

Food and Agriculture Organization of the United Nations Initiative on Soaring Food Prices

Subregional Synthesis of Beneficiary Satisfaction and Impact Assessment Reports for ISFP TCP Projects in the Pacific Countries

FAO Subregional Office for the Pacific Islands Apia, Samoa

June 2010

The designations employed and the presentation of material in this information product do not imply the
expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.
The views expressed in this information product are those of the author(s) and do not necessarily reflect the views of FAO.
2

Table of Contents

List of acronyms	5
Executive summary	6
1. Introduction	12
1.1 Brief background on soaring food prices at regional/sub-regional level;	12
1.2 Summary of government responses to the soaring food prices	13
1.3 FAO response to the crisis	13
1.4 Purpose of ISFP TCP project impact assessments	14
1.5 Brief description of beneficiary satisfaction and impact assessments carried out	14
2. Summary of ISFP TCP projects in the SAP subregion	16
2.1 Overview of ISFP TCP projects in the subregion	16
2.1.1 Regional overview of inputs distributed	
2.1.2 Socio-economic profile of sample beneficiary households	
2.2 Input distribution systems used in TCP Projects	
2.2.1 Description of beneficiary and site selection process (including criteria)	
2.2.2 Description of method/system for distributing inputs	
2.3 Farmers' impressions of receiving agriculture inputs (country comparisons)	25
2.3.1. Awareness of farmers	
2.3.4 Perceived impacts of TCP on beneficiary households	
3. Analysis of input distribution systems of TCP projects	39
3.1 Main types of input distribution systems used in the Subregion	39
3.2 Effectiveness of input distribution systems	40
3.2.1 Knowledge of the agriculture inputs received and willingness to adopt:	
3.2.2 Satisfaction level with inputs received:	
3.2.3 Perceived impacts of TCP on beneficiary households	
3.2.4 Constraints of input distribution systems	
4. Integration of TCPs into overall government responses to soaring food prices	44
5. Conclusions and recommendations:	46
5.1 Conclusions	46
5.2 Recommendations	46
Annovos	10

List of Tables

- Table 1.1: Land area, population and percentage food imports in SAP countries
- Table 1.2: Overview of ISFP TCP projects including the objectives, supplied inputs, outputs, target areas and budgets in countries of the SAP Subregion
- Table 2: Volume of inputs distributed in SAP Subregion
- Table 3: Socio economic characteristics of sample households in SAP Subregion
- Table 4: Input distribution systems used in TCP projects at the SAP Subregion
- Table 5: Knowledge of seeds received and willingness to adopt in SAP Subregion
- Table 6: Knowledge of fertilizers received and willingness to adopt in SAP Subregion
- Table 7: Knowledge of other inputs received and willingness to adopt in SAP Subregion
- Table 8: Regional aggregate knowledge of TCP inputs level
- Table 9: Percentage satisfaction level with seeds in SAP Subregion.
- Table 10: Satisfaction level with receiving seeds in each country
- Table 11: Satisfaction level with <u>timeliness</u> of seeds in each country
- Table 12: Satisfaction level with appropriateness of seeds for each country
- Table 13: Satisfaction level with quality of seeds in each country
- Table 14: Percentage satisfaction level with fertilizer in SAP Subregion.
- Table 15: Satisfaction level with receiving fertilizer in each country
- Table 16: Satisfaction level with timeliness of fertilizer in each country
- Table 17: Satisfaction level with appropriateness of fertilizers
- Table 18: Satisfaction level with quality of fertilizers
- Table 19: Average satisfaction level with other inputs in SAP Subregion
- Table 20: Satisfaction level with receiving other inputs
- Table 21: Satisfaction level with <u>timeliness</u> of other inputs
- Table 22: Satisfaction level with appropriateness of other inputs
- Table 23: Satisfaction level with quality of other inputs
- Table 24: Average percentage of perceived impacts on beneficiary households
- Table 25: Perceived impacts of TCP project on <u>crop production</u> of beneficiary households
- Table 26: Perceived impacts of TCP project on food accessibility of beneficiary households
- Table 27: Perceived impacts of TCP project on ability to sell more at country level.
- Table 28: Perceived impacts of TCP project on animal production of beneficiary households
- Table 29: Perceived impacts of TCP project on animal health of beneficiary households
- Table 30: Average aggregate knowledge of inputs and willingness to adopt
- Table 31: Average satisfaction level
- Table 32: Perceived impacts of TCPs on beneficiary households at country level

List of acronyms

BOA Bureau of Agriculture, Palau

CMFSM College of Micronesia, Federated States of Micronesia

CSFT Civil Society Forum of Tonga

DARD Department of Agriculture and Research Division, Vanuatu

DOA Department of Agriculture

DRD Department of Research and Development

FAO Food and Agriculture Organisation of the United Nations

FSM Federated States of Micronesia

GPG Guadalcanal Provincial Government, Solomon Islands

HH Household

ISFP FAO Initiative for Soaring Food Prices

MAFF Ministry of Agriculture, Forestry and Fisheries, Niue, Samoa and Tonga

MAL Ministry of Agriculture and Livestock, Solomon Islands

MOA Ministry of Agriculture

MRD Ministry of Resources and Development, Marshall Islands

NC National Correspondent (FAO)

NDMO National Disaster Management Office, Solomon Islands

NGO Non Government Organisation

PNG Papua New Guinea

RMI Republic of the Marshall Islands

ROC Republic of China

RPFS FAO Regional Programme for Food Security in the Pacific Island Countries

SAP FAO Subregional Office for the Pacific

SI Solomon Islands

SPMCA Sanma Producers and Marketing Cooperative Association, Vanuatu

TANGO Tuvalu Association of Non Government Organisation

TCP FAO Technical Cooperation Program

VAC Vanuatu Agricultural College

WUTMI Women United Together Marshall Islands

WV World Vision

Executive summary

1. Background on soaring food prices

World food prices have been stable for decades prior to the spike of 60 percent on basic food commodity prices while grain prices doubled between 2006 and 2008. The FAO Food Price Index (2006-2010) reported that by mid 2008, food prices on international markets had reached their highest level in nearly 30 years. This surge was particularly harsh for low-income countries heavily dependent on staple food and fuel imports. In the Pacific Region, despite considerable agricultural potential in some of the larger countries, all countries are net importers of cereals especially rice. Globally, in 2008, the food import bill for low-income food-deficit countries increased by about 35 percent from 2006. Although the international food prices have come down considerably from their 2008 peaks, they are higher and are expected to remain higher than they were prior to the onset of the food crisis in 2006.

For low-income food-deficit countries, the cost of food imports in 2009 was reduced by nearly one quarter from the previous year's figures (FAO 2010). Despite this improvement, the ongoing weakened situation of the global economy is making food less accessible to the world's poor. In many developing countries, the cost of basic staple foods remains stubbornly high. In the Pacific, diminished incomes and less money being sent from relatives working abroad have put the squeeze on household food security particularly the urban poor. Poorer families typically spend two-thirds or more of their income on food, with less for healthcare and education. During tough economic times, people eat fewer meals or opt for cheaper, less nutritious food, raising the risk of malnutrition and other dietary related lifestyle diseases. The Australian aid agency (AusAID), estimates that one third of the population of the Pacific island countries to the north of Australia, roughly 2.7 million people do not have the income or access to subsistence production to meet their basic human needs.

The countries of the Pacific region vary greatly in size, population and population density. Papua New Guinea is the largest having an area of 462,840 sq km compared to Nauru and Tuvalu, with only 21 and 26 sq km respectively. With the exception of PNG with a population of 6.6 million people, populations varied from 828,000 people in Fiji to 1,500 persons in Niue. Some of the smaller Pacific countries are highly dependent on imported food for sustenance of their population. The Pacific food imports as a percentage of total imports averaged 21 percent and varied from as low as 9 percent in Palau and Marshall Islands to 52 percent in Niue. The relatively low percentage of food imports in some countries such as Palau, Nauru and Marshall Islands is a reflection of high levels of total imported goods to these countries, for example in Nauru, 14 percent of imports are food, which represents about 90 percent of the total food consumed in the country.

Government responses

National governments reaction to the soaring food prices have varied greatly. There was no reaction from governments in countries such as the Cook Islands and Papua New Guinea; some countries such as the Marshall Islands introduced initiatives such as the "Youth Food Initiative". The Palau government supported development partners such as the ROC mission project to set up Demonstration Farms and encouraged farmers to grow their own food crops. The Federated States of Micronesia in Pohnpei encouraged and supported their "Go local" food production campaign to reduce dependence on imported food. Other countries prioritized certain agricultural development projects such as rice to reduce dependence on imported rice.

FAO response

FAO launched the Initiative for Soaring Food Prices (ISFP) project in December 2007 in an effort to cushion the impacts of the world wide hike on food prices particularly on the poor and vulnerable communities. The initiative was aimed to increase food production and to earn more income through semi-commercial production during the cropping season 2008/2009 through supplying basic agricultural inputs to vulnerable farmers. In total, there were 74 agricultural input distribution TCP projects as well as 45 technical assistance TCPs that were launched globally. In the Pacific, the ISFP project had a total budget of USD\$2.5 million for supplying agricultural inputs to the 14 FAO member countries including the Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

Under the ISFP, (TCP) projects were initiated for member countries, as an emergency response to the rising price of food in late 2007 and 2008, various agricultural inputs were distributed throughout the SAP Subregion. Type of inputs varied between countries and included rice seed, vegetable seed, root crops planting material, fertilizers, chemicals, livestock, stock fencing/housing materials, garden tools and agricultural equipments and machinery.

2. The beneficiary satisfaction impact assessment

General

The main objective of the impact assessment is to get general feedback on the impact of the FAO ISFP project from the point of view of beneficiaries. The impacts are evaluated by the level of satisfaction and perception of respondents with regards to inputs received and their use; the impact on household food security; the ability to earn an income through project inputs; and to propose improvements for any similar project in future.

The FAO's decision to assess the effectiveness and impact of this emergency relief project led to its evaluation at the national level and the synthesis of this SAP Subregional report. Similar assessments are being carried out at regional and subregional level of FAO members throughout the globe. The objective is to evaluate the effectiveness of the assistance at national, subregional, regional and global level and to assess to what extent the expected impacts were achieved in improving food security of target communities. The assessment is to also provide member countries as well as FAO governing bodies with information on the use of supplied inputs to achieve the expected outputs, the constraints faced at implementation and lessons learned to be of assistance in future projects.

The assessment in FAO SAP was conducted in all fourteen member countries. Six consultants were recruited to conduct the survey in member countries. Each consultant prepared a country report for each of the countries they visited. Drawing from these national reports, one consultant was tasked with the synthesis of the subregional report.

Socio-economic profile of beneficiary households

Traditionally in the SAP subregion, all household heads are male, the exception only where there is no senior male in the household. The beneficiaries from the project in all 14 member countries

consisted mainly of the vulnerable groups within the communities including those marginal, poor and displaced farmers who were affected by floods and whose livelihood was greatly affected by the soaring prices of food.

Considerable differences across average socio economic characteristics do exist among the SAP countries. Average age of head of households ranged from 42 in PNG and Vanuatu to 52.4 in Palau. The average family size ranged from 4.1 in Tonga to 9.8 in Samoa. Large differences between countries are also in land holdings, the average ranges from about 200sq meters in Kiribati to 9.4 ha in Vanuatu. Small livestock such as pigs and chicken are kept by all households in all countries, where as cattle and goats were only reported from Fiji while Cook Islands reported having goats.

The status of food security is reflected as the average months of the year when the household have sufficient resources to feed the family. This range from the average household in Kiribati could afford only 2 months of the year to 12 months in some countries.

3. Overview of Results

Main types of input distribution systems used

A range of distribution systems were used in the project and these varied significantly across the countries, ranging from fully controlled by the National government to high level of control by NGOs and the private sector. The main differences between distribution systems utilised were in the level of involvement of the various stakeholders, including government agencies, politicians, FAO and its national agent, NGOs, other assistance projects, local governments and communities. Distribution systems are broadly grouped into (i) groups or individuals distribution (ii) equal quantity to all beneficiaries or quantity differed based on some criteria (iii) single input distribution or multiple inputs distribution (iv) government and institutional distribution compared to NGO and private sector distribution (v) political distribution or need based (vi) competitive bidding in procurement of inputs or direct procurement of inputs.

The choice of mechanism for input distribution has great impacted upon the efficiency and effectiveness of the distribution system, the coverage of target communities and the satisfaction level of the recipients and ultimately the perceived impacts of the assistance. Each of the distribution systems have their own strengths and weaknesses as well as particular situation where application is most appropriate. For example, in single island countries such as Niue and Nauru, a government (Ministry of Agriculture) distribution may be the most appropriate, while in others such as in the Solomon Islands and Vanuatu, NGOs have better connections and wide reach to remote communities. A combination of the different systems need to be worked out for a particular locale or situation, such as combinations of groups and individuals distribution to various degrees seemed to be appropriate in most situations. The diversity of the SAP Subregion in culture, land mass, population, resources etc. certainly will be hard to fit into a single system.

Knowledge of the agriculture inputs received and willingness to adopt:

The knowledge of the inputs by beneficiaries ranged from a low 27 percent in Palau and 29 percent in PNG to a very high level of 100 percent in Cook Islands, Niue and Tonga where everyone had previously used or had training in the use of the project inputs. The regional average for knowledge of the inputs is considered moderately high at 68 percent.

