrepreneurship • Active participation of private sector as local supplier supported small and medium scale traders (especially in Angola, Swaziland, Lesotho)	
Reaching beneficiaries (targeting and distribution)	• Beneficiaries were able to choose most appropriate seeds from ITFs • Integration of input distribution systems into existing government projects and systems • Ensured local level participation of governmental and civil society	• Confusing and non-practical beneficiary selection criteria including issues of vulnerability and agriculture potential • Beneficiary selection biased by traditional leaders and local government • Targeting a limited number of members of selected cooperatives raised internal conflict (Zambia) • Inadequate Seed Quality Control especially in ITFs settings • Corruption, forging of vouchers and theft of inputs reported in various countries

	Opportunities	Threats
Input distribution projects	• Diversification of types of seeds to support crop diversification and rotation and overall nutritional status • Sustainability can be addressed through revolving schemes for returning seeds and/or sale at subsidized prices with the revenue placed in revolving funds • Opportunity for the most vulnerable to increase their production and income	• Input distribution activities can be seen as political party activities Long term sustainability of free or high subsidized input distribution systems may create dependency syndrome and negatively impact on-going project that focus on long-term sustainability.
Emergency TCP project planning and management	• Exposure of beneficiaries to new types and varieties of inputs	• Non-aligned project inceptions and delays on starting up of the project may impact final result • Including effective micro-effective organisms without quality controls and guidelines (Mauritius and Lesotho) • Lack of accountability
Procurement systems		
Reaching beneficiaries (targeting and distribution)	• Improved collaboration between various participating stakeholders • Targeting can be done in collaboration between local leaders, civil society groups, and agricultural extension officers to minimize bias on targeting and build local capacity for targeting activities • Input suppliers can get to know the needs of consumers (ITFs and subsidized sales) • The distribution of inputs directly to cooperatives supports community organization and long term sustainability • Formal and informal training for farmers and traders during distribution activities.	• Traders collude in setting input prices in ITFs • Lack of training for new varieties and type of seeds **Other** • Weather and pest shocks

4. INTEGRATION OF TCPS INTO OVERALL GOVERNMENT RESPONSES TO SOARING FOOD PRICES

All TCPs implemented in southern Africa were integrated to on-going or new governmental projects and programmes that focused on alleviating the impact of soaring prices. In various instances, the activities envisioned by the TCP were modified to ensure that the project would support governmental projects. For example, in Zambia the TCP was integrated with the on-going governmental Fertilizer support programme, which was already distributing maize seeds and fertilizer. Because the governmental was already addressing those inputs, the TCP was modified to cater for other seed types. In some countries, such as Seychelles, the beneficiary could not even note the difference between governmental programme and the TCP, as inputs procured by the TCP were distributed through on-going mechanisms of subsidized sales.

Table 23: Value of TCP Projects

Country	USD Value Spent on Purchase of Inputs	% of budget Spent on Purchase of Inputs[1]
Angola	$126,686	94.3%
Lesotho	$434,486	86.9%
Madagascar	$428,765	88.4%
Malawi	$426,472	85.3%
Mauritius	$245,060	94.0%
Seychelles	$224,654	91.7%
Swaziland	$405,153	81.0%
Tanzania	n/a	-
Zambia	$425,038	85.0%

n/a: No data available at compilation of report
Total TCP value for Lesotho, Malawi, Swaziland, Tanzania and Zambia refers to US$ 500,000
Total TCP value for Mauritius refers to US$ 260,000
Total TCP value for Seychelles refers to US$ 250,000
Total TCP value for Madagascar refers to US$ 484,795
Total value spent up to date in Angola US$ 134,391

Furthermore, all TCPs occurring in southern Africa were implemented with governmental bodies. In all instances, the deliveries of TCP inputs were done through existing governmental activities. This merging ensured that inputs were distributed in a timely manner once the project implementation started, administrative expenses were decreased and bumps and unforeseen issues were avoided.

