Food and Agriculture Organization of the United Nations

Initiative on Soaring Food Prices

Beneficiary Satisfaction and Impact Assessment Survey of the Implementation of ISFP TCP Projects in the Eastern Africa Region

Addis Ababa, Ethiopia
April 2010

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LIST OF ACRONYMS

AFC	Agricultural Finance Corporation (Kenya)
CAADP	Comprehensive Africa Agriculture Development Programme
FAO	Food and Agricultural Organization of the United Nations
FAOSFE	FAO Sub-regional Office for Eastern Africa
FAOK	FAO Kenya
IDPs	Internally Displaced Persons
IFPRI	International Food Policy Research Institute
ISFP	Initiative on Soaring Food Prices
MOA	Ministry of Agriculture
MDGs	Millennium Development Goals
NGO	Non Government organization
NIB	National Irrigation Board (Kenya)
OECD	Organization for Economic Cooperation and Development
RECA	Relief Environment Care for Africa, NGO, Kenya
SWOT	Strengths, Weaknesses, Opportunities, Threats
TCP	Technical Cooperation Programme
UN	United Nations
USD	United States Dollar
VAT	Value Added Tax
WFP	United Nations World Food Programme

EXECUTIVE SUMMARY

The populations of the Eastern African Region are not new to vulnerability of food price shocks. As a result of droughts, floods and conflicts which are almost endemic to the region, volatilities of food prices have been and continue to be perennial problems. What distinguished the recent developments from the previous ones are the global nature of the increases, the rates at which food prices increased, and the number of food crops affected by the increases.

Although the food price rises were global the rate of increase in the domestic markets of the region and their subsequent effects on the economies depended mainly, among others, on factors such as exchange rate developments, the degrees of dependence on food imports and the existence of subsidies or import tariffs which can exacerbate or mitigate the "pass through" of international food prices.

In all the countries, the price transmission or "pass through" has materialized but in degrees that reflected the economic conditions in each country. Thus in Burundi, Kenya and Rwanda the global food price surge produced only a steady rises in the domestic food markets while the rises in Djibouti and Sudan were significant. As one study by WFP showed, food prices increased by 20 % in Burundi, 11 % in Kenya and only 10 % in Rwanda[1] while the increases both in Sudan and Djibouti constituted what may be regarded as price hikes.

Accordingly, the governments of the Eastern African countries designed and executed policies that were necessary to reduce the transmissions of the international food prices into domestic markets, protect the most vulnerable groups of the population, and enhance medium and long-term supply responses.

FAO elaborated its response in what is referred to as Initiative on Soaring Food Prices (ISFP) whose prime goal was to bring about rapid supply responses in the poor, food insecure countries. To this end ISFP, in collaboration with national governments and development partners, proposed interventions which can improve the poor smallholder farmers' access to agricultural inputs (seeds, fertilizers, pesticides, animal feed, tools, etc.), rehabilitate rural infrastructure (small scale irrigation infrastructure, market infrastructure, rural roads, soil conservation schemes etc), decrease post harvest losses and improve access to financial and product markets.

Based on the general objectives of the ISFP, the TCP projects in the Eastern Africa Region were designed with the objective of providing small, vulnerable farmers with agricultural inputs and tools required to rapidly boost food production. In formulating the project the strategy recognized specificity and called for adjustments so that the projects are designed to reflect the conditions in every country. In all cases, therefore, the TCP aimed to finance programs and technical assistances in areas that the countries identified as a priority. Accordingly, FAO through its Country Offices in Burundi, Djibouti, Kenya, Rwanda and Sudan and the Sub regional Office for Eastern Africa (FAOSFE) were actively engaged in the last two years in assisting the relevant Ministries and Departments of the Governments in designing cooperation programs, facilitating implementation and subsequently in monitoring the execution of the programs.

In 2009/10 FAO launched Beneficiary Satisfaction and Impact Assessments for ISFP TCP Projects in the region to evaluate their implementation and to identify the lessons that can be drawn. More specifically the objectives of the assessments included an assessment of the level of satisfaction of beneficiaries with the FAO ISFP TCP projects, the impact of the projects on the lives of the beneficiaries, the constraints faced in executing the projects and the lessons derived to improve future operations.

[1] Sithabiso Gandure, High Food Prices in the Eastern, Central and Southern Africa, WFP, December 2008, p.7

Field surveys carried out by national consultants in each country were designed to be conducted on randomly sampled 100 beneficiary households from each TCP project. In reality, however, the number of households selected for the survey varied from country to country. Burundi selected 201 households (about 4 % of the beneficiaries), Djibouti 100, Kenya 115, Rwanda 114 and Sudan 200 households (100 each from North and South Sudan). In all cases the surveys have achieved the objectives set for them and have succeeded in generating the information required to make adequate assessments of the performance of the projects in the region.

ISFP TCP projects in the SFE region were launched in 2008 with a total budget of USD 2,044,000 out of which US 500,000 each was allocated for Burundi, Rwanda, Sudan (USD 250,000 each for the North and South Sudan) and US 294,000 and US 250,000, respectively to Kenya and Djibouti. The projects covered 6,328 households in Burundi, 8000 in Djibouti (6000 agro-pastoralists and 2000 nomads), 540 in Kenya, 10,000 in Rwanda and 12,085 in Sudan (7000 in Southern Sudan and 5085 in North Sudan) bringing the total number of households who benefited directly from the projects in the region to 36,953.

The beneficiaries were mainly drawn from the small, vulnerable rural producers, from the regions/provinces and districts or communes that are food insecure, frequently hit by drought and where productivity is low. In some cases, however, variations were made to accommodate the specific conditions and priorities in the respective countries.

In principle, farmers should be satisfied when provided with seeds, fertilizers, pesticides, tools and other inputs that enable them to increase food production, reduce food insecurity and increase their incomes. Thus, the varying degrees of satisfaction expressed by the beneficiaries of ISFP TCP suggest the efficiency with which the inputs have been delivered, the qualities and the appropriateness of the selected inputs. It is also a reflection of how effective the TCPs have been in training the beneficiaries with the techniques of applying the inputs and managing the farms so as to get maximum benefits from the use of the inputs. On the whole the satisfactions of the beneficiaries are therefore reflections of how well the projects have been planned and executed.

As the responses from the randomly sampled household survey show the beneficiaries of the projects in Burundi, Djibouti, Kenya, Rwanda and Sudan (north and South) have expressed different levels of satisfactions. The delivery of inputs to the Kenyan Ahero Irrigation Scheme in terms of timeliness, quality and appropriateness has been executed to the maximum satisfaction of the beneficiaries. Accordingly, over 70 % of the sampled households expressed very high levels of satisfaction with the varieties of rice seed distributed, timeliness, appropriateness and qualities of the seeds. As the responses suggest a 100 % (63% highly satisfied and 37 % satisfied) of the sampled beneficiaries in North Sudan were satisfied with the receipts of the seeds while over 81 % and a 100 % of the respondents expressed satisfaction with timeliness and qualities of the seeds. Equally high levels of satisfaction have been expressed by the beneficiaries of South Sudan too. On the other hand the implementation of the TCP in Rwanda showed mixed results with 49.5 % of the sampled household beneficiaries being satisfied close to 40% dissatisfied and 10.6 % indifferent in receiving the inputs. The response of the sampled household beneficiaries in Burundi also showed mixed results while that of Djibouti showed responses that were not unexpected taking into consideration the setbacks that occurred there.

On the key question of the impact of the projects on the lives of the beneficiaries as the responses of the sample survey of the beneficiary households suggest the results achieved varied from country to country. In other words not all the beneficiary households in all the countries enjoyed similar degrees of successes; in Kenya and North and South Sudan the impact of the projects on the lives of the beneficiaries were spectacular. In the Ahero project in Kenya, for example, rice yield per ha increased by over 150 % compared to the performance in the previous year in just one season. The increases in total production also led to significant improvements in the food security situation of households and marketable surpluses. As a result of these positive developments, 93% of the surveyed households expressed satisfaction in the project. Equally impressive achievements were also made by the TCP project in North Sudan. On the basis of the survey, 79 % of the sampled household

beneficiaries have registered improvements in food production as a result of the increases in yield which came about because of the use of improved seeds. The TCP project in South Sudan was also a success as 82 % of the surveyed beneficiary households reported increases in the volume of food production.

On the other hand the successes achieved in Burundi and Rwanda were modest while in Djibouti it was not satisfactory at all. The differences in the levels of achievements seemed to be mainly due to differences in the effectiveness of the delivery of inputs systems, the appropriateness and quality of inputs and the weather conditions which prevailed during the agricultural season when the seeds were planted.

While the input distribution systems in the region consists of government parastatal (albeit with very limited role), private sector, NGOs, voucher schemes, Input Trade Fair and of late the rural "stockist", the ISFP TCP projects were implemented in all the countries in special arrangements which were outside the normal input distribution system. The special arrangements might have been necessitated by the urgency of the projects and the need to ensure the timely delivery of the inputs and to save costs by using existing government structures that are stretched down to the lowest administrative unit levels.

The inputs were procured by FAO or the implementing government agencies and in both cases the orders were affected through private suppliers selected on the basis of competitive tenders. In all cases it was the suppliers that delivered the inputs to the project areas. The actual distribution of the inputs to the beneficiaries was then carried out by the branches of the implementing government agencies and producers' organizations often with the support of the local administrative units in the project sites. The only exception to this general pattern was Kenya where the inputs were distributed to the beneficiary households by the Relief Environment Care for Africa (RECA) a local NGO with interests in rice cultivation.

The achievements of the distribution systems are mixed. In Rwanda, Sudan (North and South) and Kenya the distribution system was effective as it succeeded in delivering the inputs in the required quantity and quality to the beneficiary households before the planting seasons. On the other hand the distribution system in Burundi and Djibouti failed to deliver the inputs before the planting seasons to the beneficiary households. The delay was worse in Djibouti than in Burundi.

Evident from the experience of those that succeeded and failed in achieving the goals of the TCP projects is the critical role of the timely delivery of inputs. Equally evident, as the experience of Rwanda and Burundi amply demonstrated, is the role of the appropriateness, quantity and quality of the inputs. Another important lesson that emerged from the experience of all the countries is the necessity of including all the complementary inputs in the assistance package in order to achieve the expected increases in yields. The TCP projects have also, once again, demonstrated the limitations of an agricultural system that is heavily dependent on weather conditions. Of course none of these lessons are new. Hence, the lessons that emerged from the assessments of the TCP projects only reinforced the already known conclusion of the overriding significance of adopting a holistic approach or ensuring parallel development in all areas that are critical for the sustained growth of agriculture.

1. INTRODUCTION

1.1 Brief background on soaring Food Prices at Regional/Sub-regional levels

The populations of the Eastern African Region are not new to vulnerability of food price shocks. As a result of droughts, floods and conflicts which are almost endemic to the region, volatilities of food prices have been and continue to be perennial problems. What distinguished the recent developments from the previous ones are the rates at which food prices increased, the number of food crops affected by the increases and the global nature of the increases. The upturn in food prices in international markets began in 2003 ending the declining trend witnessed in food prices for over 30 years. The gradual food price increases in 2003 and 2004 were followed by steep rises in 2005 and 2006 and more dramatic developments in 2007. The persistence and further acceleration of price rises eventually led to food price surges in the first half of 2008. In quantitative terms from 2005-2008, "…global food prices have climbed by 83 per cent."[2] The price surge involved almost all the major cereal crops such as wheat, rice, maize, corn, and oil seeds and livestock products as well. Although the effect of the surge differed across regions and countries only few countries spared the crisis.

Since April 2008 the surge in international food markets has shown signs of easing owing to increases in the supply of cereal crops as a result of increases in output mainly in the developed and emerging economies, the slowing down of demand for cereal crops due to the recession, decreases in the price of fuel and the strengthening of the US dollar. Although prices have significantly declined from the peaks reached in 2008 they still remain above the 2007 levels. Moreover, as projections and assessments made by IFPRI, OECD and FAO suggest food prices are not expected to decrease significantly, at least not in the near future. The increasing demand for food (arising mainly from the rapid economic growth of emerging economies) and the continuing demand to increase the production of biofuel (due to the anticipated rises in the price of fuel), the low global stock levels of cereals and the continuing adverse impact of climatic changes on production are envisaged to keep the challenges of high food prices for some time (perhaps for as long as a decade)[3] albeit at lower levels than the levels during the surge.

The price surge was a global phenomenon which affected almost all countries of the world with the exception of those that are self sufficient or net exporters of cereal food crops. Food prices in the Eastern Africa markets also increased in line with developments in the global commodity markets. However, the rate of increase of food prices in the domestic markets and their subsequent effects on the economies depended on several factors. In principle the transmission or the "pass through" of international food prices to the domestic food markets is determined by three main factors. These include:

1) Exchange rate development, i.e. the appreciation or depreciation of the domestic currency against the US dollar in which international commodities are denominated;
2) The degree of dependence on food imports or conversely on domestic food production;
3) The existence of policies such as subsidies or import tariffs which can exacerbate or mitigate the transmission.

In addition the extent to which international prices are transmitted is also influenced by the state of infrastructure, transport costs, and the efficiency of domestic markets in each country.

The development of food prices in the East Africa region reflected in one way or the other the effects of all the major forces that influence the transmissions of prices from international to domestic markets. In all the

[2] FAO, Crop Prospect and Food Situation NO 2, April,2008, p. 1.
[3] Joachim Von Braun, The World Food Situation : New Driving Forces and Required Actions, IFPRI, December,2007, pp. 8-10.

countries the price transmission or "pass through" has materialized but in degrees that reflected the economic conditions in each country. Thus, in Burundi, Kenya, and Rwanda food prices did not increase significantly indicating lower rates of transmission of international prices. On the other hand the rates of transmission of prices to Djibouti and Sudan food markets were quite high.

In the case of Djibouti as the economy is essentially based on the tertiary sector the contribution of agriculture to the national economy is limited to 3.6 percent only, suggesting a very high dependence on food imports. In fact, as some estimates put it, Djibouti is almost 100 percent dependent on food imports. The country had also been suffering from consecutive years of drought that hugely depleted the livestock population on which the pastoralists depended for their livelihood. The lingering of the drought led to the worsening of the food security situation of the country. Consequently, Djibouti had no option but to step-up its import of rice and wheat, the major staple food of the population. As a study by WFP points out the domestic price of the crops in 2007 and 2008 experienced increases that were higher than the average price rises witnessed in the country in the previous five years.[4]

Sudan is the other country of the region that experienced very high price increases in its domestic market. Thus, from 2006-2008 the wholesale prices of sorghum, millet and wheat, the major staple food crops, registered 35, 45, and 65 percent increases, respectively which, compared to the historical trends, can be referred to as price hikes.[5] In normal agricultural years, Sudan is self sufficient in the production of sorghum and millet, while its wheat production falls very much short of its requirements. Hence, Sudan is one of the countries in the region that depends heavily on Wheat imports which in 2006, for example, reached 1.35 million tons.[6] Thus, the soaring price experienced in the food markets in 2007 and 2008 with respect to sorghum and millet are explained mainly by domestic factors (such as low productivity, rises in cost of production, cross-price substitutability effects, etc.) while the price of wheat was essentially a function of the surge in the international market.[7]

In Burundi, Kenya and Rwanda the global food price surge produced only a steady rise in the prices of domestic food markets. Thus, from 2007-2008 food prices in Burundi and Kenya increased by 20% and 11%, respectively and in Rwanda by less than 10 percent.[8] Maize, which is the main staple food of these countries, is essentially produced locally. In normal agricultural years, maize imports do not constitute more than 5 percent of domestic production. Thus, the prices of cereal food crops are mainly influenced by domestic factors and not much by variations in international commodity markets. In the case of Kenya the appreciation of the domestic currency against the US dollar has to some extent enabled it to insulate the domestic food market from the effects of rising international prices. Since Rwanda managed to hold to the exchange rate with the US dollar, it did not experience price transmission due to exchange rate movements. On the other hand the depreciation of the domestic currency of Burundi against the US dollar has exacerbated the impact of the rising world food prices in its domestic food market.