The willingness to adopt as reflected by 'beneficiaries' willingness to purchase' the inputs if it was locally available was lower at an average 53 percent than the level of knowledge of the inputs (68%). There was a broad range of 'willingness to adopt'; from no one willing to adopt in Tuvalu and only 5 percent willing to adopt in Kiribati, whereas in Tonga everyone was willing to buy the inputs. In the case of Tuvalu and Kiribati, it is not the only issue that inputs are not available especially in outer atolls, but also that the input may be too expensive for farmers. In Tonga on the other hand, the inputs are widely available and prices are manageable for farmers'. The remainder of the countries fell within the two extremes cases of Tuvalu and Tonga.

Satisfaction level with inputs received:

Beneficiaries satisfaction levels differed between the inputs distributed. Values indicate the average of respondents views on the four parameters: receiving the inputs; its timeliness; appropriateness; and quality. Highest satisfaction level is expressed for seed where a combined value for satisfied and highly satisfied respondents was 93 percent, with fertilizer and other inputs slightly lower at 81 and 86 percent respectively. Very few respondents expressed any dissatisfaction (2.8%) with the inputs and the majority of the dissatisfaction was related to timeliness or the lateness of the inputs.

Perceived impacts of TCP on beneficiary households

The highest perceived impact was recorded for Solomon Islands where the three indicators of impacts: namely crop production; accessibility to food; and ability to sell produce scored a perfect 100 percent. The lowest impact was calculated for Niue scoring 4 percent. High impact values of more than 80 percent were recorded for Fiji, FSM, Marshall Islands, Palau, Samoa and Vanuatu. Average perceived impact was highest on crop production 79.5 percent while ability to sell produce was 66.6 percent and accessibility to food was 57.6 percent; the lowest impact was calculated for livestock production at 34.7 percent. The relatively high values for perceived impacts is a clear attribution to the success of the ISFP project achieving its main objective of improving food security and ability to earn an income amongst those vulnerable communities in the SAP Subregion.

Constraints of input distribution systems

Constraints

- Inefficient and long delays in getting supplies from overseas and to farmers.
- The lengthy and time consuming system of procurement of supplies.
- Poor communication between the parties (SAP, implementing agencies and input suppliers).
- Timeframe of one year for the project was too short.
- Local businesses are often left holding goods ordered by government officials for TCP projects.
- Farmers had little choice with timing and type of inputs they were given.

Suggestions for improvement

- Enable some flexibility in the procedures for sourcing and payment of materials.
- Government officials must work closely with implementation agencies.
- Improve communication between all parties.
- The project should be sensitive to local needs.
- Address other related issues such as processing and marketing.

4. Conclusions and recommendations:

Conclusions

The soaring global food prices from 2006 to 2008, jeopardized the ability to achieve the Millennium Development Goal which targets reducing hunger and poverty and at a country level threatens national food security and food sovereignty, while at the household level, hunger and malnutrition thrives especially amongst those poorer and more vulnerable in the community. The FAO Initiative on Soaring Food Prices (ISFP) project which supports agriculture production through provision of essential inputs to vulnerable households was gratefully welcomed by all wherever its distribution reached including the beneficiaries in the SAP Subregion.

The assistance in most cases and in most countries was able to reach the poor, the vulnerable and marginalised households through using appropriate criteria. It is however regrettable the assistance could not reach certain areas and communities due to a range of reasons including limited resources, high costs of transportation and the short duration of the project.

Procurement of inputs was in most cases successful although this was challenging in some cases. The main concern was with timing which led in some cases to failure to synchronize distribution of certain complementary inputs such as chicken and chicken feed, seeds and or equipment with the planting season. The SAP Subregion consists mainly of water with small islands nations which are scattered over huge expanses of ocean. With this geographical distribution constraint, it is obvious that costs of transportation and communication are major challenges to providing assistance of this nature which targets the poor and vulnerable.

A range of distribution systems were adopted in different countries. Each adopted system in each country was considered the most appropriate under their respective situation and conditions. All variants of distribution systems had strengths and weaknesses which came out during implementation and assessment; from the beneficiaries' perspective, these could potentially have influenced their satisfaction levels and perceived impacts of the assistance.

The implementation of project activities were considered successful in all countries of the SAP Subregion. High levels of satisfaction were recorded for receiving inputs, timeliness, appropriateness and quality; also for distribution of inputs, and perceived impacts from respondents in all countries. Positive impacts were also reported for increased production, improved accessibility to food and improved ability to sell agricultural produce. There were some concerns with timing of distribution of inputs well worth noting.

Recommendations

The following recommendations are based on the synthesis of this report and the analysis of the 14 country reports for the SAP Subregion. The ISFP project is considered under the category of 'emergency assistance' and may not lend itself squarely to manage some of these recommendations; however these are made for consideration for possible future program assistance.

Project administration and design

• Extend the timeframe for each phase of the project. - The time frame for the project was short; the period between project initiation and implementation, the implementation period, and the time between implementation and assessment/evaluation were all considered rushed. It is therefore recommended that periods be extended so that adequate planning and project design incorporates stakeholder's participation. True impacts of the assistance would

provide a more comprehensive picture if assessments were done approximately six months after project completion.

- Increase the assistance package especially for bigger countries. The volume of inputs were considered adequate for smaller countries and in line with the nature of the assistance, however it was considered too small to impact the larger countries.
- Procurement processes be improved. Although this is a broad and sweeping
 recommendation and if not well planned and furthered with appropriate advice and expertise
 it may be contrary to regulations, policies and even open avenues for abuse; however this
 was identified as important issue and cannot be overlooked if improvements can be
 implemented.
- **Project coordinator at SAP should visit project sites.** This monitoring visit could yield multiple benefits. It has been suggested as being necessary to provide an avenue to discuss concerns and related issues with national coordinators as well as with contracted importers of inputs; at the same time a broad assessment of progress could be conducted.

Project implementation

- Training should be conducted for all levels at the onset of implementation. While in some countries, training may not be necessary; in others even the agriculture officers require some training on proper use of some of the inputs. Where the inputs are a new introduction, for example rice seed for farmers of Malo islands in Vanuatu.
- **Timing of assistance must match local conditions.** Consideration should be given to local needs and agendas. In certain areas cropping follows certain patterns such as rainy season, particular time of the year or certain phase of the lunar cycle or even certain cultural events.
- **Monitoring of development should be conducted.** Monitoring of the ISFP project at country level was considered either inadequate and in many cases nonexistent.

Project evaluation

- **Project must be evaluated.** This is a costly but essential part of the project and should be written into the plan and the budget. Proper timing is essential to assess impacts and identify pitfalls and successes for planning of similar future interventions.
- Evaluators should be briefed. Evaluators of projects such as the present ISFP assistance should be briefed at the regional level to know exactly the kind of information and data to collect. This is particularly important where a number of individuals are involved; as evident from the amount of important data missing in the country reports and also the inconsistency amongst the reports.

1. INTRODUCTION

1.1 Brief background on soaring food prices at regional/sub-regional level;

The international prices for basic food commodities shot up by 60 percent while grain prices doubled between 2006 and 2008. The FAO Food Price Index (2006-2010) showed that by mid 2008, food prices on international markets had reached their highest level in nearly 30 years. This surge was particularly harsh for low-income countries heavily dependent on staple food and fuel imports. In the Pacific Region, despite considerable agricultural potential in some of the larger countries, all countries are net importers of cereals especially rice. Globally, in 2008, the food import bill for low-income food-deficit countries increased by about 35 percent from 2006. Although the international food prices have come down considerably from their 2008 peaks, they are higher than they were before the onset of the food crisis.

For low-income food-deficit countries, the cost of food imports in 2009 was reduced by nearly one quarter from the previous year's figures (FAO 2010). Despite this improvement, the ongoing weakened situation of the global economy is making food less accessible to the world's poor. In many developing countries, the cost of basic staple foods remains stubbornly high. In the Pacific, diminished incomes and less money being sent from relatives working abroad have put the squeeze on household food security particularly the urban poor. Poorer families typically spend two-thirds or more of their income on food, with less for healthcare and education. During tough economic times, people eat fewer meals or opt for cheaper, less nutritious food, raising the risk of malnutrition. The Australian aid agency (AusAID), estimates that one third of the population of the Pacific island countries to the north of Australia, roughly 2.7 million people do not have the income or access to subsistence production to meet their basic human needs.

The countries of the Pacific region vary greatly in size, population and population density. Papua New Guinea is a very large country by Pacific standard, having an area of 462,840 sq km compared to Nauru and Tuvalu, the smallest countries with only 21 and 26 sq km respectively. With the exception of PNG with a population of 6.6 million people, populations varied from 828,000 people in Fiji to only 1,500 persons in Niue. Some of the smaller Pacific countries are highly dependent on imported food for sustenance of their population. The Pacific food imports as a percentage of total imports averaged 21% and varied from as low as 9% in Palau and Marshall Islands to 52% in Niue (Table 1). The relatively low percentage of food imports in some countries such as Palau, Nauru and Marshall Islands is a reflection of high levels of total imported goods to these countries, for example in Nauru, 14% of imports are food, which represents about 90% of the total food consumed in the country. Similar levels apply also to both Palau and the Marshall Islands. Food imports to the larger Pacific countries consist mainly of meat, rice and flour.

Table 1.1: Land area, population and percentage food imports in SAP countries.

Country	Area sq km	Population	Population density (no./km2)	Food as % of total imports
Cook Islands	237	19,600	83	19
Fiji	18,272	828,000	45	15
FSM	700	107,000	153	32
Kiribati	811	113,000	127	30
Niue	260	1,500	6	52
Nauru	21	10,000	495	14
Palau	487	20,000	45	9
PNG	462,840	6,600,000	14	
Marshall Islands	181	50,800	727	9

Samoa	2,820	180,700	65	19	
Solomon Islands	28,370	533,700	19	17	
Tonga	747	101,000	135	14	
Tuvalu	26	9,500	378	27	
Vanuatu	17,200	218,500	16	17	
Average (not including PNG)	5,600	168,700	178	21	

Note: PNG food and beverage import from Australia alone was A\$280 million in 2008

1.2 Summary of government responses to the soaring food prices

National governments reaction to the soaring food prices has varied greatly amongst the Pacific FAO member countries. There was no reaction from governments in countries such as the Cook Islands and Papua New Guinea; some countries such as the Marshall Islands introduced initiatives such as the "Youth Food Initiative". This project focused on providing youth with life skills training, and among other objectives promotes the growing and consumption of local foods, and safe, healthy food preparation and preservation. The Palau government supported development partners such as the ROC mission project to set up Demonstration Farms and encouraged farmers to grow their own food crops. The Federated States of Micronesia in Pohnpei encouraged and supported their "Go local" food production campaign to reduce dependence on imported food. Other countries such as Fiji, Vanuatu and the Solomon Islands, prioritized development of rice to reduce dependence on imported rice and directed ISFP project towards rice development.

1.3 FAO response to the crisis

In December 2007, the FAO Director General launched the Initiative for Soaring Food Prices (ISFP) project in an effort to cushion the impacts of the world wide hike on food prices particularly on the poor and vulnerable communities. The initiative was aimed to increase food production and to earn more income through semi-commercial production during the cropping season 2008/2009 through supplying basic agricultural inputs to vulnerable farmers. In total, there were 74 agricultural input distribution TCP projects as well as 45 technical assistance TCPs that were launched throughout the globe.

In the Pacific, FAO SAP revisited country priorities under its ongoing 'Support to the Regional Programme for Food Security' (RPFS) for implementation of the ISFP. The RPFS in the Pacific Island Countries (PICs) was completed in June 2009; however the ISFP extended into the early part of 2010. The ISFP project fell within the Component I: *Enhancing Food Production and Security* of the RPFS project. Furthermore ISFP fit well into and form an initial component of the expansion phase of the RPFS called "Food Security and Sustainable Livelihoods Programme (FSSLP) in the Pacific Islands Countries", which has been submitted to donors for funding. The regional emergency project (ISFP) had a total budget of USD\$2.5 million for the 14 FAO Pacific member countries for a duration of 12 months. These member countries under FAO SAP include: the Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

Under the ISFP project, various agricultural inputs were distributed throughout the SAP Subregion. Type of inputs varied between countries and included rice seed, vegetable seed, root crops planting material, fertilizers, chemicals, livestock, stock fencing/housing materials, garden tools and agricultural equipments and machinery. The level of assistance varied from USD\$500,000 for PNG; USD\$250,000 for each of the larger Pacific countries; and a regional project of USD\$500,000 for the seven smaller countries. Also in the FAO Pacific Subregion, a large number of Technical Cooperation Programme (TCP) projects were initiated for its member countries, as an emergency response to the rising price of food in late 2007 and 2008.

As the input supply TCPs were coming to a close, the FAO Member States requested that a standard beneficiary satisfaction and impact assessment be undertaken for the input supply projects in order to gauge the usefulness and impacts that such TCPs have had on the farmers most affected by the food crisis. The ISFP Secretariat developed a generic questionnaire and methodology to help guide the assessment of input distribution TCP projects and also facilitate comparisons between countries and regions. Given the heterogeneity in the inputs that were distributed and the large number of countries involved, the questionnaire and methodology were adjusted to best suit the nature and context of the project being examined. In February 2010, FAO SAP recruited external consultants to assess the impacts of the ISFP TCPs through the views of its beneficiaries in all its 14 member countries.