The intensive collaboration ensured that the vast majority of the financial resources used in the TCPs were applied to purchase inputs, increasing the cost-effectiveness of the projects. In accordance with project proposal documents reviewed, 88.5% of budgets in all countries were to be spent with agricultural inputs. The experiences from TCP projects in the region followed these planning and around 85% of all financial resources were reported to be spent on inputs purchase as displayed in table 23.

Furthermore, implementation of TCP project through existing governmental projects allowed fast-tracking of activities. Most of TCPs were implemented through projects to which FAO has already worked during the past and therefore FAO had good knowledge of practices, strengths and limitations of implementing agencies' activities. For example the experiences of Malawi indicate because activities were implemented through extensive collaboration between FAO and the national government they were quickly implemented. Therefore, although the project was only approved in November 2008, in a space of one and a half month all processes were completed and beneficiaries were able to access inputs on the second week of December 2008.

Although collaboration with national governments was a major strength of the TCP projects, relying on national government posed a few challenges. The first complexity was seen in some countries as programs merged to governmental on-going systems were used as political lobbying. Secondly, the successful implementations of activities were highly dependent upon governmental focal points, whom sometimes were overwhelmed with their on-going activities and did not prioritize the TCP project. Thirdly, the successful implementation of TCP was highly dependent upon existing relationship between FAO and MoA through their focal point. Even though in most cases relationships were positive and actually facilitated the process, lack of constructive relationship may have posed difficulties in some activities.

Nevertheless, the planning and implementation of TCP through tight collaboration with governmental agencies showed to be one of the strongest points of the TCP project as national government led most activities and adopted innovations.

5. CONCLUSIONS AND RECOMMENDATIONS

Even though various conclusions and recommendations were presented throughout this report in each respective sector, this section focuses on the main conclusions and recommendations found during the TCP evaluations.

Overall findings show that the ISFP TCPs have been well accepted by national and local governments, input traders and beneficiaries. Even though quantification of impacts are not possible with the designed evaluation method, the beneficiary, input suppliers and implementing agencies' perceptions were that the TCPs have been of great benefit to communities in southern Africa, assisting beneficiaries and non-beneficiaries to minimize the impact of soaring prices. The twin-track approach of ISFP projects, linking emergency distribution activities with long term policy and development projects was seen as a major strength of the ISFP project. Indications from various sources show that input support projects should be mainstreamed in southern Africa and repeated when there is an emergency where an increased distribution of inputs is needed.

Nevertheless a few enhancements should be included in the ISFP TCPs as to ensure that input distribution system address issues of sustainability. Key recommendations for future ISFP TCP input distribution projects include:

Develop detailed project planning: Project design documents were over simplistic and focused mainly on identifying objectives and targets. Therefore various activities, including procurement, monitoring and evaluation, beneficiary targeting, and choice of inputs were implemented post-factum. A detailed project planning and implementation document, describing selection criteria, inclusion of gender component, training aspects, monitoring and evaluation activities among others are necessary to ensure that projects are efficiently implemented.

Align projects to agricultural calendar: The non-alignment of the inception of TCP input distribution projects with local agricultural calendar impacted on all activities of the projects, as the time needed to carefully coordinate, adapt, plan, implement and monitor activities was limited to two or three months. As a result, various activities were rushed, including planning, community mobilization, beneficiary selection, procurement and delivery of inputs. Finally, in most countries the actual delivery of inputs was later that the start of the planting period.

In the future, it is crucial that the period given to projects, to be implemented realistically allows for the activities to be well planed, implemented and monitored.

Inputs need to respond to local realities: The TCP focused on distributing seeds that would support a greater diversification of crops and increased yields, which is a valuable and valid objective. However, the choice of types and varieties of crops calls for a careful assessment of which ones would be most suitable for different areas. This is especially the case when new varieties and crop types are being supported in emergency situations.