[4] Sithabiso Gandure, High Food Prices in the Eastern, Central and Southern Africa, WFP, December 2008, p. 19.
[5] SIFSIA-N/FAO, Determinants of Current Food Price Hikes and Their Implications in the Northern Stats of Sudan, October 2008, p. 8.
[6] Ibid, p. 7.
[7] Ibid, pp. 8-13.
[8] Sithabiso Gandure, High Food Prices in the Eastern, Central and Southern Africa, WFP, December 2008, p.7

1.2 Summary of Governments Response to Soaring Food Prices

Governments all over the emerging and developing economies could not rely on the customary macroeconomic instruments and social protection schemes or safety net programs alone to manage the effects of soaring food prices and out of the food quagmire or the increasing demand and supply imbalances. Hence, almost all the countries in the developing world in addition to macroeconomic and other relevant policies had to resort to administrative policies as well to insulate, to the extent possible, domestic food prices from the transmission of world prices and effect rapid supply responses. Accordingly the governments of the Eastern African countries along with their development partners also designed and executed policies that were deemed necessary to:

- Reduce the transmissions of the soaring international food prices into domestic markets,
- Protect the most vulnerable groups of the population, and
- Enhance a medium and long-term supply responses focusing on smallholder farmers so as to achieve the twin objectives of boosting production and reducing poverty from the sector where it is well entrenched.

The table below summarizes the responses by the governments of the region.

TABLE 1: Government Response to Mitigate the Effects of Soaring International Food Prices

COUNTRY	IMMEDIATE /QUICK MEASURES	PRODUCTION ENHANCING MEASURES
DJIBOUTI	- Suspended sales taxes on food items - Suspended customs duty (8%) on imported rice, powder milk, wheat flour, sugar, etc.	- Promoted the development of small scale agro-pastoral farms around water points in the rural areas
BURUNDI	- Enhanced safety net program - Suspended customs and transaction taxes on import of certain food items, and petroleum products - Reduced tariffs on diesel imports from 12 to 9 % -Reduced VAT on food	- Increased budgetary allocations to agriculture from 3 to 12 % - Opened 15 seed centres -Rehabilitated irrigation infrastructure -Distributed 280 water pumps for irrigation pad of 158ha - Provided micro-credit to smallholder farmers
KENYA	- Provided hot lunches to 60,000 school children - Provided fortified nutritious hot porridge to 62,000 pre-school children - Food ration to 9,000 HIV carriers - Subsidized wheat flour to millers - Setting a two tier price control for milled maize	- Subsidized chemical fertilizers - Provide input vouchers for 2000 small farmers - Provided agricultural inputs to 142, 000 small scale farmers

	- Removed import taxes on maize	
RWANDA	- No quick response measures introduced	- Made substantial subsidy for improved seeds and chemical fertilizers
SUDAN	- Removal of the 15% VAT on wheat - Provided subsidy to wheat	- Provided subsidy to fuel and chemical fertilizers - Strengthened micro-credit services to farmers - Promoted the development of cooperatives, - Promoted income generating activities - Distributed 1081 tones of seeds to farmers

1.3 FAO Response to the Crisis in the Region

The global food price surge endangered the lives of millions of the world's most vulnerable people and threatened to reverse the gains achieved in reducing food insecurity, hunger and poverty through the MDG's. FAO's response to the crisis in the region and indeed to the world at large was born out of the urgent task of tackling the negative consequences of the rising food prices and exploiting the opportunities created by the crisis to enhance a quick supply response and increase food supply. FAO elaborated its response in what is referred to as Initiative on Soaring Food Prices (ISFP). The ISFP is founded on "twin- track approach… that combines the promotion of quick response agriculture, led by small farmers, with targeted programs to ensure that the most vulnerable and food insecure consumers can have access to adequate supply."[9] To enhance adequate supply response particularly in the most vulnerable countries the ISFP focused on mitigating the constraints of the smallholder farmers so as to improve their own food security situation and also increase marketable surplus. To achieve the overall goal of reducing food insecurity through supply response in the poor countries, ISFP, in collaboration with national governments and development partners, proposed interventions which could rapidly improve the poor smallholder farmers' access to agricultural inputs (seeds, fertilizers, pesticides, animal feed, tools, etc.), rehabilitate rural infrastructure (small scale irrigation infrastructure, market infrastructure, rural roads, soil conservation schemes etc), decrease post harvest losses and improve access to financial facilities and markets.

Based on the general objectives of the ISFP and requests for assistance received from FAO Member States, FAO launched emergency assistance through Technical Cooperation Programme (TCP) projects in the Eastern Africa region, which aimed to provide vulnerable farmers with agricultural inputs and tools and to rehabilitate rural infrastructure to boost production rapidly. In executing the project, the strategy recognized specificity and called for adjustments so that the projects are designed to reflect the conditions in every country. In all cases, therefore, the TCP aimed to finance programs and technical assistances in areas that the countries identified as priorities. Accordingly, FAO through its country offices in Burundi, Djibouti, Kenya, Rwanda and Sudan and FAOSFE was actively engaged in the last two years in assisting the relevant Ministries and Departments of the Governments in designing cooperation programs, facilitating implementation and subsequently in monitoring the executions of the programs.

[9] FAO, Initiative on Soaring Food Prices (ISFP) : Programme Document, May 2008, p.5

1.4 Purpose of ISFP TCP Project Assessment

One of the most important lessons derived from the course of development is the need to critically examine past efforts with the view to identifying successes that could be scaled up and mistakes that should be avoided in future endeavours. This is even more so in programs such as ISFP TCP which needed to be designed and executed quickly to avert food crisis that threatened the lives of millions of people and the stabilities of many governments in developing countries. The assessment of ISFP TCP projects has, therefore, been launched to evaluate the course and to identify the lessons that can be drawn. More specifically the objectives of the assessments are:

1) Assess the level of satisfaction of beneficiaries with the FAO ISFP TCP projects and the impact that it has had on their lives;

2) Collect the views of project beneficiaries, implementing agencies and input suppliers on the major constraints or problems they faced with the projects and suggestions that they have for improving them;

3) Contribute to a lessons learning process that will be useful for optimizing future emergency responses.

1.5 Brief Description of Beneficiary Satisfaction and Impact Assessments

The Beneficiary Satisfaction and Impact Assessment Survey was planned, organized and executed in accordance with a general guidelines developed by the ISFP Secretariat. As the TCP projects were not initiated with collection of the necessary baseline data to undertake a full scale beneficiary impact assessment, the exercise had to, therefore, be limited mainly to qualitative evaluations of the views of stakeholders about the projects' objectives, contributions and constraints faced in the implementations phases. It was on the basis of this understanding that the guidelines defined the purposes and the methods of the survey.

The guidelines included two generic questionnaires- one for the beneficiaries and the second for the implementing agencies and suppliers of inputs. The first questionnaire aimed at assessing the satisfaction of beneficiaries about the inputs provided in terms of delivery time, quality and appropriateness. It also focused to establish, to the extent possible, quantitatively the impact of the projects on productivity, food insecurity, marketable surpluses and lives of the beneficiaries. The second questionnaire was targeted to collect the opinions of implementing agencies and input suppliers about constraints faced in executing the projects. In all cases the questionnaires aimed to assemble the suggestions of the stakeholders about what needs to be done to improve future projects. While the general framework of the questionnaires seek to ensure information required for the assessment and compare the developments in the different countries, they also allowed adjustments to accommodate the particular aspects of the projects in each country.

The beneficiary impact assessments in all the countries were carried out with national consultants who undertook the tasks in accordance with the directives of the guidelines. Enumerators with the requisite skills were also employed and provided with an intensive one-day training to be familiarized with the questionnaires and approaches to be followed. The national consultants, as required by the guidelines, also conducted field testing of the questionnaires to ascertain suitability to the concrete situation in every project area.

In all the countries, the surveys were conducted on the basis random sampling, covering all the regions/districts where the projects were executed and the gender profile of the beneficiaries. There were, however, slight variations in Djibouti. Since the farmers' socio-economic profile did not vary from region to region the beneficiary households for the survey in Djibouti were chosen from three of the five regions in which the project was implemented. The number of households selected for the survey also varied from country to country.

Burundi selected 201 households (about 4 % of the beneficiaries), Djibouti 100 households, Rwanda 114 households and Sudan 200 households (100 each from North and South Sudan).

The choice of the households for the survey in Kenya was, however, conducted in a slightly different way, reflecting the different nature of the project. The beneficiaries constituted 30 groups, out of which, on the basis of purposive sample 22 groups were selected from which 5 households were chosen randomly from each of the selected groups. 5 households were then randomly selected out of the remaining 8 groups bringing the total number of beneficiary households sampled for the survey to 115.

Table 2: Beneficiary households and sample size distribution by gender

	Countries	Number of beneficiary households	Number of sample households	Sample households by gender (%)		Sample as % of number of households
				Male	Female	
1	Burundi	6,328	201	67	33	3.17
2	Djibouti	8,000	100	80	20	1.25
3	Kenya	540	115	61	31[10]	21.29
4	Rwanda	10,000	114	78	22	1.14
5	Sudan	12,085	200	86	14	1.65
	Total	36,953	730	74.4	18	1.97

Source: Country Reports, 2009.

As the above table shows all the countries have endeavoured to represent women-led household beneficiaries in the survey. Thus, in Burundi, for example, of the total beneficiary households sampled 33 % were women-led, in Kenya 31%, in Rwanda 25 % and in Djibouti 20 %. In Sudan women led households constituted 14% of the sampled beneficiary households. In North Sudan, however, of the sampled household women-led beneficiaries made up only 6%, reflecting the poor participation of women in the project. In South Sudan, on the other hand, of the surveyed beneficiary households women constituted 22 %. In Djibouti, it may be worthwhile to note that one of the 36 cooperatives that benefited from the project was entirely a female cooperative. All the other cooperatives selected to benefit from the project also had women participating in different capacities in the activities of the cooperatives.

On average the households sampled for the survey represented close to 2% of the total beneficiary households covered by the program. As the above table shows the sampled households in Djibouti, Rwanda and Sudan were, however, slightly lower while that of Burundi was higher than the average sample size for the region. On the other hand owing to accessibility the proportion of household beneficiaries covered by the survey in the Kenyan TCP project was much higher than the average for the region.

On the whole the surveys have succeeded in generating the quantitative and qualitative information required to assess the impact of the projects, except in Djibouti where actual data were lacking. The TCP project in Djibouti did not succeed to deliver the inputs in time for the planting season in 2008/09. Since the seeds were planted in 2009/10 actual figures on food production, food security and marketable surpluses could not be made available for the survey. Thus, the national report of Djibouti had to base its impact assessment on estimates or projections provided by household beneficiaries who participated in the survey. The beneficiaries made the estimates on the basis of the qualities of the seeds received and observation of the growth of the plants in the fields.

[10] The remaining 8% were not household heads but sons, daughters and close relatives drawn from the beneficiary households.

In all the countries, efforts have been made to verify the information obtained through the survey with interviews, visual observations and where possible with data from monitoring and follow-up report

2. SUMMARY OF TCP PROJECTS IN THE REGION

2.1 Overview of TCP projects in the region

The ISFP TCP projects in the Eastern Africa region were implemented in Burundi, Djibouti, Kenya, Rwanda and Sudan. The projects aimed to bring about rapid supply responses through the provision of agricultural inputs, tools and rehabilitation of rural infrastructure with the view to increasing food production and improving food security and marketable surplus for the households covered by the projects. ISFP TCP in the region was launched in 2008 with a total budget of USD 2,044,000 out of which USD 500,000 each was allocated for Burundi, Rwanda, Sudan (USD 250,000 each for the North and South Sudan) and USD 294,000 and USD 250,000, respectively to Kenya and Djibouti. The projects covered 6,328 households in Burundi, 8000 in Djibouti (6000 agro-pastoralists and 2000 nomads), 540 in Kenya, 10,000 in Rwanda and 12,085 in Sudan (7000 in Southern Sudan and 5085 in North Sudan) bringing the total number of households who benefited directly from the projects in the region to 36,953. Table 3 below provides a brief description of the project.

TABLE 3: Overview of the TCP projects in SFE

Country	TCP Project code	Brief project description			
		Objectives	**Outputs**	**Target areas and households**	**Total budget (USD)**
BURUNDI		Improve access to food through rapid boost in food production and policy support	-Beans increased by 5.6 % -vegetables by 21 %	Target Areas (provinces) -Bubanza -Bujumbura -Cibitok Household -target 6,000 -actual 6328	USD 500,000
DJIBOUTI	TCP/DJI/3201	To counter the effects of soaring food prices	-Inputs delivered late for 2008/09 season -Planted in 2009/2010 _figures currently not available	Target Areas (Regions) -Djibouti-Ville -Region d'Arta -Region d' Ali-Sabieh -Region de Dikhil -Region de Tadjourah -District D'obock Household -8000	USD 250,000
KENYA		To reduce food insecurity among households by bringing under production 2168 ha of irrigation scheme that was unutilized	Rice yield increased from 2,211kg/ha to 5,928 kg/ha after the intervention -i.e. yield increase of 150 %	Target Area -Ahero Irrigation Scheme Household -540	USD 294,000(FAO) Plus USD 461,540 (local sources)
RWANDA	TCP/RWA/3201(E)	To assist 10,000 highly vulnerable members of the population to be food secure through agricultural input support	Yield performance was poor due to poor quality of seeds and poor rainfall	Target Areas (3 Districts) -Bugesera -Gicumbi -Musanza Household -10,000	USD 500,000

SUDAN	TCP/SUD/3201(E)	To alleviate part of the pressing crisis of food soaring prices on small farmers and vulnerable households	-Project succeeded in increasing production of planted crops (maize,sorghum,wheat, ground nuts etc) -Households able to meet consumption, keep seeds and sale to market and increased income	<u>Target Areas</u> North Sudan (States) -Khartoum -White Nile -Blue Nile -North Kordofan South Sudan (States) -Central equatorial Upper Nile -Unity -Warrap <u>Households</u> -North Sudan -5058 -South Sudan -7000	USD 250,000 (North Sudan) USD 250,000 (South Sudan)

The table below provides a summary of the inputs delivered, the number of households to whom the inputs were delivered and the cost of the inputs.