1.4 Purpose of ISFP TCP project impact assessments

The main objective of the impact assessment is to get general feedback on the impact of the FAO ISFP project from the point of view of beneficiaries. The impacts are evaluated by the level of satisfaction and perception of respondents with regards to inputs received and their use; the impact on household food security; the ability to earn an income through project inputs; and to propose improvements for any similar project in future. The specific objectives of the impact assessments are as follows:

- Identify the level of satisfaction of beneficiaries with the FAO ISFP TCP projects and the impact that the projects have had on their lives;
- Identify how various inputs received by target groups were utilised, including the knowledge level and willingness to adopt by beneficiaries;
- Identify 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;
- Contribute to a lessons learning process that will be useful for optimizing future emergency responses; and
- Provide recommendations to improve on any emergency projects of similar nature in future.

1.5 Brief description of beneficiary satisfaction and impact assessments carried out

The FAO ISFP Secretariat's decision to assess the effectiveness and impact of this emergency relief project led to its evaluation at the national level and the synthesis of this SAP Subregional report. Similar assessments are being carried out at regional and subregional level of FAO members throughout the globe. The objective is to evaluate the effectiveness of the assistance at national, subregional, regional and global level and to assess to what extent the expected impacts were achieved in improving food security of target communities. The assessment is to provide member countries as well as FAO governing bodies with information on the use of supplied inputs to achieve the expected outputs, the constraints faced at implementation and lessons learned to assist future projects.

The assessment in FAO SAP was conducted in all fourteen member countries, namely: Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. The national TCP projects that were developed under the ISFP did not have a beneficiary impact assessment component integrated into the original project design. This has meant that the collection of standardized baseline data has not been conducted prior to implementation of the projects; therefore it would be difficult to evaluate the impact at the end of these projects. In light of this situation, it was felt that the best way to gauge the impact of the project is to focus on the collection of beneficiaries' views of how they perceive the projects have positively or negatively

impacted on their lives. In order to maintain uniformity in data collection at the country level and their synthesis at the subregional/regional and global level, ISFP Secretariat developed a common guideline framework for the assessment in September 2009. The framework contained a generic survey questionnaire to be administered to a sample beneficiaries, a brief questionnaire designed for the implementing agencies including the suppliers of inputs, excel sheets for data entry and analysis and a report outline. The consultants conducting the survey in each country were allowed to modify the designed questionnaire as needed to suit the countries' specific situation.

The FAO SAP office, in January 2010 recruited six consultants to conduct the survey in its member countries. Three of the consultants were each assigned three countries; two consultants covered two countries each and one consultant covered one country. The consultants were directed to modify the questionnaire as necessary and to survey a sample of about 100 beneficiary households in each country, however, this was not possible within the timeframe and resources allocated, thus in most cases, this number was not attained. In each country, the consultant was assisted by the FOA National Correspondent, Project National Coordinator and staff of the national Ministry of Agriculture. The surveys using the questionnaire were carried out with sample beneficiary households trying to get their views and opinion on a range of parameters including:

- satisfaction levels in terms of receiving inputs, including timeliness, quality, and appropriateness of inputs received;
- availability of inputs and willingness to adopt;
- changes in production and crop yield;
- perceptions on overall production, accessibility to food and ability to sell;
- and with regards to these indicators a comparison of their current situation to that from before the project; and
- problems they faced and suggestions they have for improving similar assistance in future.

With a second questionnaire the opinions were gathered from implementing agencies and input suppliers on what they felt were the major constraints of the projects and suggestions that they have for future improvements.

Gender dimensions were emphasised through the survey in order to disaggregate data and assess project performance from a gender perspective. Traditionally, females play important roles in the household economy in the Pacific countries especially in coastal fishing and collection of other marine and freshwater foods, food preservation and storage and utilization. In the Melanesian countries the roles of women extend to include activities such as food crops and livestock production, selection and preservation of seeds and collection of wild foods. The data collected at the country level however was not sufficient to make any comprehensive analysis of project performance from a gender perspective for the synthesis of this subregional report.

Each consultant prepared a country report for each of the countries they visited. The data collected through the questionnaires were compiled and inputed into an electronic data entry template to facilitate the analysis of information. The data itself forms a crucial part of the assessment as it will set a baseline data for future evaluation of similar programs. The data and results collected during the country assessment were analyzed and are discussed in the national reports. From these national reports, one consultant was tasked with the synthesis of the subregional report.

This subregional report is a synthesis of all country reports prepared for the 14 member countries of the SAP subregions. It reflects the beneficiaries view, their satisfaction level in a given preset scale and the perceived impacts of the assistance compared to their previous season's operation. The synthesis report compiles information on all aspect of the assessment making it possible for cross country comparisons of assessed indicators. The report also provides an overview of the main regional food security issues and impacts of the ISFP project on the lives of some of the vulnerable communities in the Pacific. Some recommended actions are made for improvements on planning and implementation of similar input delivery projects in the future.

2. SUMMARY OF ISFP TCP PROJECTS IN THE SAP SUBREGION

2.1 Overview of ISFP TCP projects in the subregion

The global increase in food prices has put the poorest people at greater risk of food insecurity and poverty particularly in the developing world. The overall objective of the ISFP project was to increase food production among small holders' farming systems to increase their food security. The specific objectives were to provide small vulnerable farmers with the necessary agricultural inputs to help them increase food production, thereby raising the nutrition levels of their diets; also to ensure long-term sustainability of the project through enhanced awareness, knowledge and capacity of target beneficiaries towards the benefits of sustainable use of improved inputs. The projects were set to contribute to improved national food security and nutritional status as well as to improve opportunities for income generation.

The ISFP project provided free agricultural inputs to selected vulnerable beneficiaries. Selection of target beneficiaries were based on set criteria, which varied between the different countries. The assistance distributed a range of inputs based on the most urgent need of each member country. The inputs consist of various planting materials including improved rice seed, vegetable seeds, root crops planting materials and fruit tree seedlings; fertilizers, pesticides, rice processing equipments, and garden tools; improved breeds of chicken and pigs, as well as stock feed for these livestock. A detailed overview of the assistance supplied to, and specific objectives for, each of the 14 member countries are shown in Table 1. The monetary value of different inputs were not available in the national reports, thus only the total allocation for each country is reported here.

Criteria for selection of beneficiaries differed slightly between countries. Although the overall objective targeted small holder farmers and vulnerable households, the assistance could reach only a portion of all those in real need. In two of the SAP countries, Fiji and Solomon Islands, most of the assistance was directed towards victims of flash floods whose food gardens were destroyed early in 2009. In the small countries of Cook Islands, Niue, Nauru and Tuvalu, the assistance was distributed to all parts of the country reaching every household and therefore expected to provide a benefit to most of the population. In other cases, although the main bulk of the supplied inputs were distributed to target households, some inputs particularly vegetable seeds which were provided to all member countries except PNG, were distributed throughout each of the countries. In some countries, the decision to distribute inputs to all areas was politically motivated, however, this is considered to extend the reach of the assistance to benefit more people.

Table 1.2: Overview of ISFP TCP projects including the objectives, supplied inputs, outputs, target areas and budgets in countries of the SAP Subregion

			Brief project descr	iption		Dudget
Country	Project code	Objectives	Inputs	Outputs	Target	Budget (USD)
Cook Islands	TCP/RAS/3205	to enable beneficiaries to be self- sufficient in food and to sell extra product on the market.	seeds, small farm tools, fertilizers and poultry and poultry feed.	Increased vegetable, food crops and chicken production	331 HH (households of all 10 islands of CI)	RAS*
Federated States of Micronesia	TCP/RAS/3205	to enable beneficiaries to be self- sufficient in food and to sell excess produce for cash	vegetable seeds, planting materials, chickens and chicken feed.	Increased vegetable, food crops and chicken production	3000 HH (All vulnerable HH in all 4 states)	RAS*
Fiji	TCP/FIJ/3202 (E)	increase rice production through the supply of inputs to small vulnerable farmers	Rice seed, other PM, fertilizer, tools and equipment	Increased rice and food production	2,729 HH (Rice farmers of Dreketi, Bua and flood victims of Rewa)	250,000
Kiribati	TCP/KIR/3201 (E)	to provide rapid assistance to enhance food security and nutritional status of vulnerable households.	seeds of improved food crop varieties, chickens, pigs and garden tools	Increased vegetable, food crops, pigs and chicken production	2319 HH (All islands of Kiribati received some inputs from the project)	250,000
Marshall Islands	TCP/RAS/3205(E)	Support farming activities to increase production for household use and income	vegetable seeds, local fruit trees seedlings and farm tools and equipment.	Increase food production and reduce dependence on imported foods	3000 HH (vulnerable farmers in all 24 atolls)	RAS*
Nauru	TCP/RAS/3205 (E)	Support farming activities to increase food production for household use	Vegetable seeds, tools, fertilizer and pigs	Increased local food production	500 HH (All 14 districts of the country)	RAS*
Niue	TCP/RAS/3205 (E)	To support farming activities to increase and sustain food production for household use	Chickens and feed, tools, fertilizers, vegetable seeds and poultry building materials.	Increased local food production	474 HH (The assistance covered the whole population of Niue)	RAS*
Palau	TCP/RAS/3205 (E)	To support farming activities to increase and sustain food production for household use	vegetable seeds, fertiliser and farm tools.	Increased local food production	600 HH (Assisted households in 6 states)	RAS*
Papua New Guinea	TCP/PNG/3201 (E)	To improve food security and nutritional status of vulnerable households	rice seeds, fertilizer, tools and rice machinery.	Enhanced food security and nutritional status	18,000 HH (Rice growers in Northern, Southern, Highlands, and Islands Regions)	500,000
Samoa	TCP/SAM/3202 (E)	To improve food security and nutrition of vulnerable households affected by the soaring food prices.	fertilizers, tools, seeds, planting materials, materials for pig pens and pigs	Increase food production and reduce dependence on imported foods	1,100 HH (farmers in both Upolu and Savaii)	250,000

Solomon	TCP/SOI/3201	To improve food security and	Vegetable seeds, fertilizers,	enhanced food security	2000 HH (Flood victims of	250,000
Islands	(E)	nutritional status of vulnerable	garden tools, pigs and pig	and nutritional status	6 villages, 3 schools at	
		households	feed and micro rice-mills		Saghalu District,	
					Guadalcanal Plains and	
					Malaita Province)	
Tonga	TCP/TON/3202	To improve food security and	Vegetable seeds, pigs, pig	Increased food	3821 HH (Vulnerable	250,000
	(E)	nutritional status of vulnerable	pens and pig feed	production	farmers of Vava'u, Ha'apai,	
		households			'Eua and Tongatapu)	
Tuvalu	TCP/RAS/3205	To improve food security and	Vegetable seeds, fertilizers	Increased food	317 HH (All 8 atolls of the	RAS*
	(E)	nutritional status of vulnerable	and chickens	production of	country)	
		households		vulnerable households	-	
Vanuatu	TCP/VAN/3201	To increase rice and root crop	rice seeds, vegetable seeds,	Increased food	5,000 HH (Sanma Province	250,000
	(E)	production of vulnerable farmers	root crops planting materials	production of	in Santo and Malo Island)	
			and rice hullers	vulnerable households		

Note: * refers to a regional TCP (TCP/RAS/3205 E) with a budget of US\$500,000 covering the 7 smaller countries of Cook Islands, FSM, Marshall Islands, Nauru, Niue, Palau and Tuvalu.

2.1.1 Regional overview of inputs distributed

Table 2, shows the volume of each input supplied through the TCP and the associated recipient countries. Vegetable seed consisting of 12,500 packets was the main input distributed to 13 of the 14 member countries in the SAP subregion. Due to their durability and ease to transport, the vegetable seeds were widely distributed throughout each of the 13 member countries that received them. The vegetable seeds were repackaged into small quantities that were considered a more appropriate size for local farmers, before distribution. In some cases, a portion of the vegetable seeds were withheld and stored by the local Ministry of Agriculture for a later second distribution to farmers. Three of the larger countries (Fiji, PNG, Vanuatu) having land and capacity to produce rice requested improved rice seeds through the TCP project. Fiji and PNG needed to increase production in some of their traditionally rice producing areas. However in the case of Vanuatu, rice was introduced to a new area where rice hasn't been planted before. The majority of the 44.3 tons of rice seed (92%) distributed through the project were supplied to PNG and the remaining 2 tons was shared between Fiji and Vanuatu. Approximately 205 tons of fertiliser was distributed to 9 countries, where it was used mainly for vegetable production. Other inputs distributed included: pesticides, stock feed, small livestock, garden tools, some equipment, nursery supplies and construction material for making livestock shelters. Details and quantity distributed to each country is listed in Annex 1

Table 2: Volume of inputs distributed in SAP Subregion

Inputs distributed	Volume	Countries
Seeds:		
Rice (kg)	44,300	Fiji, PNG, Vanuatu
Vegetables (packets)	12,500	Cook Is, Fiji, FSM, Kiribati, Marshall Is, Nauru, Niue, Palau, Samoa, Solomon Is, Tonga, Tuvalu, Vanuatu
Planting material(pieces)	180,200	FSM, Fiji, Kiribati, Marshall Is, Samoa, Vanuatu
Fertilizers (bags)	5,130	Cook Is, Fiji, Marshall Is, Nauru, Niue, PNG, Samoa, Solomon Is, Tuvalu
Other inputs		
Pesticides (litre)	100	Fiji, Tonga
Pigs (number)	350	Samoa, Solomon Is, Tonga
Chicken (number)	6,000	Cook Is, FSM, Kiribati, Niue, Tuvalu
Stock feed (bags)	4,100	Cook Is, FSM, Kiribati, Niue, Solomon Is, Tonga, Tuvalu,
Tools (items)	5,700	Fiji, Marshall Is, Nauru, PNG, Samoa, Solomon Is,
Equipments (number)	150	Fiji, Marshall Is, PNG, Solomon Is, Vanuatu
Nursery supply (items)	10,900	Cook Is, Niue, Samoa
Construction materials (items)	28,700	Cook Is, Kiribati, Niue, Samoa, Tonga

Note: Information on quantity of inputs distributed at country level can be found in Annex 1.