Even though an emergency distribution project as the TCP may not allow enough time for a detailed assessment of most suitable inputs, the long-term existence of FAO in countries allow that these kind of studies be carried out before an emergency and be part of the contingency or preparedness plans.

Studies on suitability of inputs should include, among others: beneficiaries preferences, nutritional value, crop diversification potential, agro-ecological conditions, marketing potential, seed reproduction potential and access to seeds at local level.

Beneficiary targeting criteria is clearly understood, easily applicable and does no harm: Because the impact of

TCP was envisioned as mitigating the impact of soaring prices, there were two fronts for action: (i) increase agricultural production of those householders most affected by the soaring prices, who are the most vulnerable to food insecurity as they have small production and are unable to purchase inputs and food at the increased prices; (ii) support medium and large scale farmers whom have good agricultural potential and can therefore maximize use of distribute inputs and make more food available at local markets and therefore alleviate price increases, which in turn should benefit the most vulnerable.

Based on those different fronts, beneficiary selection in TCP countries usually strived to target households with a good level of agricultural production that were also vulnerable. The juxtaposition of these two somehow contradictory fronts raised some confusion on the development and application of selection criteria.

The countries which developed a two-stage targeting scheme showed to be the most positive approach. In these countries firstly, areas of intervention were selected based on vulnerability to food insecurity, and in the second step, beneficiary were selected based on their agricultural potential

The example of the TCP in Madagascar, where the quantities of inputs in the distributed packs were adapted to the agricultural potential of beneficiaries is a good approach for ensuring that both types of households benefit from the project.

The approach followed in Zambia, where only a limited number of members of selected cooperatives had access to the TCP inputs raised tension inside the organized groups. On the other hand, the experience of Angola, where all members of selected groups (in this case agricultural farmer schools) benefited from the project shows that the universal selection of members within groups may decrease internal conflict.

The approach followed by Seychelles, where all members of society could purchase subsidized inputs may be a powerful and more equal opportunity in settings where access to distribution points is easy and where most members have the purchasing power necessary to buy inputs at subsidized prices.

Ensure that training is included in project design: Even though emergency projects are usually constrained about time and funding, capacity building through formal and informal trainings as well as technical support are crucial for the success of activities, especially those that introduce new types and varieties of crops. Therefore, some minimal training components should be planned as part of the distribution systems. Furthermore, whenever possible, distribution systems should merge to on-going governmental and non-governmental agricultural projects that have training components.

Review the potentials of Input Trade Fairs for input distributions: The experiences of input trade fairs as a mechanism of distributing inputs show that this approach has great potentials to ensure that beneficiaries preferences are respected, logistical costs are decreased and local markets are supported. Nevertheless, occurrences of corruption, price monopoly and lack of quality of inputs distributed in the fairs highlight some of the potential problems of this system. Thus, a careful investigation and detailed guidelines for utilizing input trade fairs as a method for input distribution is necessary to ensure that benefits are maximized.

REFERENCES

Calinengue, Ermelinda, 2010. Relatório de Impacto e Grau de Satisfação do Beneficiário. Angola

Food and Agricultural Organization of the United Nations, 2009. Emergency supply of maize and sorghum seed and fertilizer to drought and/or flood affected farmers in the United Republic of Tanzania (TCP/URT/3201). Terminal Report. United Republic of Tanzania

Food and Agricultural Organization of the United Nations, 2008. *Project Proposal* [for all countries]

Food and Agricultural Organization of the United Nations, 2008. *Initiative on Soaring Food Prices website*

Maro, Moses, 2010. Beneficiary Satisfaction and Impact Report for TCP project. United Republic of Tanzania

Mkamanga, Gilbert, 2010. Beneficiary Satisfaction and Impact Assessment Survey. Malawi

Mokitimi, None, 2010. Beneficiary Satisfaction and Impact Report for Initiative on Soaring Food Prices TCP Project. Lesotho

Mondlane, Sibusiso, 2010. Final Beneficiary Satisfaction and Impact Assessment for ISFP TCP project. Swaziland