TABLE 4: Summary of inputs distributed in SFE

Inputs distributed	Volume (kg)	Number of beneficiary households	Value (USD)	Countries
Seeds				
Beans(kg) Vegetable seeds (kg) Sweet potato (cuttings)	59690 1494 1492150	 6328		**BURUNDI**
  Vegetable seeds (kg) Animal feed seeds(kg)	1185 880	8000		**DJIBOUTI**
Rice seeds (kg)	54,200	540	36,855	**KENYA**
Beans (tons) Wheat (tons) Maize (tons)	320 50 45	10,000 4000 5000	321,172 45,410 39,137	**RWNADA**
Seeds(kg) Seeds(kg)	161,535 120,000	5032 7000	237,500 250,000[11]	**N. SUDAN** **S.SUDAN**
Total				
Fertilizers				
Urea(kg) Dap(kg)	47,752 47,752			**BURUNDI**
				DJIBOUIT
MOP & SA (kg)	320,00	540	228,333	**KENYA**
Total				
Pesticides				

[11] Includes also the cost of hand tools

Dithane(kg) Dursban(Liters) Dursban(L)	537 60 60			**BURUNDI**
Karate (liters)	500	540	16,738	**KENYA**
Total				
Other inputs				
Motor pump	10			**Burundi**
Mineral stone(kg)	25,000			**Djibouti**
Carbendazine (liters)	500	540	21552	**KENYA**
Total				

Note: Information on inputs distributed at country level can be found in the annex

2.1.1 Socio-economic profile of beneficiaries

The socio-economic profiles of the beneficiaries reflect the characteristics typically observed among the lowest segments of the rural population in Africa. The main assets of the beneficiaries remain land and livestock. The average land owned by the beneficiaries in Burundi, Kenya and Rwanda is low, ranging from 0.5 – 1.7 ha. Although the size of the population in Djibouti is low because of the scarcity of agricultural lands the beneficiaries own, on average, less that 1 ha. In Sudan as land is still in abundant supply the average land holding, compared to the realities in the other countries of the region, is very high. In North Sudan of the sampled household beneficiaries 79% own less than 2.1 and 4.2 ha while the remaining 21 % own between 4.2 and 222.6 ha. In South Sudan on the other hand the average cultivated land of the respondents was 2.52 ha.

As is the practice in mixed farming in Africa, beneficiaries in Burundi, Kenya, and Rwanda own limited number of livestock as an additional source of income. Perhaps owing to the semi-nomadic culture of the population and the size of land they possess, the beneficiaries in Sudan own large herds of livestock, predominantly small ruminants. Accordingly, in North Sudan of the sampled beneficiary households on average each household owns 7.81 goats, 5.86 sheep, 3.41 cattle 0.27 camel and 0.17 donkeys. In Djibouti despite the fact that livestock remains the main source of livelihood for the population the size of livestock owned by beneficiaries is not much. As the data provided by the survey indicates average size of livestock per household does not exceed 10 and constitute mainly small ruminant animals.

The average size of family of the households which benefited from the project also varied from country to country. The average for Burundi was 7, Djibouti 6.3, Kenya 8 and Rwanda 5.5 persons per family while in Sudan the average was 10 persons per family. In fact as the national report indicates 60% of the sampled beneficiaries had 3-9 persons while 40 % of the beneficiaries had up to 40 persons per family. With respect to age while the age of the participants ranges from 20 -60 years the mean age for all the countries is 50 years.

2.2 Input Distribution System used in the TCP Projects

2.2.1 Description of beneficiary and site selection process

To achieve its objectives of increasing food supply and reducing food insecurity, ISFP aimed at targeting the vulnerable smallholder farmers who, owing to poor access to inputs and resources, were unable to exploit the opportunities created by soaring food prices. Accordingly, in most of the countries the beneficiaries were mainly drawn from the small, vulnerable rural producers, from the regions/provinces and districts or communes that are most food insecure, frequently hit by drought and where productivity is low. In some cases, however, variations were made to accommodate the specific conditions and priorities in the respective countries.

In Sudan, for example, beneficiaries included Internally Displaced Persons (IDPs), returnees and refugees as well. The IDPs, returnees and refugees in Sudan were mainly in the South while those in the North were, as required by the TCP project, essentially drawn from the small vulnerable farmers. The selection of the beneficiaries and states in the South Sudan was based on information gathered from field visits in which, the staff of the MOA, the implementing government organization, FAO and other development partners, mainly NGOs, and the communities themselves participated. Contrary to the approach followed by the other countries of the region, the criteria for selection of the project areas in South Sudan were based on the production potential of the states and their proximity to market. The approach was rationalized on grounds of ensuring adequate returns to the beneficiaries with the view to ascertaining the success of the project.

In North Sudan, on the other hand, the selection of the communities and household beneficiaries were based on annual crop assessment reports undertaken by the Ministry of Agriculture, UN and NGO reports that indicated the degrees of food insecurity and vulnerability situations in the different states and communities of the region.

Based on the general criteria the selection of specific households was also supported by the views of extension agents who were familiar with the communities.

The beneficiary selection in Burundi also followed slightly different approaches. While 30 per cent of the beneficiaries consisted of IDPs, returnees and vulnerable farmers the remaining 70 percent were selected from among the viable farmers. Contrary to the focus of ISFP the latter group, was given more weight in the project because of the government's intention to replicate the program on a wider scale. The idea of incorporating farmers with capacities to pay-back the seeds was to enable the government to scale up the program by re-distributing the seeds to new farmers in the succeeding seasons. However, if the borrowers faced crop failures they were not obliged to pay back the seed loan. The criteria for selection of the three provinces and the specific sites from which beneficiaries were drawn were the absence or low government services and the predominance of returnees in the areas. In addition proximity to the capital city was also considered with the view to creating a more favourable condition for follow-up and monitoring of the execution of the project.

In the economic realities of Djibouti, the project had to be based mainly on agro-pastoralist and pastoralists who are organized in cooperatives. The selection of the regions and beneficiaries was made in the course of a country wide tour which was conducted to create awareness about the aims and objectives of the project among regional administrators, rural development professional and the leadership of the cooperatives in the different regions of the country. The criteria for selecting the beneficiaries, which included the state of motivation and activities of the cooperatives and integration of women in the activities of cooperatives, were adopted in the dialogue conducted with stakeholders during these tours. The beneficiaries selected for the project were 36 cooperatives from the five regions of the country and the sixth one from the periphery of the capital city- Djibouti. It may be worthwhile to note that one of the beneficiary cooperatives selected from among those near the Djibouti city is a cooperative that is wholly constituted by women only.

In Kenya, the project was focused on the rehabilitation of Ahero Irrigation Scheme on 2168 ha of rice farm. Although established in 2004 with the cooperation of FAO only about 50 ha of the scheme were utilized due to resource constraints faced by the farmers. Since the scheme was underutilized its rehabilitation made strong economic sense as it opened quick and dependable opportunities to increase food supply, reduce food insecurity and increase marketable surplus in an area that is food insecure and where the levels of poverty is higher than the national average. However, as the ISFP TCP fund was not enough to finance the project, forging partnership with national organizations became necessary. To this end FAOK succeeded in bringing the National Irrigation Board (NIB) and Agricultural Finance Corporation (AFC) of Kenya on board to cooperate in financing the scheme. The land preparations, operations, maintenances and water pumping were financed by NIB and AFC while the ISFP TCP project financed the seeds, fertilizer and pesticides. The beneficiaries were the very poor and small farmers who were on the farm but who lacked the means to cultivate the land, plant seeds and exploit the irrigation scheme.

The approaches adopted in identifying the project sites and beneficiaries in Rwanda were participatory in which the staff of the Ministry of Agriculture and Animal Resources, the district administrators and the farmers themselves were involved. The criteria adopted for the selection of beneficiaries were poverty and vulnerability as indicated by size of land owned and other basic resources. The selection of the districts was based on criteria that helped to identify the districts that needed the support most. Accordingly, the frequency and intensity of drought in the districts, the severity of food insecurity, shortage of land and low usage of modern agricultural inputs were the important criteria that determined the selection of the district for the TCP project.

TABLE 5: Criteria for the selection of target regions and beneficiaries SFE **

Country	Criteria	
	Selection of Region	**Selection of beneficiaries**
Burundi	-predominance of returnees in the province -absence or lack of gov. services -closeness to the capital city	-returnees -widows -landless and vulnerable farmers -viable farmers
Djibouti	-the country's regions are found at more or less the same level of development -5 of the 6 regions were selected -a six one a wholly women cooperative near the capital city was also selected	-state of motivation of farmers -integration of women -the state of the activity of farmers/cooperatives
Kenya	- degrees of food insecurity -prevalence of poverty(58%) -the existence of underutilized resource	-prevalence of poverty and food insecurity -high incidence of HIV/AIDS
Rwanda	-frequency and intensity of drought -severity of food insecurity -low usage of technological inputs -shortage of land	-poverty and vulnerability measured by ownership of land and other assets -Widows of genocide -HIV/AIDS
Sudan	-degrees of food insecurity and vulnerability situations of the states(North) -production potential of the states, and -proximity to markets(south)	-IDPs -returnees, -refugees -small vulnerable farmers

2.2.2 Methods/systems for distributing inputs

The procurement and distribution of the agricultural inputs was directed and executed by FAO, implementing government ministries and their branches and producers organizations in the project sites. Private enterprises were also involved, but their roles were limited to supplying the inputs and did not take part in distribution which, in the region, remained entirely the concern of governments. The involvement of FAO took at least two forms. In all the countries it approved the procurement process and the tenders. In some of the countries FAO was also involved in the procurement and hence in overseeing the delivery of the inputs to the project areas or communes.

In Djibouti, Burundi and Kenya, upon the request of the implementing government bodies, it was FAO that procured and ensured the delivery of the inputs to the project areas. The actual delivery of the inputs to the project areas was carried out by the private suppliers who won the awards but the supervision remained the responsibility of FAO. In all the three countries the distributions of the inputs to the beneficiaries was subsequently handled by the implementing government bodies. In Burundi, the distribution was directed and

supervised by the provincial Direction for Agriculture and Livestock which served as the focal point for the project in the selected provinces. The Direction for Agriculture and Livestock distributed the inputs to the presidents of the farmers associations who in turn carried out the distributions to the beneficiary households. In Kenya, the inputs were delivered to the office of the Ahero Irrigation Scheme and subsequently distributed by Relief Environment Care for Action (RECA) a local NGO. In Djibouti, it was the technical committee that was established to implement the project that oversaw the distribution of the inputs. Upon the arrival of the inputs in the project areas, members of the committee were deployed to each site and ensured that the inputs were delivered to the leadership of the beneficiary cooperatives who in turn distributed them to the beneficiary households.

In Rwanda and North and South Sudan, on the other hand, the procurements of the inputs were made through open tenders to private suppliers. After the suppliers delivered the inputs to the project areas the distribution was then handled by the relevant government bodies. In Rwanda, the inputs were delivered to the project districts specifically to the agronomist of the districts, who was the designated focal person for the distribution of the inputs. The actual distribution of the seeds was carried out at sector levels with the sector agronomists as the focal points and in collaboration with the decentralized government's grass root administration. In North Sudan the distribution was carried out by the extension service staffs of the state's ministry of agriculture in the targeted areas under the supervision of the technical departments of the Ministry of Agriculture and Forestry of the Government. The distribution system employed in South Sudan was similar with the North Sudan, the responsibility for the distribution mainly resting with the state's ministry of agriculture. However, perhaps owing to the weaknesses of the state's organizations in South Sudan, FAO and a number of NGO's had played an active roles in assisting the state with the distribution of the inputs to the beneficiary households.

On the whole the distribution of the inputs to the beneficiaries in the region was executed by the cooperation of different bodies of the governments and producers organizations. More specifically it included the representatives of the Ministries of Agriculture in the project areas, local administrative bodies at the project sites, producers' organizations such as cooperatives, farmers associations, etc. And, in the case of South Sudan, NGO's as well. The exception to this general pattern was Kenya where the distribution of the inputs to the beneficiaries was totally managed by a local NGO. In all cases monitoring remained the responsibility of the head offices of the MOAs and FAO.

2.3 Farmers' Impression of Receiving Agricultural Inputs

Intuitively thinking, farmers should be quite satisfied when provided with seeds, fertilizers, pesticides, tools and other inputs that enable them to increase food production and reduce food insecurity and poverty. The role of such inputs in increasing productivity is something that has long been proved by empirical evidences. Thus, the varying degrees of satisfaction expressed by the beneficiaries of ISFP TCP have, therefore, less to do with the technological values of the inputs. On the contrary the feedback or the responses gathered from the beneficiaries indicate the efficiency with which the inputs have been delivered, the qualities and the appropriateness of the selected inputs. It is also a reflection of how effective the TCPs have been in training the beneficiaries with the techniques of applying the inputs and managing the farms so as to get maximum benefits from the use of the inputs. Because of the dependence of agriculture on mother nature, the responses of the beneficiaries also reflects the favourability or unfavourability of the weather conditions at the periods the projects were implemented. On the whole the satisfactions of the beneficiaries are therefore reflections of how well the projects have been planned and executed.

2.3.1 Awareness of farmers as to why they received agricultural inputs

The question about the awareness of the beneficiaries as to why they were selected to receive inputs in essence aims to assess whether the projects have been formulated with the participation of the primary stakeholders. The

responses are quite revealing. In Burundi, for example, awareness of the beneficiaries was assumed to prevail since the farmers were well familiar with the provision of such inputs during the civil war when the country had to cope with the disruption of production and the resulting soaring food prices. In the case of Kenya, beneficiaries did not directly point out the specific reasons why they were provided with the inputs. They succeeded in identifying the factors for the input assistance in the processes of listing or enumerating all the possible factors that could qualify them for such assistance. The national report of Rwanda has not even treated the issue of beneficiary awareness. The responses of the respondents in North and South Sudan also did not confirm that their knowledge was based on information about the goals of the project.

On the other hand Djibouti has made systematic campaign to create awareness about the project among the stakeholders. The national committee established to implement the project toured the different regions of the country to explain the objectives and targets of the project to the regional administrators, professionals of the Ministry of Agriculture and Livestock branches and to the leadership of the cooperative in the regions. As indicated earlier the very criteria for the selection of vulnerable groups was also adopted in the dialogue conducted with the stakeholders during these tours. The responses of the surveyed beneficiary household which showed that over 80% of both the male and female respondents were well aware of how and why they were selected for the project confirmed the familiarity of the participants with the goals of the projects.

2.3.2 Knowledge of agricultural inputs received and willingness to adopt

The knowledge of the surveyed beneficiaries about the inputs they received varied from one input to another and from country to country. Some of the farmers were familiar with some of the inputs; some saw some of the inputs for the first time in their lives. Thus, in Burundi, for example, 43 % of the sampled beneficiaries saw some of the seeds (carrot, lettuce, and cauliflowers) for the first time in their lives. On the whole only about 57 % of the beneficiaries had some knowledge about the seeds, 54 % about the pesticides while 71 % were familiar with the fertilizers. In North Sudan only 45 % of the sampled beneficiaries reported prior knowledge about the inputs while the corresponding figure for South Sudan was 69 %. In Kenya 80 % of the respondents were familiar with the rice seeds. On the other hand 80 % of the respondents were not familiar with the major fertilizer (MOP) which was utilized while 68% of the respondents were familiar with the second fertilizers (SA). With respect to pesticides only 44% of the respondents reported to have had the experience of employing the input before ISFP TCP.The national reports of Djibouti and Rwanda did not cover this aspect of the survey and hence figures on awareness about inputs utilized are not available.