2.1.2 Socio-economic profile of sample beneficiary households

The average socio-economic characteristics of beneficiary households are shown in Table 3. During the survey, a total of 723 sample households were interviewed in the 14 SAP countries, ranging from 17 to 108 households with an average of 51 households per country. This low average number of households interviewed was due to limited time and resources available for the survey. Disaggregated data by gender distribution for each item was not available in the national reports to provide a meaningful analysis. Gender (%) of household heads as shown, is the only characteristic reported in 13 of the 14 country reports, whereas it was not reported for other parameters. Traditionally in the SAP subregion, all household heads are male, the exception only where there is no senior male in the household. Given that women are recognised across

many of the countries as a core vulnerable component of the communities, disaggregated data would have enriched the findings of this report. This can offer a key learning to be included in future surveys.

The beneficiaries from the project in all 14 member countries consisted mainly of the vulnerable groups within the communities including those marginal, poor and displaced farmers who were affected by floods and whose livelihood was greatly affected by the soaring prices of food. These farmers were also the economically most deprived groups whose only means of earning a cash income is through the sale of any excess farm produce. They however are unable to sustain and invest in their farming due to increased costs and unavailability of farm inputs.

Considerable differences across average socio economic characteristics do exist among the SAP countries. Table 3, shows the average of socio economic parameters for all 14 member countries and also shows the diverse range between countries. Average age of head of households ranged from 42 in PNG and Vanuatu to 52.4 in Palau. The average family size was 4.1 and 4.5 in Tonga and Palau respectively to as high as 9 and 9.8 respectively in PNG and Samoa. The high average family sizes in PNG and Samoa reflects a social system of members of extended families living together. Large differences between countries are also shown in land holdings; an average land holding of about 200sq meters in Kiribati compared to 9.4 ha in Vanuatu. Larger countries including Vanuatu, Fiji, Solomon Islands and PNG have an average land holding of 6.2 ha. The smaller countries of Cook Islands, Nauru and Marshall Islands all have average land holdings of less than half a hectare. Small livestock such as pigs and chicken are kept by all households in all countries, where as cattle were reported only from Fiji and Vanuatu. An average of 4.6 goats per household is recorded for the subregion; however it's only the Cook Islands and Fiji that reported having goats on average 27 and 38 animals per household respectively in those countries.

The status of food security is reflected across the average months of the year when the households have sufficient resources to feed the family. Although the subregion reported having enough food for an average of 9.9 months of the year, the average household in Kiribati could afford only 2 months of the year. The situation in Nauru is anecdotally expected to be similar to that in Kiribati although data was not available in the country report.

Table 3: Socio economic characteristics of sample households in SAP Subregion

	All sample households	Male	Female	Range of averages in all countries
Household head Gender (%)	100	88	12	
Avg. age	46.3			42 - 52
Avg. family size	6.3			4.1 – 9.8
Avg. Land holding (ha)	2.8			0.02 - 9.4
Avg. animal holding				
Cattle	1.2			0 - 7.2
Goats	4.6			0 - 38
Pigs	4.8			0.52 - 10.7
Chicken	14			2 - 30
Avg. months per year that families have sufficient resources to feed family	9.9			2 - 12

2.2 Input distribution systems used in TCP Projects

The distribution systems used in the project varied significantly across the countries, ranging from fully controlled by the National government to fully controlled by an NGO (Table 4). The main differences between the distribution systems used were in the level of involvement of the various stakeholders, including government agencies, politicians, FAO and its national agent, NGOs, other assistance projects, local

governments and communities. In some countries, FAO provided the technical assistance and in some cases were involved in the procurement of supplies of the project inputs either through local business or directly from overseas suppliers; in other cases, government agencies were directly involved in executing the project by outsourcing to local contractors to procure supplies of inputs through a competitive bidding process. NGOs were actively involved in some countries, particularly with the distribution of project inputs and their monitoring, giving advice to farmers and monitoring project activities. Table 4, show details of the distribution systems implemented in each of the 14 member countries.

The choice of mechanism for input distribution has great impacted upon the efficiency and effectiveness of the distribution system, the coverage of target communities and the satisfaction level of the recipients and ultimately the perceived impacts of the assistance. Each of the distribution systems have their own strengths and weaknesses as well as particular situation where application is most appropriate. For example, in single island countries such as Niue and Nauru, a government (Ministry of Agriculture) distribution may be the most appropriate, while in others such as in the Solomon Islands and Vanuatu, NGOs have better connections and wide reach to remote communities. A combination of the different systems need to be worked out for a particular locale or situation, such as combinations of groups and individuals distribution to various degrees seemed to be appropriate in most situations. The diversity of the SAP Subregion in culture, land mass, population, resources etc. certainly will be hard to fit into a single system.

2.2.1 Description of beneficiary and site selection process (including criteria)

The beneficiaries targeted by the ISFP project were small farmers in vulnerable communities that were adversely affected by soaring food prices as well as high costs of farm inputs, preventing them from using adequate amounts to optimise productivity. In some countries, the assistance was directed towards victims of natural disasters such as droughts, floods and volcanic eruption, whereas in others the selection of sites was a political decision aimed to please the constituencies and fulfil political agendas. In the latter case, a blanket approach was used trying to reach all parts of the country, resulting in a limited impact in those larger countries where inputs were spread too thinly. In the five smaller countries, each having a population of less than 20,000 (Cook Islands, Nauru, Niue, Palau and Tuvalu); the assistance was adequate to reach all parts of each country, benefiting most of the population. Selection of sites in the larger countries including Fiji, FSM, Kiribati, PNG, Solomon Islands, Tonga and Vanuatu was politically influenced for some of the inputs, while the remainder of the inputs were channelled through to vulnerable communities. In some countries such as Palau, FSM and Tuvalu, the political influence included the selection of recipients, albeit targeting those with low household incomes. Beneficiary and site selection in Samoa was undertaken through a slightly different method. No particular sites were selected and beneficiaries were selected throughout the country using criteria typical of beneficiary selection across most SAP countries, as follows:

- families living in very basic housing condition;
- families with very little productive land;
- families without reliable means of transport;
- families with no wage earner, or with limited/irregular sources of income.

Details of country specific information on the selection process of beneficiary households and selection process of target areas are shown in Table 4.

2.2.2 Description of method/system for distributing inputs

A number of different distribution systems were adopted in different countries during the implementation of the ISFP projects. The political, geo-physical and socio-economic status of each country has largely dictated the methods of procurement, supplies, timing and distribution of inputs at different levels. The project implementation was largely carried out through partnerships between a range of stakeholders such as government ministries, FAO national officer, other donor partners, local NGOs, input suppliers, local governments, local community groups and farmers and their families. A brief description of different distribution modalities adopted in each of the 14 member countries is presented in Table 4.

Table 4: Input distribution systems used in TCP projects at the SAP Subregion

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)
Cook Islands	Ministry of Agriculture was coordinating agency and distribution in islands was by Agriculture officer and the Island Administrators.	FAO and MOA sourced inputs from overseas	MOA and Island Administrators	All households were beneficiaries of the assistance	Every island was assisted through the project
Fiji	Ministry of Agriculture was the implementing agency and dealt directly with the beneficiaries through its Extension agents.	Local businesses were contracted to supply the inputs	MOA through its Extension services	All flood victim farmers needing root crop planting materials in affected areas and progressive rice farmers willing to set up demonstration plots in their fields	It was a political decision to involve all parts of the country. Also the flood affected areas for certain inputs
FSM	Committee with membership from DRD, CMFSM and stakeholders was formed to coordinate the project	Inputs procured from local suppliers and abroad by FAO SAP in consultation with DRD,	CMFSM was responsible for implementation at each State	i. Vulnerable communities in outer islands considered most affected by soaring food prices in each of 3 states with islands; and ii. Vulnerable groups in Kosrae	It was a political decision to share inputs equally amongst the four states of FSM.
Kiribati	Department of Agriculture was the implementing agency and dealt directly with the beneficiaries through its Extension agents and Local Council.	Inputs were procured locally and from aboard by FAO with assistance from DOA	DOA was main implement agency. Ship-yards Ltd distribute to atolls and local council selected beneficiaries.	Agriculture orientated community, youth and women; previously involved with other agriculture activities; involved in Health Nutrition garden project;	It was a political decision to involve all atolls
RMI	A project committee consisting of MRD, an NGO - Women United Together Marshall Islands (WUTMI) staff, and stakeholders was established to implement the project.	FAO in consultation with MRD procured the inputs locally and from abroad.	MRD was assisted by (WUTMI) and local government for implementation	WUTMI representatives in outer islands, and together within the project committee, they would draw up the list of beneficiary farmers for input distribution.	Project Committee decided that all outer islands be assisted through the project.
Nauru	Department of Agriculture (DOA) distributed all inputs to Community Leaders who then share it amongst	FAO in consultation with DOA procured the inputs through a	DOA in consultation with Community Leaders	All households benefited from the project	All 15 districts were assisted

	its members.	local supplier.			
Niue	Ministry of Agriculture Forestry and Fisheries (MAFF) distributed inputs to Village Councils for its members. Tools are kept for borrowing by members.	FAO in consultation with MRD procured the inputs locally and from abroad.	MAFF in consultation with Village Councils	All households benefited from the project	All 14 villages were assisted
Palau	Bureau of Agriculture (BOA) chaired a project committee consisting of other stakeholders. Committee work through the office of each state governor to get to farmers.	FAO in consultation with BOA procured all inputs from abroad.	BOA in consultation with State Governors' offices	Beneficiary farmers for each state were selected by the state governor, and the priority was given to farmers and households with low income.	Six states out of a total of 16 states
PNG	Department of Agriculture and Livestock (DAL) manage the project. The Regional Directors work with district agriculture managers to identified recipients and distribute inputs.	Inputs procured through suppliers in Lae and were released through their outlets in other regions.	MAL through its regional offices. Some NGOs were engaged for distribution of inputs	DAL Regional Directors identify beneficiaries based on farmers who are growing rice and belong to an organized group.	All four districts were included. Provinces selected based on those already growing rice; also disaster affected areas e.g. Oro flooded areas and Madang volcano affected region.
Samoa	MAF was the National Project Coordinator and an NGO was assigned for implementation.	FAO in consultation with MAFF and WIBDI procured the inputs locally and from abroad.	An NGO - Women in Business Development Inc (WIBDI–Samoa) was contracted for implementation monitoring and evaluation	Beneficiaries scattered throughout and selection was based on families living in basic housing condition, those with very little productive land, families without draught animal or no other means of transport, families with no wage earner	No specific areas were targeted. Beneficiaries were selected throughout the two islands of Upolu and Savaii.
Solomon Is	MAL controlled project management in consultation with the NDMO. MAL through its Extension agents working with the GPG dealt directly with the farming community.	FAO in consultation with MAL contracted out to local businesses the procurement of inputs.	Local Extension services of GPG distributed inputs to farmers, follow-up visits and advice on their proper use.	Most inputs were distributed to all victims of 2009 floods. Distribution of pigs was a political decision covering all Provinces.	The Saghalu District suffered severe floods in early 2009 and thus targeted for the inputs. Pigs were distributed to all Provinces.
Tonga	Civil Society Forum of Tonga (CSFT) was the main implementing agency in partnership with MAFF	FAO in consultation with CSFT and MAFF procured	Civil Society Forum of Tonga (CSFT) was the main implementing	Beneficiaries were selected by community groups based on: being unemployed; no access to	It was a political decision to include all the main island groups of Vava'u,

		inputs locally and	working together with	land; no other family support	Ha'apai' Tongatapu and
Tuvalu	FAO in consultation with the Department of Agriculture commissioned the Tuvalu Association of Non Government Organisation (TANGO) to implement the project.	FAO in consultation with DOA and TANGO procured inputs locally and from abroad.	MAFF and NGOs The TANGO was the implementing Agency	available to them Village councils selected beneficiaries in each island targeting vulnerable groups such as women and youths. TANGO confirmed the selected beneficiaries.	'Eua. It was a political decision to include all the eight atolls in the distribution of inputs
Vanuatu	The Vanuatu Agriculture College (VAC) provides the project coordination MOA Extension service and World Vision (WV) field officers were the implementing agents taking the project and distributing inputs to the farm level.	FAO in consultation with MOA and VAC contracted out to local businesses the procurement of inputs.	MOA, VAC and WV's arm an NGO called SPMCA were implementing agencies	The vulnerable communities living at fringes of big towns and very remote areas – people without formal paid jobs and no other means of earning income.	While some of the inputs were targeted to the most vulnerable communities, others were distributed throughout all Provinces of the country as a political decision

2.3 Farmers' impressions of receiving agriculture inputs (country comparisons)

2.3.1. Awareness of farmers

Awareness of farmers varied across each country as follows:

- o **Cook Islands** no one was aware of why they were chosen to receive the input.. All household heads were male.
- o **Fiji** 32% indicated they were aware, suggesting that it was because their crops were destroyed by floods, while 68% didn't know why they were chosen. There was no data available on gender differences
- o FSM 77% were aware of their being chosen stating it was because they were active farmers.
- o **Kiribati** 100% were aware of why they were chosen, because they were keen gardeners.
- o **Marshall Islands** everyone (100%) knew why they were chosen, 74% stated its because of their position in the society or their involvement with the implementing agency while 26% said its because they were active farmers.
- o **Nauru** everyone was aware of their being chosen stating its because they were home gardeners.
- o **Niue** everyone was aware of their being chosen stating its because they were growers.
- o **Palau** 79% were aware and most stated it is because of their involvement with state office and that they wanted to grow crops for the family.
- **PNG** 93% were aware and that they were chosen because they were members of an organization that was selected for the project.
- Samoa everyone was aware of why they were chosen, 75% stated its because they were known farmers to those who implemented the project, the remaining 25% stated meeting the criteria for selection.
- O **Solomon Islands** everyone was aware of why they were chosen, saying its because they were victims of the floods in January 2009.
- O **Tonga** 74% were aware of why they were chosen, 55% of which stated that they needed the inputs and they met the criteria for selection of recipients, while the remaining 45% stated being well known farmers and often work closely with government agencies and NGOs.
- Tuvalu everyone was aware of why they were chosen, 84% stated its because of their involvement with community groups while 16% stated being keen gardeners.
- Vanuatu 90% stated they were aware of their being chosen, stating their involvement in community groups that were chosen as recipients of the assistance.