Nakaponda, Bethel, 2010. Beneficiary Satisfaction and Impact Assessment of the Initiative on Soaring Food Prices (ISFP) TCP for Zambia. Zambia

ANNEX I: STANDARD TABLES FOR REGIONAL SYNTHESIS

Table 24: Socio-economic characteristics of sample households in southern Africa

Socio-Demographic Characteristic	All Sample HH (N=768)	Male (N=429)	Female (N=339)
Gender (%)	100.0%	55.8%	44.2%
Avg. Age	45.6	46.2	44.8
Avg. Family Size	7.1	7.2	7.0
Avg. Land Holding (ha)	2.1	2.5	1.7
Avg. months per year that families have sufficient resources to feed family (ref. 2007/08)	7.3	7.3	7.3

Table 25: Average animal holding of sample households in southern Africa

Animal Type	All Sample HH (N=768)	Male (N=429)	Female (N=339)
Draught power	0.3	0.3	0.2
Cows	1.6	1.7	1.6
Goats	3.9	4.5	3.1
Sheep	2.3	3.1	1.1
Pig	1.0	1.0	1.0
Poultry	10.1	10.0	10.3
Donkey	0.2	0.3	0.2
Horse	0.1	0.1	0.1

Table 26: Knowledge of seeds received and willingness to adopt in southern Africa

Country	% of beneficiaries who ever used the TCP Seeds before			% of beneficiaries who received training on input seeds from TCP or other			% of beneficiaries who have access to TCP seeds locally			% of beneficiaries who would be willing to purchase TCP Seed if it were available locally		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Angola (N=199)	61%	68%	57%	80%	83%	78%	81%	85%	78%	89%	93%	87%
Lesotho (N=269)	60%	65%	55%	32%	41%	23%	77%	71%	84%	87%	90%	84%
Malawi (N=120)	54%	64%	41%	79%	83%	75%	83%	81%	86%	41%	51%	27%
Swaziland (N=301)	68%	68%	68%	27%	29%	24%	64%	68%	61%	86%	89%	84%
Tanzania (N=144)	28%	29%	26%	41%	42%	36%	33%	34%	31%	48%	53%	34%
Zambia (N=140)	38%	43%	31%	29%	30%	26%	25%	24%	27%	91%	89%	93%
Regional Avg. (N=1,173)	50%	52%	47%	48%	50%	46%	58%	54%	63%	77%	77%	76%

Table 27: Knowledge of fertilizer received and willingness to adopt in southern Africa

Country	% of beneficiaries who ever used the TCP Fertilizers before			% of beneficiaries who received training on input Fertilizers from TCP or other			% of beneficiaries who have access to TCP Fertilizers locally			% of beneficiaries who would be willing to purchase TCP Fertilizer if it were available locally		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Angola (N=0)	-	-	-	-	-	-	-	-	-	-	-	-
Lesotho (N=0)	-	-	-	-	-	-	-	-	-	-	-	-
Malawi (N=235)	74%	81%	65%	77%	76%	78%	87%	85%	90%	42%	52%	29%
Swaziland (N=76)	76%	79%	74%	47%	44%	49%	56%	52%	59%	95%	100%	91%
Tanzania (N=108)	17%	13%	26%	36%	39%	30%	45%	48%	37%	43%	48%	29%
Zambia (N=0)	-	-	-	-	-	-	-	-	-	-	-	-
Regional Avg. (N=419)	59%	60%	60%	61%	62%	61%	69%	73%	71%	57%	46%	52%

Table 28: Satisfaction level with receiving seeds

Country	% Dissatisfied			% Indifferent			% Satisfied		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Angola (N=192)	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0
Lesotho (N=221)	5.9	5.5	6.3	0.5	0.0	0.9	93.7	94.5	92.8
Malawi (N=119)	27.7	23.5	33.3	5.0	4.4	5.9	67.2	72.1	60.8
Swaziland (N=229)	2.6	1.8	3.4	2.6	3.5	1.7	94.8	94.7	94.8
Tanzania (N=139)	5.0	6.8	0.0	0.0	0.0	0.0	95.0	93.2	100.0
Zambia (N=139)	0.7	0.0	1.6	1.4	2.6	0.0	97.8	97.4	98.4
Regional Avg. (N=1,039)	5.8	5.6	5.9	1.4	1.6	1.2	92.8	92.7	92.9