TABLE 6: Knowledge of agricultural inputs received and willingness to adopt in SFE (In percentages)

Country	Familiarity with inputs	Willingness to buy or adopt
Burundi		
-seeds	57.7	81.2
-fertilizers	71.1	71.0
-pesticides	54.7	70.3
-other inputs	20.9	58.49
Djibouti		
-Seeds	NA	80
-fertilizers		
-pesticides		
-other inputs		
Kenya		
-seeds	80	80
-Fertilizer (MOP)	14	86
-Fertilizer(SA)	68	86
-Pesticides	44	69
Rwanda		
-Seeds	NA	NA
North Sudan		
-Seeds	69	63
South Sudan		
-Seeds	45	92

The other question that the survey investigated was the willingness of households to continue with the application of the inputs. As the results of the survey showed, a very high proportion of the surveyed beneficiaries have responded very positively to the question. Although the opinions of the respondents were qualified by such conditions like the availabilities of the inputs in the local markets, affordability of the prices of inputs, incomes, etc., the willingness to continue employing the use of the inputs appears to be a common trend. Thus, in Kenya, for example, over 80 % of those interviewed expressed willingness to continue with the application of the inputs. In North Sudan over 60 % and in South Sudan over 92 % of the surveyed beneficiaries responded positively to the question. The feedback from the survey in Djibouti was also encouraging with 80% of the respondents willing to continue investing in the application of inputs. On the whole the observed attitudinal change is consistent with the long held belief about farmers' willingness to embrace changes. In theory farmers adoption of technology is, among other variables, a function of the additional income or benefits that the use of the technology generates. In the case at hand also willingness to adopt the technologies was very strong in countries such as Kenya and Sudan where the benefits gained from the application of the inputs were high.

A related issue that the survey examined was the extent to which beneficiaries had received training in the application of the inputs. As the national reports suggest most of the sampled household beneficiaries in Burundi, Djibouti, Kenya, and Sudan have had received some training. Most were trained through the extension services of the ministries of agriculture. In addition some had also received training through the ISFP in the course of implementing the TCP projects. Some of the national reports have indicated quantitatively the extent to which beneficiaries had benefitted from the training programs. Accordingly, in Burundi for example, 49% had training in the application of seeds, 51% in fertilizers and 54.7% in pesticides. In North Sudan over 60% had reported to have had some training on the application of seeds while in South Sudan only 34% had benefited

from such training. In Kenya, on the other hand, "...60% of the respondents, 78% being women responded that they had never received training on the use of rice seeds...[12]". As the survey in Kenya further revealed the sampled farmers had no training on the application of the fertilizer while only about 18% of the respondents had received some training on the application of pesticides. On the whole as the national reports suggest lack of adequate training on the application of improved technologies appears to be one of the commonly observed problems in the region.

2.3.3 Satisfaction level with inputs received

One of the main objectives of the ISFP TCP survey was to assess accurately, to the extent possible, the satisfaction levels of beneficiaries about the agricultural inputs provided to them through the programme. Accordingly, the questionnaire developed by the ISFP Secretariat, among other issues, aimed to gauge the satisfactions of beneficiaries regarding inputs received, the appropriateness of the inputs to the farming system practiced in the country/regions, the timeliness of the delivery of inputs in relation to the farming seasons and the qualities of the inputs. The responses of the beneficiaries were graded in to five levels: viz

1. Highly dissatisfied
2. Dissatisfied
3. Indifferent
4. Satisfied, and
5. Highly satisfied

Although the goal of the ISFP programme remained the same, the beneficiaries of the projects in the different countries of the region have, as the results of the randomly sampled household survey showed, expressed different levels of satisfactions regarding the provision of inputs. This is not surprising as the projects were executed in different countries under different opportunities and constraints.

In **Burundi**, for example, about 60% of the surveyed households are satisfied (27% highly satisfied and 33% satisfied) in receiving the seeds while over 30% (17%highly dissatisfied and 15% dissatisfied) were dissatisfied with the seeds. As the national report indicates, the dissatisfaction was mainly due to the low quality and quantity of some the seeds received. The Timeliness of delivery of seeds had also been a constraint. In fact as the information gathered from the survey regarding delivery showed about 55%(23% highly dissatisfied and 32% dissatisfied) of the surveyed households were dissatisfied since most of the seeds were delivered after the planting season was over. On the other hand the responses expressed regarding the appropriateness of the seeds were very high. Thus, of the households surveyed 43 % were highly satisfied and over 30 % satisfied while only 7 % of the beneficiaries were dissatisfied regarding the appropriateness of the seeds. With respect to the qualities of seeds received 62 % of the surveyed beneficiaries were dissatisfied (34 % highly dissatisfied and 28 % dissatisfied) while only 35% of the surveyed households expressed satisfaction. The degree of satisfaction and approval rating expressed by the surveyed households with respect to fertilizers and agricultural tools was very high, the exception being pesticides where beneficiaries have been disappointed by the low quantity provided.

[12] ISFP, Beneficiary Satisfaction and Impact Assessment Survey Report for Kenya, October 2009 P.14

TABLE 7: Beneficiary satisfaction of inputs in BURUNDI

INPUTS DELIVERED	LEVELS OF BENEFICIARY SATISFACTIONS(in percentages)				
	Highly dissatisfied	Dissatisfied	Indifferent	Satisfied	Highly satisfied
Seeds					
-Receiving	17	15	6	33	27
-Timeliness	23	32	5	15	20
Appropriateness	2	5	13	33	43
-Qualities	34	28	3	18	17
Fertilizers					
-Receiving	10	15	2	29	44
-Timeliness	7	15	1	28	49
Appropriateness	3	6	1	30	60
-Qualities	4	1	1	24	70
Pesticides					
Receiving	34	15	3	8	40
-Timeliness	27	15	2	8	48
Appropriateness	25	5	1	19	50
-Qualities	22			17	59
Other inputs					
-Tools	7	7	4	28	54

The delivery of inputs to the **Kenyan Ahero Irrigation Scheme** in terms of timeliness, quality and appropriateness has been executed to the maximum satisfaction of the beneficiaries. As the table below shows, of the sampled household beneficiaries, 73.7 % expressed very high levels of satisfaction with the varieties of rice seeds distributed, 75.8% on the timeliness, 79.8% on the appropriateness and 90.9% on the qualities. Even higher levels of satisfactions were registered with respect to fertilizers and pesticides distributed to the beneficiaries. To be more precise 86.7 % of the surveyed households were very satisfied on receiving the fertilizers, close to 90 % on its appropriateness and 98 % on its qualities. Similarly 80.7% of the surveyed households were satisfied on receiving the pesticides while 78.9% were satisfied on the timeliness, 87.7% on the appropriateness and 96.5 on the qualities of pesticides. As the national report indicates significant differences have not also been noted between female and male led household respondents in the degrees of satisfactions expressed on the inputs distributed to the beneficiaries.

TABLE 8: Beneficiary satisfactions of inputs in KENYA

INPUTS DELIVERED	LEVELS OF BENFICIARY SATISFACTIONS(in percentages)				
	Highly dissatisfied	Dissatisfied	Indifferent	Satisfied	Highly satisfied
Seeds					
-Receiving	0	2	0	24.2	73.7
-Timeliness	0	5.1	3.0	16.2	75.8
Appropriateness	0	2.0	1.0	17.2	79.8
-Qualities	0	4.0	0.0	5.1	90.9
Fertilizers					
-Receiving	0	0	1.0	12.2	86.7
-Timeliness	0	3.1	1.0	18.4	77.6
Appropriateness	0	0.0	0.0	10.2	89.8
-Qualities					
Pesticides					
Receiving	1.8	1.8	1.8	14.0	80.7
-Timeliness	1.8	5.3	1.8	12.3	78.9
Appropriateness	1.8	1.8	0.0	8.8	87.7
-Qualities	1.8	0.0	0.0	1.8	96.5

The survey of household beneficiaries carried out in **Sudan** particularly in **North Sudan**[13] also came up with even more impressive results. As the survey findings demonstrated 100 % (63 % highly satisfied and 37 % satisfied) of the sampled beneficiaries in North Sudan were satisfied with the receipts of the seeds. With respect to timeliness and qualities of the seeds, as the figures in the table below indicate, 81 %(35% satisfied and 46% highly satisfied) and 96 %(23% satisfied and 74% highly satisfied) of the respondents were satisfied. Where there is a high degree of dissatisfactions, 49 %, is with the appropriateness of the seeds which, as the national report indicates, was mainly due to the failure of the project to distribute more varieties of seeds.

TABLE 9: Beneficiary satisfaction of inputs in NORTH SUDAN

INPUTS DELIVERED	LEVELS OF BENFICIARY SATISFACTIONS(in percentages)				
	Highly dissatisfied	Dissatisfied	Indifferent	Satisfied	Highly satisfied
Seeds(maize)					
-Receiving	0	0	0	37	63
-Timeliness	3	12	4	35	46
Appropriateness	0	49	5	7	39
-Qualities	0	1	2	23	74

The results achieved in **South Sudan**, though less dramatic than the North, also demonstrated reasonable degrees of success. With respect to maize seed, for example, 53 % of the surveyed households were satisfied in receiving the seed while only about 7 % were dissatisfied. Since the delivery of the seed was delayed due to

[13] Since the participation of women led households in the project and survey is very low the assessment of beneficiaries has not been segregated by gender

logistical problems the proportion of household who expressed dissatisfaction with respect to timeliness reached 32 % while those that were satisfied with the timeliness were only about 29 %. On the other hand while over 83 % of the respondents were satisfied with the quality, about 57 % had endorsed the appropriateness of the seed. In addition to maize groundnuts seeds were also distributed. However, as the results of the survey showed 64 of the 100 sampled households did not respond to the questions. Of those that responded only 27% were satisfied with the receipt of the seeds, 16% with the timeliness, another 27% with the appropriateness and 34% with the qualities of the seeds. With respect to hand tools also only 45% of the sampled household responded to the questions on beneficiary satisfaction. Despite the low participation of the sampled households only 21% were satisfied in receiving the tools, 1% on the timeliness, 30% on the appropriateness and 39% on the qualities of the tools. While the figures are shown in detail in the table below unfortunately the national report does not provide any explanation as to why beneficiaries were not so enthusiastic about the groundnuts seeds and hand tools.

TABLE 10: Beneficiary satisfaction of inputs in SOUTH SUDAN

INPUTS DELIVERED	LEVELS OF BENFICIARY SATISFACTIONS(in percentages)				
	Highly dissatisfied	Dissatisfied	Indifferent	Satisfied	Highly satisfied
Seeds (Maize)					
-Receiving	1	7	32	39	14
-Timeliness	0	32	32	18	11
Appropriateness	0	7	29	51	6
-Qualities	1	5	4	49	34
Seeds (Groundnuts)					
Receiving	0	1	8	20	7
-Timeliness	0	11	9	9	7
Appropriateness	0	1	8	21	6
-Qualities	0	1	1	18	16
Other Inputs (Tools)					
-Receiving	0	3	21	21	0
-Timeliness	0	23	21	1	0
Appropriateness	0	1	14	30	0
-Qualities	0	1	5	34	5

The TCP project in **Djibouti** provided seeds, fertilizers, pesticides, mineral stones and tools to the beneficiaries. However, the national report covered only the satisfaction of beneficiaries on seeds only. For reasons explained elsewhere the input distribution system in Djibouti failed to deliver the inputs to the beneficiaries before the planting season. Despite this shortcoming, the satisfaction of the beneficiaries, as suggested by the responses of the sample survey of beneficiary households, was high. Thus, as the table below shows of the surveyed households 80% were satisfied in receiving the seeds while only 20% were dissatisfied. Gender wise 79 % of the male-headed households and 83% of the female-headed households expressed satisfaction in receiving the inputs. Even with the timeliness only 28 % of the sampled households were dissatisfied while 72% were satisfied despite the fact that the delivery of some of the inputs was late for as long as close to a year. With respect to appropriateness while 26 % were dissatisfied the great majority, i.e. 74 % of the surveyed households were satisfied (men 72 % and female 80 %). The rating for quality also showed more or less similar trends with 80 % satisfied and 20 % dissatisfied despite the deterioration of some of the seeds due to storage. The over enthusiasm of farmers in Djibouti about the provision of the inputs may be due, as the national report seems to suggest, to

lack of experience in receiving assistances. Unlike their counterparts in the region, the farmers in Djibouti are latecomers to aid world.

TABLE 11: Beneficiary satisfaction of inputs in DJIBOUTI

INPUTS DELIVERED	LEVELS OF BENFICIARY SATISFACTIONS(in percentages)				
	Highly dissatisfied	Dissatisfied	Indifferent	Satisfied	Highly satisfied
Seeds					
-Receiving	0	20	0	80	0
-Timeliness	0	28	0	72	0
Appropriateness	0	26	0	74	0
-Qualities	0	20	0	80	0

The results of the household survey of the satisfaction of beneficiaries in the **Rwanda** TCP showed mixed impressions. Although the project was well planned the execution was faced with setbacks that negatively affected the achievements of the project as well as the satisfactions of beneficiaries. Thus, while 49.5 % of the sampled household beneficiaries were satisfied (33.6% satisfied and 15.9% highly satisfied) in receiving the seeds close to 40% were dissatisfied and 10.6 % were indifferent. The dissatisfaction was mainly due to the low quality of the seeds (beans) that came in the first consignment which were totally rejected. The wheat seeds distributed also consisted of varieties that were not high yielding.

TABLE 12: Beneficiary satisfaction of inputs in RWANDA

INPUTS DELIVERED	LEVELS OF BENFICIARY SATISFACTIONS(in percentages)				
	Highly dissatisfied	Dissatisfied	Indifferent	Satisfied	Highly satisfied
Seeds					
-Receiving	0.9	38.9	10.6	33.6	15.9
-Timeliness	5.5	49.1	8.2	29.1	8.2
Appropriateness	-	47.3	9.1	34.5	9.1
-Qualities	10.9	11.8	2.7	29.1	45.5

As the national report indicates the input distribution system in Rwanda had succeeded in delivering the seeds before the planting season. Yet as the table above shows 54.6 %(5.5% highly dissatisfied and 49.1% dissatisfied) of the surveyed households were dissatisfied with the timeliness of the seeds. Here again as the national report suggests, "The major reason for the high level of dissatisfaction was not directly related with timeliness of seeds delivery, but with the late onset of the rains, resulting to late planting."[14] The households' opinion regarding the appropriateness of the seeds was also influenced by the quality of bean seeds and to some extent that of the wheat seeds provided. Thus, of the surveyed households 47.3% were dissatisfied with the appropriateness of the seeds while only 43.6% were satisfied. However with respect to qualities of the seeds distributed 45.5% of the surveyed households were highly satisfied and 29.1% satisfied bringing the proportion of satisfied households' to 74.6% of the sampled households.

[14] FAO, Beneficiary Satisfaction and Impact Survey Report for ISFP/TCP Project ,January,2010,P.49

2.3.4 Perceived impacts of TCP on beneficiary households

The ISFP TCP projects aimed at providing agricultural inputs to poor small farmers to mitigate the constraints that hindered them to grab the opportunities created by soaring food prices to increase food production. The ultimate goal was of course to reduce food insecurity, increase marketable surpluses and income levels among the vulnerable small holder farmers covered by the program. One of the key objectives of the Beneficiary Satisfaction and Impact Assessment has, therefore, been to find out how the lives of the beneficiaries have been affected as a result of the utilization of the agricultural inputs provided through the TCPs in the region. The survey identified three areas that can help to measure the impact of the projects on the lives of the beneficiaries. These included impact on crop production, food accessibility of households and ability to sell more of the produces to markets. The scale employed to measure the impacts on the indicators had five steps: deteriorated a lot, deteriorated a little, unchanged, improved a little and improved a lot. The questionnaires of the survey were designed to generate the data that could lead to a quantitative measurement of the impact of the projects.