2.3.2 Knowledge of the agriculture inputs received and willingness to adopt;

The knowledge of the agriculture input received, refers to:

- (i) whether the beneficiaries had previously used the inputs distributed through the project,
- (ii) whether the beneficiaries had previously had training on the use of that input,
- (iii) whether the input is available locally.

The willingness to adopt refers to whether the beneficiaries are willing to purchase the input if it was available locally. The discussion refers to those main inputs distributed to a number of countries including seeds and fertilizers, with the remainder of the inputs distributed only to one or two countries and grouped together under the heading of "other inputs". Seeds refer to true seeds only which includes rice and vegetables which were all imported in the case of vegetable seeds or a combination of imports and brought in from other regions of the country as was the case with rice seed. The vegetative planting materials which include root crops planting materials and fruit tree seedlings are available locally and normally for free through a farmers' reciprocal system and these are grouped under "other inputs".

Seeds

In some countries 'seed' was part of the assistance; however it was yet to be distributed to beneficiaries at the time of the evaluation. Data on receival of seeds (Table 5) were available from ten countries. Beneficiaries who previously used seeds ranged from a low 21 percent in Palau to everyone (100 percent) in Cook Islands, Fiji and Niue. The regional average for previously having used seeds was 72 percent of

beneficiaries, indicating that most people in the Pacific had utilised seeds in their farming. Those beneficiaries that received training on the use of the seeds averaged 69 percent for the region and ranged from a low 24 percent in Papua New Guinea to 100 percent in Cook Islands and Niue. Availability of seed in the local market differs greatly between the countries that have established markets. Trade practices vary from those locations where farmers have easy access to trade centres such as Samoa and Cook Islands to countries where farmers are isolated and the market is very small as in the case with Tuvalu where seed is not available. The level of technology adoption reflects the local availability of the inputs. The capacity of the market as an outlet for any excess produce may play an important role in the beneficiaries' willingness to purchase the inputs. In Samoa where farmers have easy access to markets, they are more willing to purchase vegetable seeds, grow them and market any excesses. Whereas in Tuvalu, there is no market outlet for excess vegetables, thus there is limited demand for seeds from growers.

Table 5: Knowledge of seeds received and willingness to adopt in SAP Subregion

	Percentage of beneficiaries					
Country	who used TCP seeds before who received training on TCP seeds who have access to TCP seeds		who have access to TCP seeds	willing to buy TCP seeds if available		
	All sample HH	All sample HH	All sample HH	All sample HH		
Cook Islands	100	100	100	44		
Fiji	100	71	43	50		
FSM	82	35	82	65		
Marshall Islands	48	67	52	74		
Niue	100	100	11	11		
Palau	21	32	71	71		
PNG	67	24	84	87		
Samoa	83	64	100	100		
Tuvalu	77	49	0	0		
Vanuatu	46	29	53	39		
Average all countries	72	69	60	54		

Fertilizer

A range of fertilizers including compound NPK and single component fertilizers such as Urea, Triple Super Phosphate and Potash were distributed in 9 countries including Cook Is, Fiji, Marshall Is, Nauru, Niue, PNG, Samoa, Solomon Is and Tuvalu. Data however, were available only for the Cook Islands, Fiji, Solomon Islands and Tuvalu (Table 6). On average, a high level of beneficiaries (88 percent) has previously used fertilizers in these 4 countries with all beneficiaries in Cook Islands and Solomon Islands previously having used fertilizers. The average of those beneficiaries who received training on the use of fertilizers was 54 percent, with a low 24 percent trained in Solomon Islands to 100 percent trained in the Cook Islands. With regards to the local availability of fertilizers, all beneficiaries in the Cook Islands stated that it was available, whereas in Fiji, only 22% had easy access to fertilizer locally, and in Tuvalu, fertilizer is not available locally. The willingness to adopt the technology and buy fertilizer is highest in the Solomon Islands where 76 percent of beneficiaries indicated willingness to adopt the technology while no one was willing to buy fertilizer in Tuvalu. In the case of Tuvalu, this may be the case as fertilizer is not available locally. Based on the available data on average, 38 percent of beneficiaries were willing to purchase fertilizers if locally available.

Table 6: Knowledge of fertilizers received and willingness to adopt in SAP Subregion

	Percentage of beneficiaries					
Country	who used fertilizers before	who received training on TCP fertilizers	who have access to fertilizers locally	willing to buy fertilizers if available		
	All sample HH	All sample HH	All sample HH	All sample HH		
Cook Islands	100	100	100	44		
Fiji	75	43	22	33		
Solomon Islands	100	24	76	76		
Tuvalu	77	49	0	0		
Average all countries	88	54	50	38		

Other Inputs

The TCP inputs that were distributed to only one or two countries as well as inputs distributed to regions or organizations within a country are grouped under this section of 'Other Inputs'. This includes rice processing equipment, machinery, garden tools, pesticides, livestock including pigs and chicken as well as stock feed.

Regarding the 'Other Inputs' (Table 7) an average of 69 percent of beneficiaries from all countries of the region used these other inputs. In the Cook Islands and Solomon Islands all beneficiaries (100%) had previously used the relevant inputs, whereas in PNG only 14 percent had previously used the particular allocated inputs, which in this case referred to rice processing machinery provided to organizations. The average of those who received training on the use of the other inputs was 59 percent across all countries. This ranged from: a low 10 percent in PNG: 21 percent in Vanuatu: 24 percent in Solomon Islands; to 100 percent in Cook Islands and Tonga. In the case of PNG and Vanuatu the inputs included group equipment that will be operated by trained specialists. In the Solomon Islands, the inputs included garden tools that beneficiaries are familiar with and know how to use. The high level of trained beneficiaries in Cook Islands and Tonga was specific to their particular inputs which referred to livestock including chicken and pigs respectively. On the availability of these other inputs, a regional average of 55 percent was calculated. Availability of other inputs (garden tools) was low in Kiribati (5%) and Nauru (19%). Remote atoll communities in Kiribati do not have access to tools and there is also low agricultural activity due to very poor soil; whereas in Nauru, the generally low level of agricultural activity on the island does not encourage store owners to stock these items. Access to these other inputs in other countries is modest, ranging between 58 percent in Vanuatu to 100 percent in Tonga. Similar levels were calculated for beneficiaries' willingness to purchase these other inputs

Table 7: Knowledge of other inputs received and willingness to adopt in SAP Subregion

	Percentage of beneficiaries						
Country	who used the other inputs before	other inputs training on other to other inputs		willing to buy other inputs if they were available			
	All sample HH	All sample HH	All sample HH	All sample HH			
Cook Islands	100	100	-	-			
Kiribati	93	89	5	5			
Nauru	89	66	19	0			
PNG	14	10	70	65			
Solomon Islands	100	24	76	76			
Tonga	100	100	100	100			
Vanuatu	71	21	58	42			
Average all countries	69	59	55	48			

Aggregate knowledge levels in the region

At the regional level 76 percent of the sample beneficiaries had experience with the supplied inputs with 88 percent of recipients having used fertilizers before the TCP fertilizer inputs. With regards to training on the use of inputs, an average 61 percent received training with 69 percent been trained on use of seeds and the lowest was on the use of fertilizer with 54 percent. With regards to the local availability of inputs, slightly more than half of respondents (55%) had local access to the inputs and less than half (47%) stated their willingness to buy the inputs. The questionnaire did not collect information on reasons why beneficiaries would not adopt the technology, however it can be suggested that this low adaptation rate may be an economic based decision.

Table 8: Regional aggregate knowledge of TCP inputs level

	Percentage of beneficiaries					
Inputs	who used the inputs before	who received training on inputs before	who have access to inputs locally	willing to buy inputs if were available		
Seeds	72	69	60	54		
Fertilizer	88	54	50	38		
Other inputs	69	59	55	48		
Average	76	61	55	47		

2.3.3 Satisfaction level with inputs received

The beneficiaries expressed different levels of satisfaction with the inputs they received under the ISFP assistance. The respondents views were expressed using a five point scale starting from highly dissatisfied, dissatisfied, indifferent, satisfied to highly satisfied with regard to a particular input they received. Respondents were also asked to express their satisfaction levels with the received inputs in relation to: receiving them, their timeliness, appropriateness and the quality of the input. All these parameters are equally important to enhance crop production and raising food security and opportunities to earn income. The expressed levels of satisfaction from the respondents provide important feedback for decision makers and implementing agencies for designing future interventions of this nature. For the purpose of this report, the distributed inputs in the SAP sub-region are grouped under three major headings as follows:

- <u>seeds</u> including rice and vegetable seeds;
- <u>fertilizers</u> including compound NPK, Urea, Triple Superphosphate and Potash; and
- <u>others</u> including local planting materials, rice processing equipments, machinery, garden tools, pesticides, livestock including pigs and chicken and stock feed.

Seeds

Overall satisfaction level: The aggregate level of satisfaction for all member countries in the SAP Subregion, under the various parameters is presented in Table 9. A high level of satisfaction is expressed on all parameters; in most cases more than 92 percent of respondents were either satisfied or highly satisfied with the seeds. Timeliness however, scored a little lower at 85 percent with the satisfied and highly satisfied respondents.

Table 9: Percentage satisfaction level with seeds in SAP Subregion.

Parameters	Receiving	Timeliness	Appropriateness	Quality	Average
Satisfaction level					
Highly dissatisfied	0	0.8	0	0	0.2
Dissatisfied	0.4	7.0	0.4	0	2.0
Indifferent	1.4	6.9	3.8	7.3	4.8
Satisfied	64.8	43.8	44	39.3	48
Highly satisfied	33.4	41.4	51.8	53.4	45
Total	100	100	100	100	100

Country satisfaction level with receiving seeds: Satisfaction levels with regards to receiving seeds are shown in Table 10. A high level of satisfaction is shown for receiving seeds, on average about 65 and 33 percent of respondents were either satisfied or highly satisfied respectively. The remaining 2 percent were indifferent (1.4%) respondents from FSM, Palau and PNG. No respondent was dissatisfied with receiving seeds while all (100%) respondents in Cook Islands, Tuvalu and Niue indicated they were satisfied.

Table 10: Satisfaction level with receiving seeds in each country

Country	% Highly dissatisfied	% Dissatisfied	% Indifferent	% Satisfied	% Highly Satisfied
Cook Islands	0	0	0	100	0
Fiji	0	0	0	92	8
FSM	0	0	7	53	40
RMI	0	0	0	59	41
Niue	0	0	0	100	0
Palau	0	0	5	26	69
PNG	0	0	2	71	27
Samoa	0	0	0	8	92
Tuvalu	0	0	0	100	0
Vanuatu	0	4	0	39	57
Average all countries	0	0.4	1.4	64.8	33.4

Country satisfaction level with timeliness of seeds: Satisfaction levels with timeliness of seeds are shown in Table 11. Although the satisfaction level on average was high at 85 percent of respondents either satisfied or highly satisfied with timeliness of the seeds, there was a moderate level of dissatisfaction (41%) in Samoa and 7 and 6 percent in FSM and Palau respectively. In the Marshall Islands, 6 percent of respondents were highly dissatisfied. It is understood that during the time of the assessment, some countries were yet to receive the project seeds. Timeliness was the parameter of main concern reflected on the level of satisfaction expressed by respondents as being indifferent and dissatisfied in some countries in the SAP Subregion. The regional average for dissatisfied and indifferent recipients of 7 percent and 6.9 percent respectively may not seem significant, however in the case of Samoa where the sum total of their two parameters is 58 percent; it is a cause for concern.

Table 11: Satisfaction level with timeliness of seeds in each country

Country	% Highly dissatisfied	% Dissatisfied	% Indifferent	% Satisfied	% Highly Satisfied
Cook Islands	0	0	0	56	44
Fiji	0	0	0	75	25
FSM	0	7	0	53	40
RMI	6	0	6	53	35
Palau	0	6	21	26	47
PNG	0	0	2	35	63
Samoa	0	41	17	17	25
Vanuatu	0	4	9	35	52
Average all countries	0.8	7.0	6.9	43.8	41.4

Country satisfaction levels with appropriateness of seeds: Satisfaction levels with appropriateness of seeds in each country are shown in Table 12. A high level of satisfaction is shown for appropriateness of seed, on average 44 and 52 percent of respondents were either satisfied or highly satisfied respectively. The remaining 4 percent of recipients were indifferent with the appropriateness of seeds, the majority of these from Vanuatu. No respondent was dissatisfied with appropriateness of seeds while all (100%) respondents in Tuvalu were highly satisfied.