Table 29: Satisfaction level with timeliness of seeds

Country	% Dissatisfied			% Indifferent			% Satisfied		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Angola (N=192)	19.3	15.6	21.7	5.7	3.9	7.0	75.0	80.5	71.3
Lesotho (N=221)	15.8	13.6	18.0	3.2	6.4	0.0	81.0	80.0	82.0
Malawi (N=119)	71.4	69.1	74.5	8.4	5.9	11.8	20.2	25.0	13.7
Swaziland (N=229)	17.5	16.8	18.1	3.5	1.8	5.2	79.0	81.4	76.7
Tanzania (N=139)	43.9	47.6	33.3	1.4	1.0	2.8	54.7	51.5	63.9
Zambia (N=139)	69.8	71.8	67.2	1.4	1.3	1.6	28.8	26.9	31.1
Regional Avg. (N=1,039)	34.2	36.1	32.0	3.8	3.3	4.5	62.0	60.7	63.5

Table 30: Satisfaction level with variety of seeds

Country	% Dissatisfied			% Indifferent			% Satisfied		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Angola (N=192)	6.8	7.8	6.1	4.2	2.6	5.2	89.1	89.6	88.7
Lesotho (N=221)	5.9	1.8	9.9	1.4	2.7	0.0	92.8	95.5	90.1
Malawi (N=119)	5.0	2.9	7.8	3.4	2.9	3.9	91.6	94.1	88.2
Swaziland (N=229)	7.4	5.3	9.5	10.9	8.0	13.8	81.7	86.7	76.7
Tanzania (N=139)	0.7	1.0	0.0	0.0	0.0	0.0	99.3	99.0	100.0
Zambia (N=139)	10.8	11.5	9.8	0.7	1.3	0.0	88.5	87.2	90.2
Regional Avg. (N=1,039)	6.3	4.7	8.0	3.9	3.1	4.9	89.8	92.2	87.1

Table 31: Satisfaction level with quantity of seeds

Country	% Dissatisfied			% Indiferent			% Satisfied		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Angola (N=192)	19.9	26.3	15.7	10.5	14.5	7.8	69.6	59.2	76.5
Lesotho (N=221)	5.0	0.9	9.0	1.4	2.7	0.0	93.7	96.4	91.0
Malawi (N=119)	27.7	29.4	25.5	10.9	5.9	17.6	61.3	64.7	56.9
Swaziland (N=229)	38.9	39.8	37.9	13.5	11.5	15.5	47.6	48.7	46.6
Tanzania (N=139)	36.7	38.8	30.6	0.7	0.0	2.8	62.6	61.2	66.7
Zambia (N=139)	41.7	41.0	42.6	1.4	1.3	1.6	56.8	57.7	55.7
Regional Avg. (N=1,039)	27.0	28.8	24.9	6.7	5.8	7.8	66.3	65.3	67.3

Table 32: Satisfaction level with quality of seeds

Country	% Dissatisfied			% Indifferent			% Satisfied		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Angola (N=192)	5.8	8.1	4.3	12.7	6.8	16.5	81.5	85.1	79.1
Lesotho (N=221)	4.1	1.8	6.3	0.9	0.0	1.8	95.0	98.2	91.9
Malawi (N=119)	3.4	1.5	5.9	0.8	0.0	2.0	95.8	98.5	92.2
Swaziland (N=229)	10.5	7.1	13.8	10.9	10.6	11.2	78.6	82.3	75.0
Tanzania (N=139)	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0
Zambia (N=139)	10.1	11.5	8.2	4.3	0.0	9.8	85.6	88.5	82.0
Regional Avg. (N=1,039)	6.0	4.8	7.3	5.6	3.1	8.4	88.4	92.1	84.3