The table below provides a summary of the impact on crop production in the region

TABLE 13: Impact on crop production in SFE
(In percentages)

COUNTRY	Deteriorated a lot	Deteriorated a little	Unchanged	Improved a little	Improved a lot
BURUNDI	7.0	30.5	15.4	42.3	5.0
DJIBOUTI	-	-	-[15]	-	-
KENYA	-	2.0	-	43.0	55.0
RWANDA	5.3	22.1	19.0	31.0	15.0
SUDAN (N)	1.0	13.0	7.0	41.0	38.0
SUDAN (S)	4.0	6.0	8.0	36.0	46.0

Evident from table above are the differences in the performances of the TCP projects among the countries in the region. In Burundi, for example, while 47 % of the sampled household beneficiaries experienced improvements in production, a sizeable 37 % registered deteriorations in the levels of production as compared to the records in the previous year. Coupled with 15 % of the sampled households that did not experience any changes in the levels of production, the number of the households that have not seen improvements from the provision of inputs comes to 52 %. While the lack of progress by such a high proportion of the surveyed households cannot be underestimated, the failure has to do mainly with factors that were beyond the control of the farmers. As the national report indicates the main obstacles were the delay in the delivery of inputs and drought that the country experienced in 2008/2009. The poor quality of some of the seeds received in particular the bean seeds were also contributing factors.

Rwanda is the other country of the region where the implementation of the program has been faced with constraints that have undermined the progress that could have been achieved with the provision of the inputs. According to the survey only about 45 % of the sampled beneficiary households experienced growth in the levels of food production compared to their performance in the previous agricultural season. On the other hand 27 % experienced deterioration in the levels of production while the volume of production for the 19 % of the surveyed households remained constant. The lack of significant progress in the volumes of crop production in Rwanda was mainly due low qualities of seeds and poor rainfall. The absence of fertilizers and pesticides from

[15] Data not available at the time of the survey

the assistance package was also advanced as one of the contributing factors for the low performance of the project

Djibouti is the only country of the region where perhaps the beneficiaries did not experience increases in production levels. Unfortunately the inputs in Djibouti were delivered after the planting season in 2008/09. Since the seeds were planted in 2009/10 and not in 2008/09 as originally planned, harvest figures were not available at the time the survey was conducted. In view of this the national report had to estimate the impact of the project on the basis of opinions gathered from the surveyed household beneficiaries' about the prospects of the harvest in 2009/10 season. The households endeavoured to estimate the production prospects for 2009/10 on the basis of the quality of inputs used and the observed growth of the plants in the field. The estimates that emerged from this assessment were that the beneficiaries would not experience growth in production or even if there were growth, mainly due to the use of improved seeds, it would be very little. The assessments of the national report were based on the former and not on the latter slightly optimistic scenario.

Of all the countries in the region, the Kenyan TCP project experienced a very spectacular growth. In the Ahero Irrigation Scheme where rice varieties were planted, "…crop yields ranging from 30 to 40 bags of 80 kg per acre with a mean of 45 bags were realized after the intervention compared to only 12 bags before the TCP…"[16] On the basis of the figures provided yields increased by over 150 percent compared to the records in the previous year. Thus, as the survey showed only 2 % of the beneficiary households suffered deterioration in production while 43% enjoyed improvement and 55 % even better levels of improvement bringing the total proportion of beneficiary household that registered growth in food production to 93%.

Equally impressive achievements were also made by the ISFP TCP project in North Sudan. On the basis of the survey, 79 % of the sampled household beneficiaries have registered improvements in food production. The increase in levels of production is a direct result of the increases in yield which came about as a result of the use of improved seeds. Thus, out of the surveyed households, 46 % experienced yield improvements ranging from 25 to 50 % while 15 % of the households reported a 100 % increases in yields. The TCP project in South Sudan was also a success as 82 % of the surveyed beneficiary households reported increases in the volume of food production. The increases in the volume of production in South Sudan were also mainly due to improvements in yields as a result of the use of improved seeds and other inputs distributed by ISFP TCP.

In the realities of the rural economy of the countries of the Region, access to food is mainly determined by household's capacity to produce food. The impact of the increases in food production was, therefore, immediately translated into improvements in access to food. Accordingly, wherever the ISFP TCP projects succeeded in enhancing food production the beneficiary households' ability to feed themselves was also enhanced. Where there was little or no growth at all, there was little or no changes in the food security conditions of the households. This is evident from the results of the survey conducted among the beneficiary households of the program. The table below summarizes the respondents' views on the impact of the program on access to food among the beneficiary households.

[16] FAO, Beneficiary Satisfaction and Impact assessment Survey Report for Kenya, October 2009, p.16

TABLE 14: Impact on accessibility of food in SFE
(In percentages)

COUNTRY	Deteriorated a lot	Deteriorated a little	Unchanged	Improved a little	Improved a lot
BURUNDI	4.0	15.0	31	40.0	10.0
DJIBOUTI[17]	-	-	-	-	-
KENYA	-	2	-	43	55
RWANDA	3.0	26.0	21.0	35.0	15.2
SUDAN(N)	1.0	8.0	16.0	39.0	36.0
SUDAN(S)	6.0	2.0	14.0	24.0	54.0

Both In Burundi and Rwanda since the efforts to increase food production were not wholly successful, only about 50 % of the interviewed beneficiary households reported improvements in accessibility to food. In Burundi, however, as the national report indicates, since the project enabled beneficiaries to produce vegetables, it also led to improvements in the nutritional conditions of the households by inducing vegetable consumption. In Djibouti access to food is estimated not to have changed as food production was projected to remain unchanged compared to the levels in the previous year.

In the other countries of the Region where the programme succeeded in increasing food production significantly, the improvements in accessibility to food or increases in levels of food security were equally significant. One such successful case is Kenya. Unfortunately, the national report lacks data that quantitatively demonstrate the degrees of improvements experienced by the households. The report simply states that food security conditions of the beneficiaries have "greatly" improved as food production has significantly increased. The fact that surveyed households were able to sell close to 89% of their produces to the market also supports the validity of the national report's assertion of the growth of food security among the beneficiaries. In North Sudan about 75 % of the respondents have reported improvements while only 9 % suffered deteriorations and 16 % remained constant in their accesses to food. The achievements in South Sudan were equally impressive; 78 % of the sampled households attained improvements and only 8 % suffered deteriorations in their food security situations.

Other things remaining constant increases in production should lead to increases in marketable surpluses assuming that the increases in production surpass the food requirements of the households. Thus, increases in marketable surpluses suggest that the achievements in the levels of production due to the ISFP TCP interventions were indeed high. In fact marketable surplus has showed positive changes even in countries where production was reported to have increased only marginally. Accordingly, in Burundi of the beneficiary household surveyed, about 40 % had reported improvements in the volumes of crops brought to the market for sales. Beneficiaries in Rwanda, where the registered figures did not show significant increases in levels of production, had also experienced increases in marketable surpluses. Thus as the table below shows of the surveyed beneficiary households in Rwanda 45.6% of the surveyed households have registered positive growths in marketable surpluses. To put it more precisely 30.4% of the sampled households experienced slight improvements while 15.2% witnessed a lot of improvements in the volume of crops brought to markets. Among the countries of the region Djibouti is the only one where marketable surplus was not expected to show improvements. For reasons indicated earlier, marketable surplus in Djibouti was assumed to remain unchanged.

[17] Data not available at the time of the survey

TABLE 15: Impact on the availability of marketable surplus in SFE
(In percentages)

COUNTRY	Deteriorated a lot	Deteriorated a little	Unchanged	Improved a little	Improved a lot
BURUNDI	3.48	16.42	40.3	33.83	5.97
DJIBOUTI	-	-	100	-	-
KENYA	-	2	-	34	64
RWANDA	3.6	18.8	32.1	30.4	15.2
SUDAN (N)	1	9	24	37	29
SUDAN (S)	4	4	20	42	30

The developments of the TCP projects in both North and South Sudan in terms of improving marketable surpluses were of course impressive. As figures from the national report showed 66 % and 72% in North and South Sudan, respectively of the surveyed beneficiary households have experienced increases in marketable surpluses. Figures that indicate the changes in marketable surpluses of the beneficiaries of the TCP project in Kenya are lacking. However, as the information gathered from the sampled beneficiary households showed as much as 89% of the seasons produce has been sold. Moreover, as information gathered from the household survey indicated beneficiaries were able to pay school fees, debts, purchase household utensils and engage in minor investment such as building houses or improving the existing ones. That the Ahero project households were able to incur such expenses is a testimony to the significant impact of the ISFP interventions in improving marketable surpluses of the beneficiaries

In sum as the responses of the sample survey of the beneficiary households suggest the projects in the different countries have impacted differently among the beneficiaries of the region. In other words not all the beneficiary households in all the countries enjoyed similar degrees of successes; in Kenya and North and South Sudan the impact of the projects on the lives of the beneficiaries were spectacular. In Burundi and Rwanda the successes achieved were modest while in the case of Djibouti it was not satisfactory. The differences in the levels of achievements seemed to be mainly due to differences in the effectiveness of the delivery of inputs systems, the appropriateness and quality of inputs and the weather conditions which prevailed during the agricultural season when the seeds were planted.

3. ANALYSIS OF INPUT DISTRIBUTION SYSTEMS OF TCP PROJECTS

3.1 Main Types of Input Distribution Systems used in the Region

The availability, accessibility and affordability of agricultural inputs still remain a key challenge in transforming agriculture in Africa. The reform to replace the largely inefficient and costly government parastatals by the private sector did not, as initially hoped for, radically improve the situation. On the contrary due to the removal of subsidies, devaluation of the domestic currencies and the weaknesses of the private sector to fill the gap created by the withdrawals of parastatals, inputs became more expensive and inaccessible. The rise in the prices of inputs and inaccessibility led to reductions in the use of inputs particularly by the poor farmers which caused declines in the productivity of mainly staple food crops in many African countries. The unexpected and negative consequences of the reforms forced governments to resort to complementary mechanisms for improving the availability, accessibility and affordability of inputs particularly for the poor farmers who make up the majority of the labour force engaged in agriculture.

Countries of the Eastern African region also spared no efforts in devising "smart and market friendly", as often referred to, ways of delivering inputs to the smallholder farmers. Kenya, for example, was the trail blazer in Africa in employing voucher scheme and Input Trade Fair systems to complement the efforts by both the government's input delivering agency and commercial suppliers. There was also an NGO that participated in the distribution of inputs. In addition, Kenya also recently introduced the rural "stockist" or agro-dealers system with the support of the Rockefeller Foundation in order to address the problems of the small farmers in areas where the commercial suppliers find it hard or expensive to operate. The system is, therefore, intended to improve the accessibility of the inputs to the smallholder farmers in the remote or inaccessible areas. By delivering the inputs at close distances to the farmers the agro-dealers help to reduce transportation costs and the high transaction that farmers incur in searching the inputs, negotiating prices, ascertaining the qualities of inputs, etc. At the same time, since the agro-dealers get their supply from the commercial suppliers, they also contribute to the strengthening of the private sector.

Other countries in the region have also implemented similar measures that will ease current problems without losing sight of the long-term solutions to develop the efficiencies of the input markets. To this end many of the governments of the region have introduced the voucher systems and designed strategies that could strengthen the private sector so that it gains confidence and access to capital so as to enhance investment in input markets. A good example in this regard is the strategy adopted by the government of Rwanda which articulated measures needed to bolster the role of the private sector. Likewise the strategy developed for South Sudan, with the assistance of USAID, supported the introduction of the voucher scheme along with steps necessary to enhance the role of the private sector in input markets. Wherever it is introduced, the voucher system aims to support the small farmers with the resources required to purchase inputs and to stimulate the demand for the inputs.

While the input distribution systems in the region consists of government parastatal (albeit with very limited role), private sector, NGOs, voucher schemes, Input Trade Fair and of late the rural "stockist", the ISFP TCP projects were implemented in all the countries in special arrangements which were outside the normal input distribution system. The special arrangements might have been necessitated by the urgency of the projects and the need to ensure the timely delivery of the inputs and to save costs by using existing government structures that are stretched down to the lowest administrative unit levels.

The inputs were procured by FAO or the implementing government agencies and in both cases the orders were affected through private suppliers selected on the basis of competitive tenders. In all cases it was the suppliers that delivered the inputs to the project areas. The actual distribution of the inputs to the beneficiaries was then carried out by the branches of the implementing government agencies and producers' organizations often with the support of the local administrative units in the project sites. This is the general pattern or model of input

distributions system of the ISFP TCP projects in the region with slight variations at country levels reflecting the implementation arrangements made in each country. The only exception to this general pattern is Kenya. In Kenya the purchased inputs were delivered to the office of the Ahero Irrigation Scheme which made an arrangement with an NGO to handle the distribution of the inputs. Hence, In Kenya inputs were distributed to the beneficiary households by the Relief Environment Care for Africa (RECA) a local NGO with interests in rice cultivation. The input distribution system employed in the other countries fitted with the general pattern indicated earlier. Thus in Burundi, for example, after the inputs were delivered to the communes the distribution of the inputs was directed and supervised by the provincial Direction of Agriculture and Livestock who in turn delivered the inputs to the presidents of the farmers association of the communes in the project sites. The actual distribution of the inputs to the beneficiary households was thus carried out by the presidents of the farmers association under the supervision of the provincial Direction of Agriculture and Livestock.

In Djibouti it was the technical committee established to manage the implementation of the TCP project that was responsible for the distribution of the inputs. Upon the delivery of the inputs to the regions members of the committee were deployed to direct and supervise the distribution of the inputs in each region. The committee member in the region ensured that the inputs were distributed to the leadership of the beneficiary cooperatives who in turn distributed them to the beneficiary households. In Rwanda it was the agronomist of the district who was designated to be the focal person for the distribution of the inputs. Actual distribution of the seeds was carried out at sector levels by the sector agronomist as focal points in collaborations with the government's grass root administrative units. In North Sudan the distribution of the inputs was conducted by the extension service staffs of the state's ministry of agriculture in the target areas under the supervision of the relevant technical departments of the Ministry of Agriculture and Forestry. The input distribution system in South Sudan was similar with the North Sudan with the state's ministry of agriculture playing the leading role. In the case of South Sudan, however, for reasons indicated earlier, FAO and some NGO's were also involved in the distribution of the inputs.

3.2 Effectiveness of input distribution systems (Comparative analysis of the input distribution systems)

As described in section 3.1 the input distribution system employed by the ISFP TCP projects in the region did not vary much from country to country. Instead there was more or less a single model or pattern of input distribution system for the TCP projects in the region. The only exception is Kenya where an NGO was involved in the distribution of the inputs. Hence, under the circumstance there is no ground for undertaking a comparative analysis of the effectiveness of different systems. What is necessary and possible is to make a general assessment of the effectiveness of the system as applied in each country

Was the distribution system effective? To answer the question defining some broad criteria or measures against which the effectiveness of the distribution system can be weighed or evaluated is necessary. The performance or the effectiveness of the distribution system can and should be evaluated in terms of its successes in achieving the goals set for it, i.e. delivering the inputs in the time, quantity, and quality required to the beneficiary households targeted to receive the inputs and tools in the countries, regions or districts and communes or specific villages the beneficiaries are located. In principle the exercise should be limited to an assessment of the effectiveness of the delivery of the inputs to the targeted households. However, the evaluation of the performance of the distribution system can also be broadened to include an assessment of the very purpose of delivering the inputs as well. This means evaluating to what extent the delivery of the inputs has enabled beneficiary households' to improve food production, food security and sales to the markets.

3.2.1 Delivery of inputs

The main goal of any distribution system is to deliver the goods in the quantity, quality and time and place consumers or people need them. Thus, in evaluating the effectiveness of the ISFP TCP input distribution system the focus will be to examine:

- The timeliness of the delivery of the inputs
- Appropriateness, and
- Quality of the inputs delivered to the beneficiary households.