Table 12: Satisfaction level with appropriateness of seeds for each country

Country	% Highly dissatisfied	% Dissatisfied	% Indifferent	% Satisfied	% Highly Satisfied
Fiji	0	0	0	75	25
FSM	0	0	0	60	40
RMI	0	0	6	60	34
Palau	0	0	0	37	63
PNG	0	2	2	50	46
Samoa	0	0	0	50	50
Tuvalu	0	0	0	0	100
Vanuatu	0	0	22	22	56
Average all countries	0	0.4	3.8	44.0	51.8

Country satisfaction levels with quality of seeds: Satisfaction levels with the quality of seeds in each country are shown in Table 13. A high level of satisfaction is shown for quality of seeds, on average 39 and 54 percent of respondents were either satisfied or highly satisfied respectively. The remaining 7 percent were indifferent with the quality of seeds, the majority of these from Samoa, FSM and RMI. No respondent was dissatisfied with the quality of seeds while all (100%) respondents in Tuvalu were satisfied.

Table 13: Satisfaction level with quality of seeds in each country

Country	% Highly dissatisfied	% Dissatisfied	% Indifferent	% Satisfied	% Highly Satisfied
Cook Islands	0	0	0	56	44
FSM	0	0	14	46	40
RMI	0	0	12	53	35
Niue	0	0	0	10	90
Palau	0	0	0	11	89
PNG	0	0	2	37	61
Samoa	0	0	33	17	50
Tuvalu	0	0	0	100	0
Vanuatu	0	0	5	23	72
Average all countries	0	0	7	39	54

Fertilizer

Overall satisfaction levels: Although fertilizer was distributed in Cook Is, Fiji, Marshall Is, Nauru, Niue, PNG, Samoa, Solomon Is and Tuvalu, data for analysis of the satisfaction levels was available only from Fiji and the Solomon Islands; thus this analysis is based only on this data. The aggregate level of satisfaction from fertilizer distributed trough the ISFP projects under the parameters of receiving fertilizer, the timeliness of its distribution, its appropriateness and quality is presented in Table 14. A high level of satisfaction is expressed on all parameters; in most cases about 80 percent of respondents were either satisfied or highly satisfied with the fertilizer. The average of respondents in the category of being indifferent (19%) to fertilizer was the highest of all the inputs.

Table 14: Percentage satisfaction level with fertilizer in SAP Subregion.

Parameters	Receiving	Timeliness	Appropriateness	Quality	Average
Satisfaction level					
Highly dissatisfied	0	0	0	0	0
Dissatisfied	0	0	0	0	0
Indifferent	18.5	18	18.5	21	19
Satisfied	51	46	59.5	47	51
Highly satisfied	30.5	36	22	32	30
Total	100	100	100	100	100

Country satisfaction levels with receiving fertilizer: Satisfaction levels with receiving fertilizer by country are shown in Table 15. A high level of satisfaction is shown for receiving fertilizer, on average 51 and 30 percent of respondents were either satisfied or highly satisfied respectively. In Fiji 86 percent were satisfied and the remaining 14 percent were highly satisfied, whereas in the Solomon Islands, more than a third (37%) of respondents indicated they were indifferent with receiving fertilizer.

Table 15: Satisfaction level with <u>receiving</u> fertilizer in each country

Country	% Highly dissatisfied	% Dissatisfied	% Indifferent	% Satisfied	% Highly Satisfied
Fiji	0	0	0	86	14
Solomon Islands	0	0	37	16	47
Average all countries	0	0	19	51	30

Country satisfaction levels with timeliness of fertilizer: Satisfaction levels with timeliness of fertilizer at country level are shown in Table 16. In Fiji a high level of satisfaction with timeliness was reported where all respondents were either satisfied (81%) or highly satisfied (19%). Fertilizer was used in growing rice in Fiji; and because rice is continuously grown, fertilizer was used on rice whenever it was distributed. In the Solomon Islands, 36 percent of respondents were indifferent regarding the timeliness of the fertilizer. This relatively high level of indifference amongst respondents in the Solomon Islands was due not only to the fertilizer being late for their vegetable planting season but also due to the lateness of the vegetable seeds which had yet to be distributed at the time of the impact assessment. Beneficiaries stored the fertilizer for future use when planting the ISFP project vegetable seeds.

Table 16: Satisfaction level with timeliness of fertilizer in each country

Country	% Highly dissatisfied	% Dissatisfied	% Indifferent	% Satisfied	% Highly Satisfied
Fiji	0	0	0	81	19
Solomon Islands	0	0	36	11	53
Average all countries	0	0	18	46	36

Country satisfaction levels with appropriateness of fertilizer: Satisfaction levels with appropriateness of fertilizer in each country are shown in Table 17. All respondents in Fiji were either satisfied (93%) or highly satisfied (7%) with the appropriateness of the input. In Solomon Islands, 37 percent of respondents were indifferent with the appropriateness of the fertilizer. This is related to a lack of understanding of fertilizers and the differences between the types of fertilizers.

Table 17: Satisfaction level with appropriateness of fertilizers

Country	% Highly dissatisfied	% Dissatisfied	% Indifferent	% Satisfied	% Highly Satisfied
Fiji	0	0	0	93	7
Solomon Islands	0	0	37	26	37
All countries	0	0	18.5	59.5	22

Country satisfaction levels with quality of fertilizer: Satisfaction levels with the quality of fertilizer in each country are shown in Table 18. A high level of satisfaction is shown for quality of fertilizer in Fiji where 83 percent were satisfied and the remaining 17 percent were highly satisfied with the quality of the fertilizer. Rice farmers in Fiji are versed in the benefits of using fertilizers and consider the types of fertilizer they received as appropriate and of good quality for their crops. In the Solomon Islands, 42 percent of respondents were indifferent with the quality of the fertilizer, which again is related to their lack of understanding between the types of fertilizer.

Table 18: Satisfaction level with quality of fertilizers

Country	% Highly dissatisfied	% Dissatisfied	% Indifferent	% Satisfied	% Highly Satisfied
Fiji	0	0	0	83	17
Solomon Islands	0	0	42	11	47
All countries	0	0	21	47	32

Other Inputs

Overall satisfaction levels: Although this input category of 'other inputs' includes chemicals, livestock and stock feed, stock fencing/housing materials, garden tools and agricultural equipments and machinery that were each distributed to some covering all the 14 member countries of the FAO SAP Subregion, data was available only for Papua New Guinea, Solomon Islands, Tonga and Vanuatu, thus this section of the report refers only to those four countries. The aggregate level of satisfaction from other inputs distributed through the ISFP projects to these member countries in the SAP Subregion, under the various parameters is presented in Table 19. A high level of satisfaction is expressed on all parameters where the combined satisfaction levels of 'satisfied and highly satisfied' averaged 86 percent ranging from 69 percent for timeliness to 98 percent for receiving the other inputs. With regards to timeliness of the other inputs, a relatively high average (23%) of respondents indicated they were dissatisfied. This dissatisfaction level was a result compiled from 90 percent of respondents from PNG.

Table 19: Average satisfaction level with other inputs in SAP Subregion

Parameters	Receiving	Timeliness	Appropriateness	Quality	Average
Satisfaction level					
Highly dissatisfied	0	0	0	0	0
Dissatisfied	0	23	2	0	6
Indifferent	2	8	9	13	8
Satisfied	22	18	37	27	26
Highly satisfied	76	51	52	60	60
Total	100	100	100	100	100

Country satisfaction levels with receiving other inputs: Satisfaction levels with receiving other inputs by country are shown in Table 20. A high level of satisfaction is shown for receiving other inputs. On average 22 and 76 percent of respondents were either satisfied or highly satisfied respectively. The remaining 2 percent were indifferent about receiving 'other inputs'. All respondents (100%) in Tonga and Vanuatu were either satisfied or highly satisfied receiving 'other inputs'. No respondent was dissatisfied with receiving 'other inputs' in all the four countries where data was reported. Other inputs in the case of Solomon Islands and Tonga included improved breeding stock of pigs, building materials for pig-pens and stock feed. The breeding stocks were welcomed by recipients as a means to improve their inbred local stock. In the case of PNG and Vanuatu, other inputs included rice processing machinery distributed to local government agencies close to farms, so farmers no longer have to cart their harvested rice long distances for processing.

Table 20: Satisfaction level with receiving other inputs

Country	% Highly dissatisfied	% Dissatisfied	% Indifferent	% Satisfied	% Highly Satisfied
PNG	0	0	2	4	94
Solomon Islands	0	0	5	15	80
Tonga	0	0	0	2	98
Vanuatu	0	0	0	67	33
All countries	0	0	2	22	76

Country satisfaction levels with timeliness of 'other inputs' distribution: Satisfaction levels with timeliness of other inputs at the country level is shown in Table 21. A high level of recipients who were dissatisfied with the timeliness of the 'other inputs' was reported from PNG, whereby 90 percent were dissatisfied and the remaining 10 percent were indifferent. The concern with timeliness was related to some of the equipment, such as the Power Tillers received late in the project and after the planting season. In Vanuatu 22 percent of respondents were indifferent with the timeliness of the 'other inputs'. All respondents (100%) in Tonga and Solomon Islands were either satisfied or highly satisfied with timeliness of the 'other inputs'. Although in the Solomon Islands, the distribution of the 'other inputs' (pigs) remained ongoing during the period of the survey, yet recipients did not mind the delays as the input was something they had wanted for some time.

Table 21: Satisfaction level with timeliness of other inputs

Country	% Highly dissatisfied	% Dissatisfied	% Indifferent	% Satisfied	% Highly Satisfied
PNG	0	90	10	0	0
Solomon Islands	0	0	0	24	76
Tonga	0	0	0	2	98
Vanuatu	0	0	22	48	30
All countries	0	23	8	18	51

Country satisfaction levels with appropriateness of other inputs: Satisfaction levels with appropriateness of 'other inputs' for each country is shown in Table 22. All respondents in Tonga were either satisfied (4%) or highly satisfied (96%) with the appropriateness of the input. The combined percentage of those satisfied and those highly satisfied with the appropriateness of the 'other inputs' were: 82 percent in PNG; 95 percent for Solomon Islands; and 79 percent for Vanuatu. Those who were dissatisfied (7%) or indifferent (14%) with 'other inputs' in Vanuatu, indicated that varieties of root crop planting materials distributed were either late for their cropping season and/or not suitable for their cropping system. In PNG 18 percent were indifferent to the appropriateness of 'other inputs', which was due to the machinery operational difficulties. This included the power tiller being slow and hard to operate and also a problem surrounding transporting it to individual farms as this equipment is kept at a central location so every farmer could access it.

Table 22: Satisfaction level with appropriateness of other inputs

Country	% Highly dissatisfied	% Dissatisfied	% Indifferent	% Satisfied	% Highly Satisfied
PNG	0	0	18	64	18
Solomon Islands	0	0	5	29	66
Tonga	0	0	0	4	96
Vanuatu	0	7	14	50	29
All countries	0	2	9	37	52

Country satisfaction levels with quality of other inputs: Satisfaction levels with the quality of 'other inputs' for each country is shown in Table 23. A high level of satisfaction is shown for quality of 'other inputs' in Tonga where 100 percent recipients indicated they were either satisfied or highly satisfied. The satisfaction levels for the quality of 'other inputs' is similar to that suggested for the appropriateness parameter as described above. A moderate level (28%) of indifferent recipients with quality of 'other inputs' in Vanuatu indicated that root crop planting material, which was a major component of 'other inputs' in that country was complementary rather than critical for their operation.

Table 23: Satisfaction level with quality of other inputs

Country	% Highly dissatisfied	% Dissatisfied	% Indifferent	% Satisfied	% Highly Satisfied
PNG	0	0	17	58	25
Solomon Islands	0	0	5	29	66
Tonga	0	0	0	2	98
Vanuatu	0	0	28	17	49
All countries	0	0	13	27	60

2.3.4 Perceived impacts of TCP on beneficiary households

The impact of the assistance from the ISFP projects is presented in this section which considers the beneficiaries' perception levels regarding the deterioration or improvement on their crop production, accessibility to food and ability to sell excess produce. The percentage changes in the beneficiaries farming outputs are shown in Table 24. In general the perceived impacts were either unchanged (30%), improved a little (35%) or improved a lot (34%). The largest change was identified in the beneficiaries' crop production whereby 79 percent reported improvements while 21 percent indicated their situation was unchanged. With regards to accessibility to food, 59 percent reported improvements while 68 percent indicated they were able to sell more produce. These moderate increases in crop production, improved accessibility to food and ability to sell more produce are clear indicators which can be attributed to the success of the ISFP project. It can indicate that the main objective of improving food security and encouraging the ability to earn an income amongst vulnerable communities in the SAP Subregion.