Table 33: Satisfaction level with receiving fertilizer

Country	% Dissatisfied			% Indifferent			% Satisfied		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Malawi (N=232)	25.0	23.5	27.1	5.6	5.9	5.2	69.4	70.6	67.7
Swaziland (N=77)	0.0	0.0	0.0	2.6	0.0	4.3	97.4	100.0	95.7
Tanzania (N=103)	2.9	3.9	0.0	0.0	0.0	0.0	97.1	96.1	100.0
Regional Avg. (N=412)	14.8	14.4	15.4	3.6	3.3	4.1	81.6	82.3	80.5

Table 34: Satisfaction level with timeliness of fertilizer

Country	% Dissatisfied			% Indifferent			% Satisfied		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Malawi (N=232)	51.7	50.0	54.2	3.0	1.5	5.2	45.3	48.5	40.6
Swaziland (N=77)	46.8	58.1	39.1	0.0	0.0	0.0	53.2	41.9	60.9
Tanzania (N=103)	43.7	48.7	29.6	0.0	0.0	0.0	56.3	51.3	70.4
Regional Avg. (N=412)	48.8	50.6	46.2	1.7	0.8	3.0	49.5	48.6	50.9

Table 35: Satisfaction level with variety of fertilizer

Country	% Dissatisfied			% Indifferent			% Satisfied		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Malawi (N=232)	0.4	0.0	1.0	4.7	2.9	7.3	94.8	97.1	91.7
Swaziland (N=77)	5.2	0.0	8.7	9.1	9.7	8.7	85.7	90.3	82.6
Tanzania (N=103)	1.9	2.6	0.0	0.0	0.0	0.0	98.1	97.4	100.0
Regional Avg. (N=412)	1.7	0.8	3.0	4.4	2.9	6.5	93.9	96.3	90.5

Table 36: Satisfaction level with quantity of fertilizer

Country	% Dissatisfied			% Indifferent			% Satisfied		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Malawi (N=232)	35.3	36.0	34.4	7.8	4.4	12.5	56.9	59.6	53.1
Swaziland (N=77)	58.4	67.7	52.2	10.4	9.7	10.9	31.2	22.6	37.0
Tanzania (N=103)	40.8	43.4	33.3	0.0	0.0	0.0	59.2	56.6	66.7
Regional Avg. (N=412)	41.0	42.4	39.1	6.3	3.7	10.1	52.7	53.9	50.9

Table 37: Satisfaction level with quality of fertilizer

Country	% Dissatisfied			% Indifferent			% Satisfied		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Malawi (N=232)	0.4	0.0	1.0	1.3	0.0	3.1	98.3	100.0	95.8
Swaziland (N=77)	0.0	0.0	0.0	11.7	16.1	8.7	88.3	83.9	91.3
Tanzania (N=103)	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0
Regional Avg. (N=412)	0.2	0.0	0.6	2.9	2.1	4.1	96.8	97.9	95.3

Table 38: Satisfaction level with receiving other inputs

Country	% Dissatisfied			% Indifferent			% Satisfied		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Lesotho (N=95)	2.1	0.0	4.4	1.1	0.0	2.2	96.8	100.0	93.3

Table 39: Satisfaction level with timeliness of other inputs

Country	% Dissatisfied			% Indifferent			% Satisfied		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Lesotho (N=95)	3.2	2.0	4.4	1.1	0.0	2.2	95.8	98.0	93.3

Table 40: Satisfaction level with variety of other inputs

Country	% Dissatisfied			% Indifferent			% Satisfied		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Lesotho (N=95)	2.1	0.0	4.4	1.1	0.0	2.2	96.8	100.0	93.3