Although the input distribution system employed in the region was similar, as the analysis below shows, the effectiveness of the system varied from country to country. One of the countries with a varied experience is Burundi where the delivery of the inputs did not proceed as scheduled. The distribution system failed to deliver some of the inputs in several locations before the planting season. Thus, as the results of the survey of household beneficiaries showed 50 % were dissatisfied with the timeliness of the delivery of the seeds. In fact only 20 % of the sampled households expressed satisfaction with the timeliness of the delivery of the inputs. The delivery of the tools was also faced with problems as the procurement and clearing took more time than anticipated. Due to the delay the water pumps, for example, could not be delivered during the drought period when they were most needed. On the other hand the TCP project in Burundi covered higher number of household beneficiaries than what was envisaged in the plan. The plan was to reach 6000 households. In actuality, however, 328 more households have been provided with inputs.

Although there were delays in the deliveries of the inputs the beneficiaries were satisfied with the appropriateness of the inputs received. According to the results of the survey close to 78 % (43 % highly and 33 % satisfied) of sampled households were satisfied with the appropriateness of the seeds, 90 % with fertilizers and 44 % with pesticides. The low level of the approval of the pesticides has little to do with the appropriateness; it is rather an expression of the dissatisfaction of the beneficiaries with respect to the quantity received which was low in relation to the requirement. The beneficiaries also supported the qualities of most of the inputs received. Once again as the survey results indicate 74 % of the households expressed satisfaction with the quality of the inputs. The only problem was with bean seeds which were not found to be of adequate quality. As it is true with all the countries of the region the vast majority of the households were satisfied with the qualities of the fertilizers and pesticides.

Djibouti experienced the longest delay in delivering the inputs to the beneficiary households. The delay was faced with all the inputs-seeds, fertilizers, pesticides, and mineral stones for the animals. In some respect the delay was close to a year. The causes of the delay were partly administrative as some of the orders had to be changed and reprocessed due to sanitary considerations, partly procedural as the inputs had to be imported from international market through FAO-Rome and partly due to logistical problems in delivering the inputs to the agro-pastoralists. Since the inputs arrived after the planting season some of the inputs such as onion, melon, etc., had to be stored in a special condition. Most of the seeds that had to be stored for long time suffered losses in yield. On the whole because of the delay in the delivery of the inputs the project could not commence in 2008/09; instead the seeds were planted in 2009/2010. Notwithstanding the setbacks, the distribution system delivered the inputs to the targeted beneficiaries of 6000 agro-pastoralists and 2000 pastoralists.

The agro-pastoralist in Djibouti unlike their counterparts in the region rarely benefited from such supports. Thus, despite the considerable delays experienced in the delivery of the inputs the beneficiaries were very understanding. In fact even with the timeliness of the arrival of inputs only 28 % of the sampled household beneficiaries expressed dissatisfaction while 72 % reported satisfaction. With respect to appropriateness and quality too over 80 % of the surveyed beneficiary expressed satisfaction.

In Kenya the input delivery system which was executed by NGO, performed very effectively as all the inputs were delivered before the planting season and no significant delays were experienced. Of course the TCP in Kenya is in many respects different from other TCP projects in the region. The inputs were delivered to only 540

households, all located in a single site. On the whole over 90 % of the surveyed household beneficiaries were satisfied with the timeliness of the delivery as well as with the appropriateness and quality of the inputs received.

Rwanda did not as such experience delay in the delivery of the inputs. As a matter of fact the input distribution system in Rwanda could be cited as the most effective in the region as it succeeded in delivering inputs to 10,000 beneficiary households spread over three districts and several villages before the planting season. The problems with the beneficiaries in Rwanda was that some of the seeds (e.g. the first consignment of been seeds) were completely rejected and the plantation of the crop has to be postponed to 2009/10. Beneficiaries were not also happy with the maize seeds as they were not hybrid seeds. Unfortunately beneficiaries reflected these problems as delivery problems. Hence, in some of the districts as much as 78 % of the respondents expressed dissatisfaction with the timeliness of the input delivery while the problems were not caused by delays in delivery as such.

On the other hand only 43.6 % of the sampled household respondents expressed satisfaction with the appropriateness of the seeds received. The low level of satisfaction of the beneficiaries in this regard also, once again, reflects the problems faced with some of the seeds. Regarding the qualities of the inputs, however, a very high proportion- about 75 % of the respondents- had expressed satisfaction.

Both North and South Sudan have experienced some delays in delivering inputs to the beneficiaries. Nevertheless, the delay was not of the scale witnessed in some of the countries in the region. Nor did it go to the point where beneficiaries missed the planting seasons. Thus, in North Sudan, for example, only 15 % of the surveyed beneficiaries expressed dissatisfaction with the timeliness of the delivery of the inputs. The corresponding figure for South Sudan is 32 % which given the infrastructural constraints of the region is not alarming. With respect to appropriateness of the inputs over 50 % of the surveyed households both in the North and South Sudan expressed dissatisfaction. The dissatisfaction was mainly due to limited varieties of seed provided and the absence of fertilizers and pesticides from the support package. On the other hand 83 % and 100 %, respectively of the respondents in the North and South Sudan were satisfied with the qualities of the inputs received.

To sum up, the achievements of the distribution systems are mixed. In some countries such in Rwanda, Sudan (North and South) and Kenya the distribution system was effective as it succeeded in delivering the inputs in the required quantity and quality to the beneficiary households before the planting seasons. On the other hand the distribution system in Burundi and Djibouti failed to deliver the inputs before the planting seasons to the beneficiary households. The delay was worse in Djibouti than in Burundi. In all cases the delay entailed sacrifices in terms of loss of output and benefits to the households. At the risk of over simplification, however, the delays seemed to have been mainly caused by delays in procurement. Certainly there were delays in the distribution of the inputs to the households but the problem seemed to have ban aggravated by the delay suffered in the procurement process. Whatever the causes the negative impact of the distribution system on the projects cannot be underestimated.

3.2.2. Impact on food production, food security, and marketable surplus

The ISFP TCP projects have been launched to bring about rapid increases in food production, food security and marketable surpluses for the selected vulnerable small farmers by supporting their efforts with the provision of scarce inputs. However, as common knowledge has it, food production is not a function of the availability of inputs only. The size and quality of land, the appropriateness, quality and quantity of inputs, whether condition, the skill of the farmers etc, also matter. Thus, from the outset it is important to note the limitations of the attempt to indicate the impacts of the input delivery system on food production, food security and marketable surplus. Moreover, the impact of any of the variables on the observed changes in the economic lives of the beneficiaries cannot be established on the basis of qualitative information alone. All that can be done is, therefore, to discuss

the probable contributions of the different variables on the observed changes among the beneficiaries. The brief analysis below endeavours just to do that.

As all the indicators showed, the TCP projects in Kenya, North and South Sudan have experienced impressive results. The Ahero Irrigation Scheme in Kenya, for example, is by all standards a success story. It is the TCP project in the region that has registered the highest growth in food production. As the available data show rice production has increased significantly compared to the performance in the previous year. True the increase in total production also resulted from changes in the size of cultivated land which increased from 50 ha in 2007 to 1240 ha under TCP in 2008/09. At the same time yields per hectare also increased from 8-10 bags of 80kg bag per acre in 2007 to 30-45 bags of 80kg bag in 2008/2009 indicating over a 150 % increases in yields. As the national report indicates the increases in yields have largely resulted from the appropriate use of improved seeds, fertilizers and pesticides. In the realities of rural economies of the region, food security is essentially determined by the households' capacity to produce food. Thus, given the big strides households in Ahero project made in increasing food production improvements of food security situation and marketable surpluses appeared to be self evident. Suffice it to note that the sampled household beneficiaries from Ahero had expressed satisfaction levels of over 90 % for all the key indicators of success posed in the survey.

The TCP projects both in North and South Sudan were also successful. As the survey of beneficiary households conducted in both regions indicated only 14 % of the North and 10 % of the South Sudan respondents reported deteriorations in the levels of food production compared to the production levels attained in the previous year. On the positive side 75 % of the surveyed beneficiary households in North and 80 % of the South Sudan experienced increases in the levels of food production. The increases in food production had of course led to improvements in the food security situation of the beneficiaries. Once again as the results of the survey showed 75 % of the North and 78 % of the South Sudan respondents had expressed improvements in their access to food. The increases in marketable surpluses in both regions were also high with 66 % and 72 %, respectively of the respondents reporting increases compared to the levels in the previous year.

Burundi and Rwanda are the countries in the region where the TCP projects achieved moderate success. The input distribution system in Burundi was not very effective as beneficiary households experienced serious delays in the timely delivery of inputs. In several cases the inputs were delivered after the planting season has elapsed. Unlike Burundi, the distribution system in Rwanda was quite effective in delivering the inputs to the beneficiary households before the planting season. On the other hand the projects in both countries suffered from poor quality of inputs. In the case of Rwanda the absence of fertilizers and pesticides from the assistance package also negatively affected the performance of the seeds as farmers were unable to use the right amounts of fertilizers on their own. In addition both countries faced unfavourable weather conditions during the planting seasons. Due to such setbacks only 47 % of the surveyed beneficiary households in Burundi and 45 % in Rwanda reported improvements in food production. On the other hand 37 % in Burundi and 27 % of the sampled households in Rwanda experienced deteriorations in levels of food production while 16 % in Burundi and 19 % in Rwanda experienced no growth in production compared to achievements in the previous year. Improvements in accessibility to food and increases in marketable surpluses in both countries reflected the low performance in production. Hence, of the surveyed beneficiary households in both Burundi and Rwanda only 50 reported improvements in access to food while 40 % in Burundi and about the same proportion of sampled households in Rwanda expressed increases in sales to the market.

On the whole, as the results of the survey suggested, not all the beneficiaries in all the countries in the region enjoyed the same levels of growths. In some of the TCP projects such as Kenya, North and South Sudan the increases were high. On the other hand the projects in Burundi and Rwanda registered only modest growths. In Djibouti the statuesque was maintained as increases were not foreseen in the levels of food production, food security and marketable surpluses.

Evident from the experience of those that succeeded and failed in achieving the goals of the TCP projects is the critical role of the timely delivery of inputs. Equally evident, as the experience of Rwanda and Burundi amply demonstrated, is the role of the appropriateness, quantity and quality of the inputs. Another important lesson that emerged from the experience of all the countries is the necessity of including all the complementary inputs in the assistance package in order to achieve the expected increases in yields. The implementations of TCP projects have also once again demonstrated the limitations of an agricultural system that is the heavily dependent on weather conditions. Of course none of these lessons are new. Hence, the lessons that emerged from the assessments of the TCP projects only reinforced the already known conclusion of the overriding significance of adopting a holistic approach or ensuring parallel development in all areas that are critical for the sustained growth of agriculture.

3.2.3. Knowledge of the agricultural inputs received and willingness to adopt

Most of the beneficiary households in most of the countries were familiar with the inputs particularly with fertilizers and pesticides. On the other hand some were ignorant about some of the vegetable seeds (Burundi, Djibouti). Some of the beneficiary households had received training through the TCP projects about the inputs and their application. However, most did not have any training and among those that did not receive any training women were the majority. Thus, the majority of the surveyed beneficiary households particularly in Burundi, Djibouti and Kenya have expressed strong desire to get further training on the use of improved technologies. In Djibouti the quest for further training also included the need to be equipped with rudimentary veterinary skills so that households are able to follow the health of their animals.

As the results of the beneficiary household survey showed farmers had expressed willingness to continue employing the inputs provided they were available in the domestic markets and their prices were affordable. Using inputs is an investment which should generate adequate returns on the capital employed to purchase the inputs. Any investor makes decisions on the basis of the expected return on the investment. Farmers are no exception in this regard and will continue to use the inputs as long as the gains in income exceeded the cost of employing the inputs. Certainly they are not able to express their views in technical terms but the bottom line in their decisions to use inputs is the expected gains in yields and income from the use of the inputs.

3.2.4. Constraints of input distribution systems

The survey has given adequate attention to collect the views of beneficiaries, implementing agencies, inputs suppliers, etc. on constraints that they saw with the TCP project and suggestions that they had for improvement. Although the surveys focused to address all the stakeholders with the view to getting the desired information not all the efforts have born fruits. The national reports of Djibouti and Rwanda, for example, did not even address the issues. Those that addressed it, Burundi, Kenya and Sudan did not treat it uniformly. Only the national report of Sudan segregated the views of the beneficiaries and implementing agencies. None of the reports managed to get the views of the input suppliers as they were inaccessible. The following is the summary of the core views as expressed by the stakeholders in Burundi, Kenya and North and south Sudan:

- Funds allocated to the ISFP were low and the duration of the projects too short to make strong impact to enhance the national efforts to tackle the causes of soaring food prices

- The choice of the crops (seeds) were limited to satisfy the needs of the farmers and to address the supply response problem on a wider scale

- The qualities and varieties of the seeds were inadequate

- Absence of fertilizers and pesticides from the package of assistance to be delivered to households undermined the gains in yields and benefits expected from the use of improved seeds
- The extension services were understaffed and not adequately equipped with the requisite skills and farmers were also inadequately trained to apply the inputs efficiently
- The procurement process was long, causing serious delays in the delivery of inputs to the beneficiary household
- Inadequate monitoring and follow-up of the distribution and utilization of the inputs in the fields
- Farmers organizations were weak to handle purchase of inputs, storage, and access markets
- Problems of dry land and support needed to promote the use of water on small scale not addressed
- Land preparation problems of farmers not addressed

3.2.5. Suggestions for improving input distribution systems

The suggestions are derived from the views of stakeholders in a few countries. Nevertheless since the suggestions are addressing problems generally observed in the executions of the TCP projects they are relevant for the region as a whole. The suggestions include:

- Expanding the scope and scale of ISFP so as to include the livestock sub-sector and increase the volumes of inputs to be distributed and the number of farmers to be covered by the program
- Supporting the provision of agricultural machineries and equipments, where appropriate
- Strengthening extension services and farmers field schools
- Supporting local capacities to produce preferred seed varieties
- Addressing the expansion of irrigation schemes and rehabilitating existing facilities
- Promoting capacity building programs for farmers organization to improve their performance
- Improving farmers access to credit to facilitate the purchase of complementary inputs and services
- Improving farmers accesses to markets
- Adequately consulting stakeholders in formulating projects

3.3 Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis of Input Distribution Systems

TABLE 16: SWOT analysis of a government input distribution system

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
- Government has well structured organizational system covering all the regions and districts including the remote areas and going down to farmers levels - achieves economies of scale in its operation and reduces unit cost of distribution - delivers the inputs to all farmers irrespective of potentials and consideration of private profitability - delivers input with low transportation and transaction costs to farmers - staff qualified to introduce farmers to the application of inputs and hence able to give holistic service - has better accesses to transport and credit to serve farmers more effectively - as a result of working with farmers has in most cases gained the confidence and trust of farmers - easy for the government to raise awareness about the use of inputs and to mobilize farmers towards adopting inputs	-bureaucratic and long channels of communication typical of government organizations become impediments to ensuring timely delivery of inputs - organizational and manpower potential not well managed due to inefficiency in management -lacks the sense of ownership to continuously improve efficiency in the distribution system -undermines the development of the private sector	- well disposed to undertake research on the use of inputs and channel the feed back to suppliers and research organizations - able to mobilize donors support	- decrease in foreign assistances due to the position of donors and NGOs regarding the role of private sector - if allowed to operate competition from the private sector could be strong

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

Food is such a "vital commodity" whose prices cannot be completely left to the free operation or play of market forces alone. This is even more so in the developing countries where expenditures on food take between 70 to 80 % of the incomes of the poor. It was in recognition of the vital role of food that governments all over the developing world responded vigorously to the dramatic rises in world food prices witnessed in 2007 and during the first six months of 2008. The responses were targeted to achieve the following three objectives: viz

- To dampen, to the extent possible, the increases in food prices in the domestic markets
- To protect the poor and in particular the most vulnerable groups of the society from the effects of price rises, and
- To enhance rapid supply responses.