Table 24: Average percentage of perceived impacts on beneficiary households

Perceived impacts	On crop Production	On Accessibility to food	On Ability to sell	Average
Deteriorated a lot	0	0	0	0
Deteriorated a little	0	2	1	1
Unchanged	21	39	31	30
Improved a little	49	23	32	35
Improved a lot	30	36	36	34
Total	100	100	100	100

Perceived impact on crop production at country level: The impact of the project on crop production is shown in Table 25. The beneficiaries whose situation was improved (which for the purpose of this discussion, is the sum of those that improved a little and those who were improved a lot) on average was high at 79 percent and ranged from zero in Niue, where all respondents responses suggested no change, to 9 countries (including Cook Islands, Fiji, FSM, Marshall Islands, PNG, Samoa, Solomon Islands, Tuvalu and Vanuatu) where 80 percent or more respondents reported improved crop production. However, on average 21 percent of respondents perceived the project had no impact on their crop production.

Table 25: Perceived impacts of TCP project on <u>crop production</u> of beneficiary households

Country	Deteriorated a lot (%)	Deteriorated a little (%)	Unchanged (%)	Improved a little (%)	Improved a lot
Cook Islands	0	0	0	100	0
Fiji	0	0	6	41	53
FSM	0	0	12	41	47
Kiribati	0	0	47	53	0
Marshall Islands	0	0	19	26	55
Nauru	0	0	39	61	0
Niue	0	0	100	0	0
Palau	0	0	21	26	53
PNG	0	1	3	23	73
Samoa	0	0	3	55	42
Solomon Islands	0	0	0	42	58
Tuvalu	0	0	0	100	0
Vanuatu	0	0	20	72	8
All countries	0	0	21	49	30

Perceived impact on food accessibility at country level: The percentage of perceived impact of the ISFP project on food accessibility of respondents for each country is shown in Table 26. With regards to the perceived impact on accessibility to food, an average of 39 percent of respondents in the region perceived their situation as unchanged, 23 percent reported little improvement while 36 percent stated a lot of improvement. In some countries such as Cook Islands, Nauru and Niue, all respondents (100%) perceived no impact on their food accessibility thus their situation was considered to be unchanged with the assistance. Kiribati and Tuvalu also showed a high percentage at 74 and 81 percent respectively of beneficiaries whose food accessibility remained unchanged. Those with improved food accessibility ranged from a low 19 percent in Tuvalu to 80 percent or more in Fiji, FSM, Marshall Islands, Palau, PNG, Samoa and Solomon Islands.

Table 26: 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 (%)
Cook Islands	0	0	100	0	0
Fiji	0	11	7	19	63
FSM	0	0	6	38	56
Kiribati	0	0	74	26	0
Marshall Islands	0	0	4	39	57
Nauru	0	0	100	0	0
Niue	0	0	100	0	0
Palau	0	0	16	21	63
PNG	0	0	0	20	80
Samoa	0	11	7	30	52
Solomon Islands	0	0	0	24	76
Tuvalu	0	0	81	19	0
Vanuatu	0	0	12	70	18
All countries	0	2	39	23	36

Perceived impact on ability to sell more at country level: The percentage of perceived impact of the ISFP project on ability of respondents for each country to sell more produce is shown in Table 27. The perceived impact on ability to sell more produce showed an average 31 percent of respondents whose situation remained unchanged, 32 percent reported little improvement while 36 percent stated a lot of improvement. In the Cook Islands all respondents (100%), Nauru 86 percent of respondents and Tuvalu 82 percent of respondents were unable to sell more produce despite the supply of free inputs and a perceived increase in crop production (Table 25). It is suggested that this is partly due to limited market outlets in these countries. In the Cook Islands, although there is a market outlet in the capital Rarotonga, it is far from the project sites on the islands of Aitutaki and Mangaia. In Fiji, FSM, Marshall Island, PNG, Samoa, Solomon Islands and Vanuatu there was a reported improvement on the ability to sell more produce with 80 percent or more of respondents indicating an improvement. All respondents (100%) in Samoa and the Solomon Islands were able to sell more produce due to the assistance.

Table 27: Perceived impacts of TCP project on ability to sell more at country level.

Country	Deteriorated a lot (%)	Deteriorated a little (%)	Unchanged (%)	Improved a little (%)	Improved a lot
Cook Islands	0	0	100	0	0
Fiji	0	5	14	25	56
FSM	0	0	11	33	56
Marshall Islands	0	0	11	50	39
Nauru	0	0	86	14	0
Palau	0	0	26	26	48
PNG	0	0	12	49	39
Samoa	0	0	0	45	55
Solomon Islands	0	0	0	14	86
Tuvalu	0	0	82	18	0
Vanuatu	0	0	15	72	13
Average all countries	0	1	31	32	36

Perceived impact of TCP project on animal production at country level: The impact of the project on animal production is shown in Table 28. Seven countries received livestock and stock feed through the project. Data was reported from the six countries listed in Table 28, while no data was available for the Cook Islands. On average, 64 percent reported no change on their animal production while 30 percent showed little improvement. The high level of indicated no change in the situation, ranging from 38 percent in Tuvalu to 100 percent in Tonga, is due to lateness in the distribution of the livestock input under the project. Subsequently the impacts on beneficiaries' production are yet to be realised. In the Solomon Islands, a high level of respondents (71 percent) indicated little improvement while the remaining 29 percent, a lot of improvement. While the distribution of livestock was ongoing in Solomon Islands at the time of the survey, respondents in the surveyed area had received their livestock, thus the high level of improvements reported. Respondents in Tuvalu (62%) also reported improvements on animal production; local chicken was available for early distribution through the project.

Table 28: 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 (%)
Kiribati	0	2	89	9	0
Nauru	0	0	73	27	0
Niue	0	0	88	10	2
Solomon Islands	0	0	0	71	29
Tonga	0	0	100	0	0
Tuvalu	0	0	38	62	0
Average all countries	0	1	64	30	5

Perceived impact of TCP project on animal health at country level: The perceived impact of the project on animal health is shown in Table 29. On average, 34 percent of respondents perceived their animals' health status was unchanged while 59 percent reported it to have improved a little and 5 percent improved a lot. At the country level Solomon Islands perceived the highest improvement with 71 percent improved a little and 29 percent at the improved a lot level; countries reporting improved a little include Niue (100%), Nauru (91%), Tuvalu (73%) and Kiribati (20%). Countries that perceived no change on animal health include Tonga (100%), Kiribati (73%) and Tuvalu (21%). The perceived impact on animal health may in most cases be a direct reaction to receiving healthier improved breeds of livestock.

Table 29: 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 (%)
Kiribati	0	7	73	20	0
Nauru	0	0	9	91	0
Niue	0	0	0	100	0
Solomon Islands	0	0	0	71	29
Tonga	0	0	100	0	0
Tuvalu	0	6	21	73	0
Average all countries	0	2	34	59	5

3. ANALYSIS OF INPUT DISTRIBUTION SYSTEMS OF TCP PROJECTS

3.1 Main types of input distribution systems used in the Subregion

A range of distribution systems were used in the project and these varied significantly across the countries, ranging from fully controlled by the National government to high level of control by NGOs and the private sector. The main differences between distribution systems utilised were in the level of involvement of the various stakeholders, including government agencies, politicians, FAO and its national agent, NGOs, other assistance projects, local governments and communities. Distribution systems are broadly grouped into (i) groups or individuals distribution (ii) equal quantity to all beneficiaries or quantity differed based on some criteria (iii) single input distribution or multiple inputs distribution (iv) government and institutional distribution compared to NGO and private sector distribution (v) political distribution or need based (vi) competitive bidding in procurement of inputs or direct procurement of inputs. The choice of mechanism for input distribution has great impacted upon the efficiency and effectiveness of the distribution system, the coverage of target communities and the satisfaction level of the recipients and ultimately the perceived impacts of the assistance. Each of the distribution systems have their own strengths and weaknesses as well as particular situation where application is most appropriate. For example, in single island countries such as Niue and Nauru, a government (Ministry of Agriculture) distribution may be the most appropriate, while in others such as in the Solomon Islands and Vanuatu, NGOs have better connections and wide reach to remote communities, A combination of the different systems need to be worked out for a particular locale or situation, such as combinations of groups and individuals distribution to various degrees seemed to be appropriate in most situations. The diversity of the SAP Subregion in culture, land mass, population, resources etc. certainly will be hard to fit into a single system. The following discussion links to the advantages and disadvantages of each distribution systems:

Groups or individuals distribution: In most countries, inputs were distributed to individual beneficiaries, however in other cases; some of the inputs were distributed to a group instead of to the individual beneficiaries. In some countries it was a political decision to supply the project inputs to everyone, for example, garden tools in Nauru and Niue, as there were not enough garden tools for everyone and farming is mostly a part time occupation in these small countries; the tools were given to the community to control and individuals could borrow these tools when needed. The system was suitable for these small communities spreading the use to all members. In the case of Solomon Islands, garden tools were distributed to individuals considered essential as borrowing is not practical as farming is a full time occupation and distances between farms could be an hour or more walking distance. Large equipment such as rice huller/polisher were also distributed to communities to own and control and beneficiaries have access to these when needed.

Equal quantity to all beneficiaries or quantity differed based on set criteria: The distribution system of equal and varied quantity of inputs to households was practised within and across countries. In Vanuatu, the distribution of root crop planting material was based on beneficiary's needs both for types and quantity; while some needed only taro planting materials others required taro as well as yams. Most countries that received vegetable seeds repackaged these seeds into appropriate sizes for beneficiaries. During distribution, beneficiaries would request only certain type of seeds and not the others. Garden tools in the Solomon Islands were distributed only to victims of the 2009 floods, while other inputs were distributed in other areas. This distribution system practised in most cases was found to be essential and appropriate under those local conditions.

Single input distribution or multiple inputs distribution: Multiple input distribution was the more common method in all countries. Some of the inputs were complimentary to each other. For example, rice seed was distributed together with fertilizer in Fiji, PNG and Vanuatu; chickens and pigs were usually distributed together with stock feed and stock shelter building materials, although in other cases such as with pigs in some parts of the Solomon Islands, were distributed without the associated feed and shelter materials.

Government distribution compared to NGO distribution: The ISFP project originally planned that NGOs will implement the distribution of inputs at the national level. This arrangement was successful in most cases however, in some countries distribution was carried out by government institutions. It is established that there is higher efficiency in public distribution system when operated by NGOs and private sector. Distribution in the SAP Subregion was conducted by both government institutions and NGOs although the overall project management was control by government institutions. In some countries such as Palau, Niue and Kiribati, the national and local government organisations not only distributed the inputs but also selected beneficiaries.

Political distribution or need based distribution: Distribution of some inputs was politically affected in Fiji, FSM, Kiribati, PNG, Tonga, Tuvalu and Vanuatu. In most cases some of the inputs were directed to be distributed nation wide which resulted in inputs spread too thinly to make a strong impact. In some countries distribution even missed the target of vulnerable households.

Competitive bidding in procurement of inputs or direct procurement of inputs: Competitive bidding is a globally accepted fair practice of procurement as against direct purchase from the market which is open to financial mismanagement. Competitive bidding however is a lengthy process and this often led to long delays which were evident on many occasions in the ISFP projects' procurement of inputs. FAO has established procedures for procurement of supplies. The 'no advances permitted' part of the system was criticised for being too rigid for local conditions of the Subregion, where local businesses do not have the capacity to supply sizeable quantity of goods before payment. This issue was raised in Fiji, PNG, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. This was regarded as the main cause of delays in the procurement of inputs for the projects.

3.2 Effectiveness of input distribution systems

3.2.1 Knowledge of the agriculture inputs received and willingness to adopt:

The awareness and knowledge of the agricultural inputs received, refer to the period just before the arrival of the distributed inputs to the beneficiaries; it also refers to whether the beneficiaries had previously used the inputs distributed through the project, if the beneficiaries had previously had training on the use of that input and if the input is available locally. The willingness to adopt refers to whether the beneficiaries are prepared to purchase the input if it was available locally.

Average aggregate knowledge of inputs was dependent on whether the beneficiaries had previously used and/or been trained on how to use the inputs; similarly, their willingness to adopt is to a large extent affected by the local availability of the inputs and the willingness of the beneficiaries to purchase them. The aggregate knowledge of inputs for each country was therefore taken as the average of whether the beneficiaries had previously used and/or trained on the use of all the inputs. The willingness to adopt was similarly calculated as the average of whether the inputs were locally available and the willingness of beneficiaries to purchase them.

The knowledge of input and willingness to adopt levels are shown in Table 30. The knowledge of inputs ranged from a low 27 percent in Palau and 29 percent in PNG to a very high level of 100 percent in Cook Islands, Niue and Tonga where everyone had previously used or had training in the use of the project inputs. The regional average for knowledge of the inputs is considered moderately high at 68 percent. It is known that vegetables (seeds) and fertilizer are commonly used in most countries in the region and is rice (seed) in the countries where it was provided. The exception was in Vanuatu where rice is a new crop in the project area. Other inputs included; garden tools which are owned by all farmers; livestock such as chicken and pigs are also common in all countries. Further inputs included rice equipment and machinery with a low level of familiarity experienced amongst most beneficiary communities.

The willingness to adopt as reflected by 'beneficiaries' willingness to purchase' the inputs if it was locally available was lower at an average 53 percent than the level of knowledge of the inputs (68%). There was a

broad range of 'willingness to adopt'; from no one willing to adopt in Tuvalu and only 5 percent willing to adopt in Kiribati, whereas in Tonga everyone was willing to buy the inputs. In the case of Tuvalu and Kiribati, it is not the only issue that inputs are not available especially in outer atolls, but also that the input may be too expensive for farmers. In Tonga on the other hand, the inputs are widely available and prices are manageable for farmers'. The remainder of the countries fell within the two extremes cases of Tuvalu and Tonga.