Table 41: Satisfaction level with quantity of other inputs

Country	% Dissatisfied			% Indifferent			% Satisfied		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Lesotho (N=95)	2.1	2.0	2.2	2.1	0.0	4.4	95.8	98.0	93.3

Table 42: Satisfaction level with quality of other inputs

Country	% Dissatisfied			% Indifferent			% Satisfied		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Lesotho (N=95)	3.2	0.0	6.7	1.1	0.0	2.2	95.8	100.0	91.1

Table 43: Perceived impacts of TCP project on crop production of beneficiary households

Country	Deteriorated (%)			Unchanged (%)			Improved (%)		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Angola (N=77)	18.2	23.8	11.4	22.1	11.9	34.3	59.7	64.3	54.3
Lesotho (N=199)	13.6	13.2	13.9	7.5	6.6	8.3	78.9	80.2	77.8
Malawi (N=120)	2.5	1.4	3.9	11.7	7.2	17.6	85.8	91.3	78.4
Swaziland (N=316)	23.1	25.2	21.0	44.3	42.1	46.5	32.6	32.7	32.5
Tanzania (N=142)	55.6	55.8	55.3	12.0	9.6	18.4	32.4	34.6	26.3
Zambia (N=142)	38.7	35.8	42.6	12.7	12.3	13.1	48.6	51.9	44.3
Regional Avg. (N=996)	25.2	27.5	22.4	22.2	18.9	26.2	52.6	53.7	51.3

Table 44: Perceived impacts of TCP project on food accessibility of beneficiary households

Country	Deteriorated (%)			Unchanged (%)			Improved (%)		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Angola (N=73)	5.5	7.7	2.9	32.9	38.5	26.5	61.6	53.8	70.6
Lesotho (N=120)	3.3	5.1	1.6	15.8	18.6	13.1	80.8	76.3	85.2
Malawi (N=120)	2.5	3.9	1.4	10.8	13.7	8.7	86.7	82.4	89.9
Swaziland (N=126)	17.5	16.9	18.0	30.2	29.2	31.1	52.4	53.8	50.8
Tanzania (N=141)	54.6	52.6	55.3	12.8	21.1	9.7	32.6	26.3	35.0
Zambia (N=131)	6.1	3.6	8.0	18.3	19.6	17.3	75.6	76.8	74.7
Regional Avg. (N=712)	15.9	11.8	18.8	17.4	21.6	14.4	66.7	66.6	66.8

Table 45: Perceived impacts of TCP project on ability to sell more as a result of the TCP programme production

Country	Deteriorated (%)			Unchanged (%)			Improved (%)		
	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.	All Benef.	Male Benef.	Female Benef.
Angola (N=61)	6.6	8.1	4.2	37.7	45.9	25.0	55.7	45.9	70.8
Lesotho (N=14)	7.1	16.7	0.0	7.1	16.7	0.0	85.7	66.7	100.0
Malawi (N=120)	0.0	0.0	0.0	65.8	86.3	50.7	34.2	13.7	49.3
Swaziland (N=2)	50.0	50.0	na	0.0	0.0	na	50.0	50.0	na
Tanzania (N=141)	56.7	52.6	58.3	12.8	21.1	9.7	30.5	26.3	32.0
Zambia (N=100)	7.0	2.2	10.9	34.0	33.3	34.5	59.0	64.4	54.5
Regional Avg. (N=533)	19.7	12.8	24.5	35.5	46.1	28.0	44.8	41.1	47.5

Table 46: Percentage of beneficiary households owning a minimum amount of livestock by country