To effect these changes governments devised and implemented what are referred to as social or administrative policies and policies and programs that could enhance the productivity of the food sub-sector. The governments of the countries of the East African Region also implemented similar policy measures to mitigate the social consequences of the crisis as well as to effect rapid supply responses so as to put an end to the crisis. With the view to getting a general picture of the efforts underway to achieve rapid supply responses in the region a brief analysis of the measures adopted in each country will be in order.

Djibouti, one of the regions countries most hard hit by soaring food prices, has accorded priority to promote the development of small scale agro-pastoral farms along water points in the rural areas in order to increase food supply and also to contribute to the efforts to control the desertification of the country. In addition the government is also taking the necessary steps to control animal diseases and to improve the health of its livestock which is the main stay of its population. Burundi, the other country of the region, which was hard it by the soaring food prices, also implemented far reaching measures that could bring about significant developments in the food sub-sector. One of these measures was government's decision to increase the budgetary allocation to agriculture from 3% to 11 %. In addition the government also established 12 seed centres, financed the rehabilitation of existing irrigation schemes and also distributed over 280 water pumps to support the expansion of small scale irrigation schemes. It also took the necessary measures to improve the access of small scale farmers to credit and inputs.

Kenya is the other country of the region which responded vigorously to enhance increases in the productivity of food crops by providing the necessary supports to the smallholder farmers. One of the most important measures along these lines was the government's decision to subsidize the price of chemical fertilizers so that it became more affordable to the small scale farmers. In addition it also provided input vouchers to 2000 small farmers and distributed agricultural inputs to 142,000 small scale farmers. The modest appreciation of the domestic currency against the USD also enabled further reductions in the domestic prices of chemical fertilizers. Contrary to the experience of the countries in the region Rwanda's response to soaring food prices was focused only on measures that could enhance the productivity of food crops. The measures adopted by the government provided substantial subsidy on improved seed and chemical fertilizers' prices to make the inputs affordable to small farmers and to increase food supply in the country.

While the policies adopted in Sudan also aimed to increase food supply through the small farmers the instruments employed consisted of subsidy on fuel prices and chemical fertilizers, strengthening of microfinance services, and distribution of improved seeds (1081 tons in 2008). In addition Sudan also gave priority to the

promote cooperatives in order to strengthen the rural producers' access to inputs and output markets and services.

As the above brief analysis shows the goal of bringing about rapid supply response through smallholder farmers remained the focus of all the countries in the region. The strategy devised by the countries to realize the increases in food supply was based on increasing the productivity of the farmers by intensifying the use of improved seeds, chemical fertilizers, pesticides and other inputs. The focus on the smallholder farmers and the increased utilization of science based agricultural inputs to achieve the growth in productivity required to bring about increases food production is exactly what the ISFP projects in the region strived to attain. As the concurrence of goals and the means of achieving them suggest there can no doubt about the integration of the TCPs into the overall responses of the governments of the region to soaring food prices. The TCPs are also in line with pillar three of CAADP, *"increasing food supply and reducing hunger by increasing smallholder productivity…*" - the agricultural development strategy adopted by the Heads of States and Governments of the African Union.

5. CONCLUSIONS AND RECOMMENDATIONS

The ISFP was designed with goal of bringing about rapid supply responses in food deficit developing countries by mitigating the constraints that small, vulnerable farmers faced to exploit the opportunities created by soaring food prices to increase food production. To this end the program aimed to provide improved seeds, fertilizers, pesticides and tools to the smallholder farmers who by increasing food production can improve their own food security conditions and also contribute to the growth of marketable surpluses. The easing of these constraints was, therefore, assumed to lead to increases in food supply, improvement in food security situations and increases in marketable surpluses. The ISFP TCP projects in Eastern Africa Region were launched to achieve these objectives.

The TCP projects in the Region commenced in 2008 in Burundi, Djibouti, Kenya, Rwanda and Sudan. Based on the goals of the ISFP, each country defined the components of the projects, selected the project areas and households, determined the inputs required, procured (except in Burundi, Djibouti and Kenya where local supply and capacity did not permit) and distributed the inputs, and monitored the implementation of the projects. The executions of the projects mainly rested with the Ministries of Agriculture of the respective countries in cooperation with the local administration of the regions/provinces or districts or communes in which the projects were located, producers organizations and development partners.

FAO provided a total budget of USD 2,044,000 which enabled 36,953 households to benefit from the program. In most of the countries the beneficiaries were mainly drawn from the small, vulnerable rural producers, from the regions/provinces and districts or communes that are most food insecure, frequently hit by drought and where productivity is low. There were also some exceptions in some respects; South Sudan in the selection of project areas and Burundi in the selection of beneficiaries adopted slightly different approaches.

The distribution of the agricultural inputs was directed and executed by implementing government ministries and their branches and producers organizations and development partners in the project sites. On the whole the distribution of inputs in the region remained mainly the concern of governments except in Kenya where it was executed by a local NGO.

In 2009/10 FAO launched Beneficiary Satisfaction and Impact Assessment Survey in all the countries with the view to evaluating the performance of the ISFP TCP projects. The Survey aimed to assess the satisfaction of beneficiaries with the TCP projects, the impact the projects had on their lives and to identify the constraints faced and the lessons to be derived for future programs.

The beneficiary household surveys in SFE randomly sampled at least 100 beneficiary households in each country and successfully attained its objectives. It has generated the required data to make reasonably valid assessments about the performance of the projects.

In this regard the starting point is of course to see to what extent the distribution system in the region has been effective in delivering the inputs to the beneficiaries. Unfortunately the performance is mixed. In Rwanda, Sudan and Kenya inputs were successfully delivered before the planting seasons where as in Burundi and Djibouti there were considerable delays. In fact in the case of Djibouti because of the delay in the delivery of inputs, which in some instance went close to a year, the program was implemented in 2009/10 and not in 2008/9 as originally planned. Likewise all did not go very well with the qualities, appropriateness, quantities and types of inputs delivered. There were also missing inputs that in some countries affected the yields of the seeds provided. Weather conditions were not also favourable in all the countries.

Because of these differences in performances the achievements of the projects also differed from country to country. As all indicators showed the TCP projects in Kenya, North and South Sudan were very successful. In

both cases food production increased significantly as a result of which beneficiary households experienced improvements in the food security conditions and marketable surpluses. The TCP projects in Burundi and Rwanda achieved moderate successes. Of course this does not mean that progress was not made. As the results of surveys showed, 47 % of the sampled households in Rwanda and 45 % in Burundi had registered improvements in food production which led to improvements in food security conditions and marketable surpluses. The worst setback was faced in Djibouti where the status quo was maintained as increases were not foreseen in the levels of food production, food security and marketable surpluses.

Recommendations

1. The main lesson that emerged from the experience in implementing the TCP projects in all the countries is the need to ensure that the package of support provided to the households consisted of all the complementary inputs needed to ensure increases in productivity growth. At minimum this would require combining improved seed varieties with fertilizer and pesticides but depending on the specific conditions could also require support in the form of providing machineries or services to cultivate the land.

2. Equally important is the lesson derived about the key role of irrigation to achieve sustained growth in agricultural output. This conclusion is supported by the positive success of the Ahero project in Kenya as well as by the setbacks suffered by the projects in Rwanda and Burundi due to the occurrences of drought.

3. Although ISFP promoted strategies which enhance rapid supply responses in ways that could lead to improvements in food security and reduction of poverty among the bulk of the farming population who constitute the majorities of the labour force engaged in agriculture, in terms of coverage it was very limited to make visible impacts in the countries. Increasing the funds of ISFP with the view to increasing its scope and coverage of households so as to make significant differences in meeting the challenges in the region would be very important.

4. Support for research and development efforts to develop appropriate seed varieties and strong and viable seed production and supply systems in each country is another area where ISFP can make meaningful contributions to the effort to enhance the productivity of agriculture in the region.

5. Strengthening the on-going efforts of FAO in capacity building of research and development centres, producers organizations and the farmers themselves in light of the challenges facing these countries also deserves more attention and support

6. Influencing national governments to increase budgetary allocation to agriculture to meet the 10 % target set by the AU Heads of States and Governments in Maputo, in 2003 and to create a more conducive environment to enhance private investment in food production, marketing, and seed production also merit high priority.

7. Improving the effectiveness and efficiency of the procurement processes and instituting strong monitoring and follow-up system is another important lesson that emerged from the implementation of the TCP projects in the region.

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ANNEX 1: INPUTS DISTRIBUTED BY COUNTRY

Summary of inputs distributed in BURUNDI**

Inputs distributed	Volume (kg)	Area planted (ha)	Number of beneficiary households	Value (USD)	Regions
Seeds					
Beans(kg)	29290		3288		BUJUMBURA
Vegetable seeds (kg)	733				
Sweet potato (cuttings)	732250				
Beans(kg) Vegetable seeds(kg) Sweet potato(cuttings)	9990 248 247000		990		BUBANZA
Beans(kg) Vegetable seeds(kg) Sweet potato(cuttings)	20500 513 512500		2050		CIBITOKE
Total **Beans(kg)** **Vegetable seeds (kg)** **Sweet potato (cuttings)**	 **59690** **1494** **1492150**		 **6328**		
FERTILIZERS					
Urea(kg) Dap(kg)	23432 23432		 3288		BUJUMBURA
 Urea(kg) Dap(kg)	 12240 12240		990		BUBANZA
Urea(kg) Dap(kg)	16400 16400		2050		CIBITOKE
Total Urea(kg) Dap(kg)	 52072 52072		 6328		
Pesticides					
Dithane(kg) Dursban(L)	264 29		 3288		BUJUMBURA
 Dithane(kg) Dursban(L)	 90 10		990		BUBANZA
Dithane(kg) Dursban(L)	184 21		2050		CIBITOKE
Total **Dithane(kg)** **Dursban(L)**	 **538** **60**				
Other inputs					
Hoes (pces) Rakes(pces)	1929 1929		3288		BUJUMBURA

Shovel(pces) Spades Water cans(pces) Sprayers(pces) Water pumps	976 1929 1929 121 5				
Hoes (pces) Rakes(pces) Shovel(pces) Spades Water cans(pces) Sprayers(pces) Water pumps	990 990 330 990 990 42 2		2050		BUBANZA
Hoes (pces) Rakes(pces) Shovel(pces) Spades Water cans(pces) Sprayers(pces) Water pumps	2050 2050 683 2050 2050 85 3				CIBITOKE
Total Hoes (pces) Rakes(pces) Shovel(pces) Spades Water cans(pces) Sprayers(pces) Water pumps	 4969 4969 1989 4969 4969 249 10		6328		

Summary of inputs distributed in DJIBOUTI**

Inputs distributed	Volume (kg)	Area planted (ha)	Number of beneficiary households	Value (USD)	Different regions
Seeds					
Onion (kg)	340	Not available			
Melon (kg)	150				
Gombo (kg)	50				
Tomato(kg)	350				
Water melon Beetroot(kg) Carrot(kg) Haricot(kg) Egg-plant(kg) Fodder seeds(kg)	25 30 50 50 25 880				
Total			**8,000**	**USD 250,000[18]**	
Other inputs					
Mineral stone (animal feed) (pcs)	5000				
Tools (pcs)	7200				
Total			**8,000**	**USD 250,000**	

[18] Includes the cost of mineral stones and tools

Summary of inputs distributed in KENYA**

Inputs distributed	Volume (kg)	Area planted (ha)	Number of beneficiary households	Value (USD)	Project areas
Seeds					
Rice seed(kg)	54,200	2168 ha	540	36,855	Ahero
Total	**54,200**	**2168 ha**	**540**	**36,855**	
Fertilizers					
MOP(kg)	110,000			100,000	
Sulphate of Ammonia(SA)kg	210,000			128,333	
Total	**320,000**	**2168**	**540**	**228,000**	**Ahero**
Pesticides					
Karate (litters)	500		540	16,738	Ahero
Total	**500**	**2168**	**540**	**16,738**	**Ahero**
Other inputs					
Fungicides Carbendazine (litters)	500		540	21,552	Ahero
Total	**500**		**540**	**21552**	**Ahero**

Summary of inputs distributed in RWANDA**

Inputs distributed	Volume (MT)	Area planted (ha)	Number of beneficiary households	Value (USD)	Region
Seeds[19]		Not available			
Beans	320		10,000	321,172	Bugesera
Wheat	50		4,000	45,410	Gicumbi
Maize	45		5,000	39,137	Musanze
Total	**415**		**10,000**	405,719	

[19] Rwanda received seeds only

Summary of inputs distributed in SUDAN (NORTH)**

Inputs distributed	Volume (kg)	Area planted (ha)	Number of beneficiary households	Value (USD)	Region
Seeds [20]					
Carrots	250	Not available	50		Khartoum
Sweet peppers	135		Not available		
Alfa-Alfa	3150		Not available		
Sorghum Wad Ahmed	10,000		37		White Nile
Fodder Abu 70	14,000		235		White Nile
Sorghum Wad Ahmed	33,000		3417		Blue Nile
Maize	4000		1343		Blue Nile
Fodder Abu70	9,000		Not available		River Nile
Sorghum Wad Ahmed	48,000		Not available		North Kordofan
Millet	30,000		Not available		
Sorghum Urwasha	5,000		Not available		
Watermelon Cashier	5,000		Not available		
Total			**7000**	**250,000**	**5 States**

[20] Received seeds only

Summary of inputs distributed in SUDAN(SOUTH)**

Inputs distributed	Volume (MT)	Area planted (ha)	Number of beneficiary households	Value (USD)	States
Seeds					
Ground nuts (MT)	110 MT				Central Equatorial,
Maize					Upper Nile
Sorghum(MT)	10 MT				Unity& Warrap
Total			**7,000**	**250.000**[21]	
Other inputs **Tools**					
Hoes (pces)	10,000				
Maloda (pces)	8,000				
Sickles Plastic Sheeting				[22]	
Total					

[21] Includes the cost of hand tools also
[22] Included in cost of seeds

ANNEX 3: SOCIO-ECONOMIC CHARACTERISTICS AND ANIMAL HOLDING OF SAMPLE HOUSEHOLDS IN SFE

Socio economic characteristics of sample households in BURUNDI

	All sample households	Male	Female
Gender (%)	201	66.7%	33.3%
Avg. age	48		
Avg. family size	7		
Avg. Land holding (ha)	0.82ha		
Avg. months per year that families have sufficient resources to feed family	6 months		

Average animal holding of sample households in Burundi

Animal type	All sample households	Male	Female
Goats	1.17		
Poultry	2.01		
Pigs	0.2		
Cows	0.11		
Rabbits	0.11		
Guinea pig Sheep	0.29 1.5		

Socio economic characteristics of sample households in DJIBOUTI

	All sample households	Male	Female
Gender (%)	100	80.0%	20.0%
Avg. age			50
Avg. family size	6.3		
Avg. Land holding (ha)	0.5 ha		
Avg. months per year that families have sufficient resources to feed family	9.5 months		

Average animal holding of sample households in DJIBOUTI

Animal type	All sample households	Male	Female
Goats	10		
Sheep	5		
Camel	2		

Socio economic characteristics of sample households in KENYA

	All sample households	Male	Female
Gender (%)	115	61.0%	31.0%[23]
Avg. age	50		
Avg. family size	8		
Avg. Land holding (ha)	1.73 ha		
Avg. months per year that families have sufficient resources to feed family	Less than 2 months		

Average animal holding of sample households in KENYA

Animal type	All sample households	Male	Female
sheep	2		
Goats	2		
Chicken	5		
Cattle(oxen)	4		

Socio economic characteristics of sample households in RWANDA

	All sample households	Male	Female
Gender (%)	114	79.0%	21.0%
Avg. age	43		
Avg. family size	5.5		
Avg. Land holding (ha)	0.7ha		
Avg. months per year that families have sufficient resources to feed family	8 months		

Average animal holding of sample households in RWANDA

Animal type	All sample households	Male	Female
Cattle	0.6		
Goats	0.47		
Sheep	0.1		
Pigs	0.1		
Rabbits	0.15		
Chicken	.32		

[23] The remaining 8% were not household heads but were sons, daughters and other members of the farming families

Socio economic characteristics of sample households in SUDAN (North)

	All sample households	Male	Female
Gender (%)	100	94 %	6 %
Avg. age	50		
Avg. family size	10		
Avg. Land holding (ha)	12.63 ha		
Avg. months per year that families have sufficient resources to feed family	9 months		

Average animal holding of sample households in SUDAN (North)

Animal type	All sample households	Male	Female
Goats	7.81		
Sheep	5.86		
Cattle	3.43		
Camels	0.27		
Donkeys	0.17		

Socio economic characteristics of sample households in SUDAN (South)

	All sample households	Male	Female
Gender (%)	100	78.0 %	22.0 %
Avg. age	43		
Avg. family size	9		
Avg. Land holding (ha)	6.72 ha		
Avg. months per year that families have sufficient resources to feed family	8 months		

Average animal holding of sample households in **Sudan (South)**

Due to time pressure and since livestock was not part of the TCP project the persons charged with the data collection did not include this data collection in their questionnaire

ANNEX 4: INPUT DISTRIBUTIONS SYSTEMS USED IN TCP PROJECTS

Country	Description of agriculture input delivery system	Input supplier(s)	Implementing agency(ies)	Selection process of beneficiary households (including criteria)	Selection process of target areas (including criteria)
BURUNDI	Inputs distributed by the association of farmers in the target areas under the supervision of the provincial Direction of Agriculture and Livestock	Not available	The ministry of Agriculture and Livestock	- 30 % of the beneficiaries were IDPs,returnees,and vulnerable farmers - 70 % were selected from among the viable farmers who will be using the seeds on a loan basis so that the government is able to spread the seed assistance to other farmers as well	Provinces and communes selected on the criteria of absence or low government services, predominance of returnees and proximity to the capital city to facilitate close follow-up of project
DJIBOUTI	Distributed to beneficiaries by the leadership of the cooperatives in which the beneficiaries were organized under the supervision of the technical committee established to direct the implementation of TCP	IMPEXS/R/L Furia Semanti MISAGO SEBASTIEN SRL CHEMIFARM	Technical committee consisting of the Director of Agriculture and Forestry(DAF), the Coordinator of the project, agronomists and other professionals and assistant directors of rural development of the regions	Beneficiaries were members of cooperatives which were selected on the basis of the state of motivation of the cooperatives, integration of women in the works of the cooperatives and the state of the activities of the farmers	Five of the six regions of the country selected, all of them poor food insecure and found at more or less similar level of underdevelopment A six one a cooperative wholly manned by women just outside the capital city was also selected

KENYA	Purchased inputs delivered to the office of Ahero Irrigation Scheme and inputs distributed to the beneficiaries by RECA, a local NGO	Agro-chemical distributors in Nairobi (fertilizers and pesticides) Mwea Irrigation and Agricultural Development Nairobi (rice seeds)	The Ministry of Agriculture, the National Irrigation Board (NIB) and the Agricultural Finance Corporation (AFC)	Selected farmers were poor, food insecure and vulnerable	Project located in area which is food insecure and where the poverty level is higher the national average and has high prevalence of HIV/AIDS
RWANDA	Distribution of seeds to the beneficiary households was carried out by the sector agronomist (MOA) who was the focal point in cooperation with the government's grass root administrative units in the project sites	Bean and wheat seeds were supplied by Murenzi Supply Company(Kigali) and maize seeds were purchased from private trader based in Kigali	Ministry of Agriculture and Animal Resources	Beneficiary households selected on the criteria of poverty and vulnerability as indicated by the size of land ownership and other assets	The criteria for selecting the districts were the frequency and intensity of drought, the severity of food insecurity and low levels of employment of modern agricultural inputs
SUDAN (North)	The distribution of seeds to beneficiaries was carried out by the staff of the extension services of the state's ministry of agriculture under the supervision of the technical departments of the Ministry of Agriculture and Forestry	Nectar Group Right direction May Trading Rans for Agriculture	Ministry of Agriculture and Forestry and the ministry of agriculture of the state	Beneficiary households selected on the criteria of poverty, food insecurity and vulnerability and ability to implement the project	Project areas chosen on the degree of food insecurity in the areas and the problems facing small farmers to increase crop yields
SUDAN (south)	The distribution of inputs was executed through the ministry of agriculture of the states in cooperation with NGOs based in the region	FAR, SSPD, SMoAARF, IRD, ADRA, Techno Relief Sudan Ltd TONNETAGRO ENGINEERING Co Ltd M&E Trading Co. Ltd	Ministry of Agriculture and Forestry and the ministry of agriculture of the states	Beneficiary households included IDPs, returnees, refugees and small vulnerable farmers	Project areas selected on the basis of production potential and proximity to markets

ANNEX 5: KNOWLEDGE OF AGRICULTURE INPUTS AND WILLINGNESS TO ADOPT

Knowledge of seeds received and willingness to adopt in SFE

Country	% of beneficiaries who have used the TCP seeds before			% who have in the past received training on TCP seeds			% who have access to TCP seeds locally			% willing to buy TCP seeds if they were available		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	57.71			49.75			54.73			81.82		
DJIBOUTI	NA			NA						90.0		
KENYA	80.0			40.0						80.0		
RWANDA	NA									NA		
SUDAN(North)	69.0			60.0						63.0		
SUDAN(South)	45.0			34.0						92.0		

Knowledge of fertilizers received and willingness to adopt in SFE

COUNTRY[24]	% of beneficiaries who have used the TCP fertilizers before			% who have in the past received training on TCP fertilizers			% who have access to received TCP fertilizers locally			% willing to buy TCP fertilizers if they were available		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	71.14			51.24			72.14			71.03		
KENYA	14.0			-						86.0		

[24] Other countries did not receive fertilizers

Knowledge of pesticides received and willingness to adopt in SFE

Country[25]	% of beneficiaries who have used the TCP pesticides before			% who have in the past received training on TCP pesticides			% who have access to TCP pesticides locally			% willing to buy TCP pesticides if they were available		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	54.73			45.77			58.71			70.34		
KENYA	44.0			18.0						69.0		
ALL COUNTRIES												

Knowledge of other inputs received and willingness to adopt in SFE

Country[26]	% of beneficiaries who have used the other inputs before			% who have in the past received training on other inputs received			% who have access to other inputs locally			% willing to buy other inputs if they were available		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	20.9			28.36			26.37			58.49		

[25] Other countries of the region did not receive pesticides
[26] The other countries of the region did not either receive other inputs or expressed their views about other inputs

ANNEX 6: SATISFACTION LEVEL WITH INPUTS RECEIVED BY THE TCP PROJECT

SATISFACTION LEVEL WITH SEEDS

Satisfaction level with receiving seeds

Country	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	18.0			15.0			7.0			33.0			27.0		
DJIBOUTI	-			20.0			-			80.0			-		
KENYA[27]	0.0			2.0			0.0			24.2			73.7		
RWANDA	0.9			38.9			10.6			33.6			15.9		
SUDAN(North)	0.0			0.0			0.0			37.0			63.0		
SUDAN(South)	1.0			7.0			7.0			39.0			14.0		
All countries															

Satisfaction level with timeliness of seeds

Country	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	23.0			32.0			7.0			17.0			20.0		
DJIBOUTI	-			28.0			-			72.0			-		
KENYA	0.0			5.1			3.0			16.2			75.8		
RWANDA	5.5			49.1			8.2			29.1			8.2		
SUDAN(North)	3.0			12.0			4.0			35.0			46.0		
SUDAN(South)	0.0			32.0			32.0			18.0			11.0		
All countries															

[27] There were no significant differences in the responses given between male and female beneficiaries

Satisfaction level with appropriateness of seeds

Country	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	2.0			6.0			14.0			33.0			43.0		
DJIBOUTI	-			26.0			-			74.0			-		
KENYA	0.0			2.0			1.0			17.2			79.8		
RWANDA	0.0			47.3			9.1			34.5			9.1		
SUDAN (north)	0.0			49.0			5.0			7.0			39.0		
SUDAN (South)	0.0			7.0			29.0			51.0			6.0		
All countries															

Satisfaction level with quality of seeds

Country	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	33.0			29.0			3.0			18.0			16.0		
DJIBOUTI	-			20.0			-			80.0			-		
KENYA	0.0			4.0			0.0			5.1			90.9		
RWANDA	10.9			11.8			2.7			29.1			45.5		
SUDAN (North)	0.0			1.0			2.0			23.0			74.0		
SUDAN (South)	1.0			5.0			4.0			49.0			34.0		
All countries															

SATISFACTION LEVEL WITH FERTILIZERS

Satisfaction level with receiving fertilizers

Country[28]	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	18.0			15.0						29.0			44.0		
KENYA	0.0			0.0			1.0			12.2			86.7		
All countries															

Satisfaction level with timeliness of fertilizers

Country	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	6. 0			13.0						27.0			49.0		
KENYA	0.0			3.1			1.0			18.4			77.6		
All countries															

Satisfaction level with appropriateness of fertilizers

Country	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	2.0			5.0			2.0			30.0			60.0		
KENYA	0.0			0.0			0.0			10.2			89.8		
All countries															

[28] The other countries of the region did not receive fertilizers

Satisfaction level with quality of fertilizers

Country	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	3.0			1.0						24.0			70.0		
KENYA	0.0			0.0			0.0			2.0			98.0		
All countries															

SATISFACTION LEVEL WITH PESTICIDES

Satisfaction level with receiving pesticides

Country	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	34.0			15.0			1.0			9.0			40.0		
KENYA	1.8			1.8			1.8			14.0			80.7		
All countries															

Satisfaction level with timeliness of pesticides

Country	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	28.0			15.0			2.0			9.0			48.0		
KENYA	1.8			5.3			1.8			12.3			78.9		
All countries															

Satisfaction level with appropriateness of pesticides

Country	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	23.0			5.0						20.0			50.0		
KENYA	1.8			1.8			0.0			8.8			87.7		
All countries															

Satisfaction level with quality of pesticides

Country	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	25.0			-			-			16.0			59.0		
KENYA	1.8			0.0			0.0			1.8			96.5		
All countries															

SATISFACTION LEVEL WITH OTHER INPUTS

Satisfaction level with receiving other inputs

Country	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	10.0			15.0			9.0			25.0			48.0		
SUDAN (South)[29]	0.0			3.0			21.0			21.0			0.0		
All countries															

Satisfaction level with timeliness of other inputs

Country	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	8.0			8.0			4.0			26.0			53.0		
SUDAN (South)[30]	0.0			23.0			21.0			1.0			-		
All countries															

Satisfaction level with appropriateness of other inputs

Country	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	3.0			4.0			5.0			26.0			60.0		
SUDAN(South)[31]	0.0			1.0			5.0			34.0			5.0		
All countries															

[29] 55 % of the surveyed beneficiaries did not give any response
[30] Same as above
[31] Same as above

Satisfaction level with quality of other inputs

Country	% Highly dissatisfied			% Dissatisfied			% Indifferent			% Satisfied			% Highly Satisfied		
	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female	All sample HH	Male	Female
BURUNDI	1.0			-			-			30.0			66.0		
SUDAN(South)[32]	0.0			1.0			5.0			34.0				5.0	
All countries															

[32] Same as above

ANNEX 7: PERCEIVED IMPACTS OF TCP PROJECT ON BENEFICIARY HOUSEHOLDS

Perceived impacts of TCP project on crop production of beneficiary households

Country	Deteriorated a lot (%)			Deteriorated a little (%)			Unchanged (%)			Improved a little (%)			Improved a lot (%)		
	All sample households	Male	Female	All sample households	Male	Female	All sample households	Male	Female	All sample households	Male	Female	All sample households	Male	Female
BURUNDI	7.0			30.3			15.4			42.3			5.0		
DJIBOUTI[33]	-			-			100.0			-			-		
KENYA	0.0			2.0			-			43.0			55.0		
RWANDA	5.3			22.1			19.3			30.7			14.9		
SUDAN (North)	1.0			13.0			7.0			41.0			38.0		
SUDAN (South)	4.0			6.0			8.0			36.0			46.0		
All countries															

Perceived impacts of TCP project on food accessibility of beneficiary households

Country	Deteriorated a lot (%)			Deteriorated a little (%)			Unchanged (%)			Improved a little (%)			Improved a lot (%)		
	All sample households	Male	Female	All sample households	Male	Female	All sample households	Male	Female	All sample households	Male	Female	All sample households	Male	Female
BURUNDI	4.0			15.0			31.0			40.0			10.0		
DJIBOUTI[34]	-			-			100.0			-			-		
KENYA[35]															
RWANDA	2.7			25.9			21.4			34.8			15.2		
SUDAN (North)	1.0			8.0			16.0			39.0			36.0		
SUDAN (South)	6.0			2.0			14.0			24.0			54.0		
All countries															

[33] Since the seeds were planted in 2009/10 and there were no production data at the time of the survey the assumption made on the basis of the opinion of the respondents is that production level, access to food and marketable surpluses would remain unchanged

[34] Same as above

[35] The national report does not provide figures on this, although food accessibility has improved greatly

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

Country	Deteriorated a lot (%)			Deteriorated a little (%)			Unchanged (%)			Improved a little (%)			Improved a lot (%)		
	All sample households	Male	Female	All sample households	Male	Female	All sample households	Male	Female	All sample households	Male	Female	All sample households	Male	Female
BURUNDI	3.5			16.4			40.3			33.8			6.0		
DJIBOUTI[36]	-			-			100.0			-			-		
KENYA													89		
RWANDA	3.6			18.8			32.1			30.4			15.2		
SUDAN (North)	1.0			9.0			24.0			37.0			29.0		
SUDAN (South)	4.0			4.0			20.0			42.0			30.0		
All countries															

Perceived impacts of TCP project on animal production of beneficiary households

Country	Deteriorated a lot (%)			Deteriorated a little (%)			Unchanged (%)			Improved a little (%)			Improved a lot (%)		
	All sample households	Male	Female	All sample households	Male	Female	All sample households	Male	Female	All sample households	Male	Female	All sample households	Male	Female
DJIBOUTI	-			-			82.5			17.5					
All countries															

Perceived impacts of TCP project on animal health of beneficiary households

Country	Deteriorated a lot (%)			Deteriorated a little (%)			Unchanged (%)			Improved a little (%)			Improved a lot (%)		
	All sample households	Male	Female	All sample households	Male	Female	All sample households	Male	Female	All sample households	Male	Female	All sample households	Male	Female
DJIBOUTI	-			-			82.5			17.5					
All countries															

[36] Same as above