Country	% of Households owning at least a certain number of livestock						
	>= 1 draught power	>= 2 cows	>= 3 Goats & sheeps	>= 3 pig	>= 5 poultry	>= 3 donkey	>= 1 horse
Angola (N=117)	7.7%	1.7%	16.2%	3.4%	38.5%	0.0%	0.0%
Lesotho (N=122)	50.8%	41.0%	47.5%	9.0%	28.7%	46.7%	36.1%
Malawi (N=120)	0.0%	0.0%	17.5%	5.0%	40.8%	0.8%	0.0%
Swaziland (N=129)	17.1%	47.3%	53.5%	3.1%	87.6%	5.4%	0.0%
Tanzania (N=144)	0.7%	14.6%	30.6%	4.9%	59.0%	1.4%	0.0%
Zambia (N=134)	0.0%	44.8%	50.0%	6.7%	74.6%	1.5%	0.0%
Regional Avg. (N=766)	8.8%	23.8%	34.9%	5.7%	54.2%	7.3%	4.8%

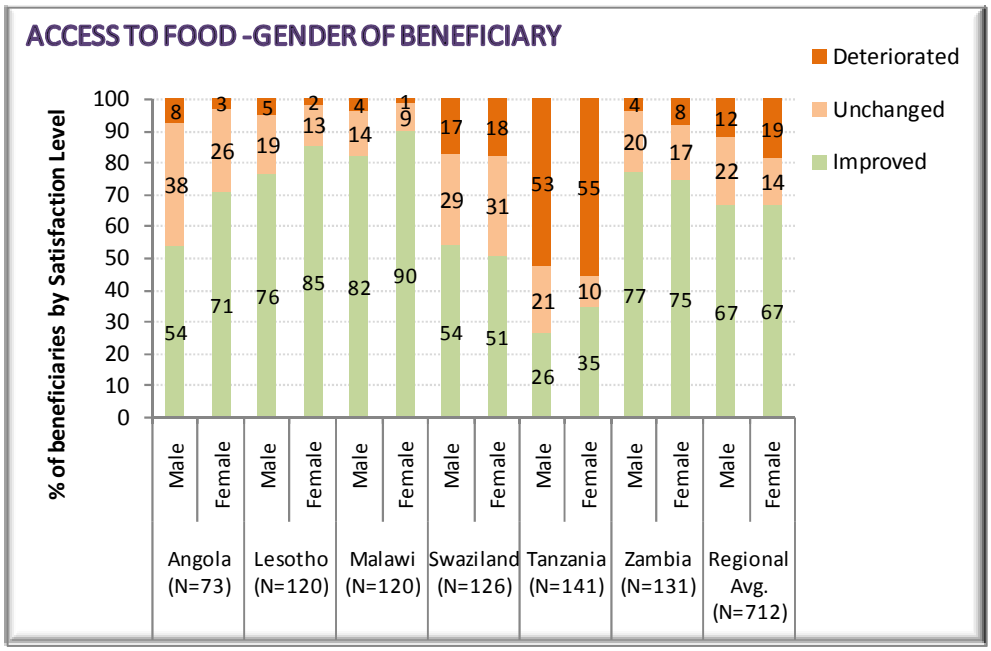
Table 47: Key socio-economic characteristics by gender of beneficiary

Gender of beneficiary	% HH with high dependency ratio	% HH classified as poorest	Avg. months sufficient food resources (before TCP)	Agriculture Land (Hec)	Avg. # of Draught power	Avg. # of Cows
Male beneficiary (N=415)	13%	30%	6.8	2.4	0.4	2.2
Female beneficiary (N=350)	18%	41%	6.7	1.6	0.3	1.8
Difference between male and female	-5%	-11%	0.1	0.7	0.1	0.4

Table 48: Key socio-economic characteristics by gender of head of household hosting beneficiary

Gender of Head of HH	% HH with high dependency ratio	% HH classified as poorest	Avg. months sufficient food resources (before TCP)	Agriculture Land (Hec)	Avg. # of Draught power	Avg. # of Cows
Male head (N=610)	12%	32%	6.8	2.2	0.4	2.2
Female head (N=155)	28%	47%	6.4	1.5	0.3	1.2
Difference between male and female	-17%	-16%	0.5	0.7	0.1	1.0

Graph 32: Percentage of beneficiary households by perceived access to food segregated by gender and country



Graph 33: Percentage of beneficiary households by perceived crop production segregated by gender and country