Table 30: Average aggregate knowledge of inputs and willingness to adopt

Countries	Knowledge of inputs	Willingness to adopt	Country average		
Cook Islands	100	72	86		
Fiji	73	38	56		
FSM	59	74	67		
Kiribati	91	5	48		
Marshall Islands	58	63	61		
Nauru	78	10	44		
Niue	100	11	56		
Palau	27	71	49		
PNG	29	77	53		
Samoa	74	100	87		
Solomon Islands	62	76	69		
Tonga	100	100	100		
Tuvalu	63	0	32		
Vanuatu	42	48	45		
Average all countries	68	53	61		

Source: compiled and computed from Tables 5, 6 and 7

3.2.2 Satisfaction level with inputs received:

Beneficiaries satisfaction levels differed between the inputs distributed (Table 31). Table 31 shows the average satisfaction levels for each of the inputs. Values presented indicate the average of respondents views on the four parameters: receiving the inputs; its timeliness; appropriateness; and quality. This was assessed under a five point scale ranging from highly dissatisfied, dissatisfied, indifferent, satisfied to highly satisfied with regards to particular inputs they received. Highest satisfaction level is expressed for seed where a combined value for satisfied and highly satisfied respondents was 93 percent with fertilizer and other inputs slightly lower at 81 and 86 percent respectively. Very few respondents expressed any dissatisfaction (2.8%) with the inputs and the majority of the dissatisfaction was related to timeliness or the lateness of the inputs. The expressed levels of satisfaction from the respondents provide important feedback for planners and implementing agencies for designing future interventions of this nature.

Table 31: Average satisfaction level for receiving, timeliness, appropriateness and quality of inputs

	Percentage satisfaction with inputs received									
Satisfaction level	Seeds	Fertilizer	Other inputs	Average						
Highly dissatisfied	0.2	0	0	0.1						
Dissatisfied	2.0	0	6	2.7						
Indifferent	4.8	19	8	10.6						
Satisfied	48	51	26	41.7						
Highly satisfied	45	30	60	45.0						
	100	100	100	100.1						

Source: compiled and computed from Tables 4, 14 and 19

3.2.3 Perceived impacts of TCP on beneficiary households

The computed perceived impact of the assistance is presented in Table 32. Calculated values are based on beneficiaries' perceived impacts of the TCP presented in Tables 25 (crop production), 26 (accessibility to food), 27 (ability to sell produce) and 28 (animal production). The weighted value was calculated using values of zero (0) where the beneficiary perceived their situation 'unchanged', a value of plus one (1) for each percentage of 'improvements' and minus one (-1) where the situation 'deteriorated'. The aggregate of possible values range between minus 100 (where all beneficiaries considered their situation deteriorated) and plus 100 (where all beneficiaries considered improvements) and a value of zero (0) where there were no changes in the beneficiaries' situation.

The highest perceived impact was recorded for Solomon Islands where the three indicators of impact: namely crop production; accessibility to food; and ability to sell produce scored a perfect 100 percent. The lowest impact was calculated for Niue scoring 4 percent. High impact values of more than 80 percent were recorded for Fiji, FSM, Marshall Islands, Palau, Samoa and Vanuatu. Average perceived impact was highest on crop production 79.5 percent while ability to sell produce was 66.6 percent and accessibility to food was 57.6 percent; the lowest impact was calculated for livestock production at 34.7 percent. The relatively high values indicated for perceived impacts is a clear attribution to the success of the ISFP project achieving its main objective of improving food security and ability to earn an income amongst those vulnerable communities in the SAP Subregion.

Table 32: Perceived impacts of TCPs on beneficiary households at country level

_	Weighted value of perceived impacts of TCPs										
Country	Crop production	Food accessibility	Ability to sell	Livestock production	Average						
Cook Islands	100	0	0	-	33.3						
Fiji	94	71	76	-	80.3						
FSM	88	94	89	-	90.3						
Kiribati	54	26	-	7	29						
Marshall Islands	82	96	89	-	89						
Nauru	62	0	14	27	26						
Niue	0	0	-	12	4						
Palau	80	84	74	100	84.5						
PNG	95	100	88	0	70.8						
Samoa	98	71	100	62	82.8						
Solomon Islands	100	100	100	-	100						
Tuvalu	100	19	18	-	45.7						
Vanuatu	80	88	85	-	84.3						
Average all countries	79.5	57.6	66.6	34.7	63.1						

Source: compiled and computed from Tables 25, 26, 27, and 28

3.2.4 Constraints of input distribution systems

Constraints

- Inefficient and long delays in getting supplies from overseas and to farmers.
- The lengthy and time consuming system of procurement of supplies.
- Poor communication between the parties (SAP, implementing agencies and input suppliers).
- Timeframe of one year for the project was too short.
- Local businesses are often left holding goods ordered by government officials for TCP projects.

• Farmers had little choice with timing and type of inputs they were given.

Suggestions for improvement

- Enable some flexibility in the procedures for sourcing and payment of materials.
- Government officials must work closely with implementation agencies.
- Improve communication between all parties.
- The project should be sensitive to local needs.
- Address other related issues such as processing and marketing.

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

The guidelines for FAO support recognised the need to integrate the ISFP production assistance projects with national strategies and with the existing partnership arrangements in member countries. FAO has made an attempt to follow a coherent strategy in all the countries it assisted. The launched Initiative for Soaring Food Prices (ISFP) project in December 2007 was an effort to cushion the impacts of the world wide hike on food prices particularly on the poorer and more vulnerable communities. The initiative was aimed at increasing food production and to encourage increased earnings during the cropping season 2008/2009 through supplying basic agricultural inputs to vulnerable farmers. In the Pacific, FAO SAP revisited country priorities under its then ongoing Support to the Regional Programme for Food Security (RPFS) for implementation of the ISFP.

National government reactions to the soaring food prices varied greatly amongst the Pacific FAO member countries. While there was no reaction from government in countries such as the Cook Islands and Papua New Guinea; some countries such as the Marshall Islands introduced initiatives such as the "Youth Food Initiative". This project focused on providing youth with life skills training, and promoted the growing and consumption of local foods. The Palau government supported development partners such as the ROC mission project to set up Demonstration Farms and encouraged farmers to grow their own food crops. The Federated States of Micronesia in Pohnpei encouraged and supported their "Go local" food production campaign to reduce dependence on imported foods. Other countries such as Fiji, Vanuatu and the Solomon Islands, prioritized development of rice to reduce the dependency on imported rice and directed the ISFP project towards rice development.

The integration of the ISFP TCP projects into the overall government responses to soaring food prices in countries in the SAP Subregion as well as initiatives commenced through the TCPs which governments subsequently took over and continued are briefly discussed.

Cook Islands

The ISFP assistance was timely and supported the government effort to improve nutrition in the country. The supply of inputs such as vegetable seed to outer islands improved the diet of those remote communities and may encourage continuity of growing vegetables.

Fiji

Rice imports to Fiji have increased significantly since the decline of the national Rewa Rice Project. The ISFP assistance was directed towards assisting rice production and the government efforts to revitalise the rice industry.

FSM

The ISFP project was welcomed at the Federated States of Micronesia in Pohnpei to support and encourage their "Go local" food production campaign which aims to reduce dependence on imported food. The "Go local" campaign has been ongoing for the past 5 years.

Kiribati

The ISFP project provided much needed planting materials of local food crops and some livestock, assisting the government in its ongoing programs to increase food security and improve nutrition throughout the country.

Marshall Islands

The RMI government responded to the soaring food crisis by establishing a "Youth Food Initiative" on Majuro atoll which was supported and funded by the RMI government. This project focused on providing youth with life skills training, and encouraging healthy lifestyles, balanced healthy diets, and promoting the growing and consumption of local foods. The ISFP project assisted with much needed agriculture inputs, with some of these inputs distributed to members of the "Youth Food Initiative" program.

Nauru

The country relies heavily on imported food to provide about 90 percent of its food needs. Government strategies for food security and improved nutrition include encouraging local food production. The ISFP project as well as other TCPs provided needed planting materials, garden tools and technical advice supporting the government strategies to improve food security.

Palau

The Palau government recognising the high cost of food encourage local production to reduce reliance on imports. It has collaborated with development partners such as the Republic of China (ROC) mission project to set up Demonstration Farms to encourage farmers to grow their own food crops. The ISFP project assisted with much needed agriculture inputs distributed to vulnerable households.

Papua New Guinea

It is estimated that 30 percent of the population is food insecure. Government in efforts to improve food security and reduce food imports, encourage increased local rice production as part of its strategies. The ISFP assistance was directed towards assisting rice production and the government's efforts to improve the rice industry.

Samoa

The ISFP project fits into the government's strategies to increase food security and improve nutrition of the population. The selection of beneficiaries and distribution of inputs was nationwide thus broadly reaching the target vulnerable households.

Solomon Islands

The country relies heavily on imported food including rice for its food needs especially in urban areas. Government in efforts to improve food security and reduce food imports, encourages increased local rice production as part of its strategies. Part of the ISFP assistance was directed towards assisting rice production and the government's efforts to improve the rice industry.

Tonga

Tonga relies heavily on imports for its meat needs, and consequently the Ministry of Agriculture prioritises improved development of the livestock industry. The ISFP TCP was directed towards this need and priority and stocks of pigs for breeding and pig pens were distributed through the assistance. The Livestock Division of the Ministry monitor and assist the development of the industry.

Tuvalu

Tuvalu does not have good soil for cropping and thus concentrate on very intensive compost based agriculture to grow crops. The country's food needs depend heavily on fishing, a very limited range of crops and a significant level of imported food. All assistance in agriculture is welcomed in an effort to increase local food production. The TCP distributed vegetable seed, garden tools and chicken throughout the country.

Vanuatu

The country imports a lot of rice and the people have taken up rice as a staple even in remote areas. Government in efforts to improve food security and reduce food imports, encourage increases in local rice production as part of its strategies. Part of the ISFP assistance was directed towards assisting rice production and the government's efforts to improve the rice industry.

5. CONCLUSIONS AND RECOMMENDATIONS:

5.1 Conclusions

The soaring global food prices from 2006 to 2008, jeopardized the achievement of the Millennium Development Goal which targets reducing hunger and poverty and at a country level threatens national food security and food sovereignty, while at the household level, hunger and malnutrition thrives especially amongst those poorer and more vulnerable in the community. The FAO Initiative on Soaring Food Prices (ISFP) project which supports agriculture production through provision of essential inputs to vulnerable households was gratefully welcomed by all wherever its distribution reached including the beneficiaries in the SAP Subregion.

The assistance in most cases and in most countries was able to reach the poor, the vulnerable and marginalised households through using appropriate criteria. It is however regrettable the assistance could not reach certain areas and communities due to a range of reasons including limited resources, high costs of transportation and the short duration of the project.

Procurement of inputs was in most cases successful although this was challenging in some cases. The main concern was with timing which led to some failure to synchronize distribution of certain complementary inputs such as chicken and chicken feed, seeds and or equipment with the planting season etc. The SAP Subregion consists mainly of water with small islands nations which are scattered over huge expanses of ocean. With this geographical distribution constraint, it is obvious that costs of transportation and communication are major challenges to providing assistance of this nature that targets the poor and vulnerable.

A range of distribution systems were adopted in different countries. Each adopted system in each country was considered the most appropriate under their respective situation and conditions. All variants of distribution systems had strengths and weaknesses which came out during implementation and assessment; from the beneficiaries' perspective, these could potentially have influenced their satisfaction levels and perceived impacts of the assistance.

Implementation of project activities were considered successful in all countries of the SAP Subregion. High levels of satisfaction were recorded for receiving inputs, timeliness, appropriateness and quality; also for distribution of inputs, and perceived impacts from respondents in all countries. Positive impacts were also reported for increased production, improved accessibility to food and improved ability to sell agricultural produce. There were some concerns with timing of distribution of inputs well worth noting.

5.2 Recommendations

The following recommendations are based on the synthesis of this report and the analysis of the 14 country reports for the SAP Subregion. The ISFP project is considered under the category of 'emergency assistance' and may not lend itself squarely to manage some of these recommendations; however these are made for consideration for possible future program assistance.

Project administration and design

• Extend the timeframe for each phase of the project. - The time frame for the project was short; the period between project initiation and implementation, the implementation period, and the time between implementation and assessment/evaluation were all considered rushed. It is therefore recommended that periods be extended so that adequate planning and project design incorporates stakeholder's participation. True impacts of the assistance would provide a more comprehensive picture if assessments were done approximately six months after project completion.

- Increase the assistance package especially for bigger countries. The volume of inputs were considered adequate for smaller countries and in line with the nature of the assistance, however it was considered too small to make impacts on the larger countries.
- **Procurement processes be improved.** Although this is a broad and sweeping recommendation and if not well planned and furthered with appropriate advice and expertise it may be contrary to regulations, policies and even open avenues for abuse; however this was identified as important issue and cannot be overlooked if improvements can be implemented.
- **Project coordinator at SAP should visit project sites.** This monitoring visit could yield multiple benefits. It has been suggested as being necessary to provide an avenue to discuss concerns and related issues with national coordinators as well as with contracted importers of inputs; at the same time a broad assessment of progress could be conducted.

Project implementation

- Training should be conducted for all levels at the onset of implementation. While in some countries, training may not be necessary; in others even the agriculture officers require some training on proper use of some of the inputs. Where the inputs are a new introduction, for example rice seed for farmers of Malo islands in Vanuatu.
- **Timing of assistance must match local conditions.** Consideration should be given to local needs and agendas. In certain areas cropping follows certain patterns such as rainy season, particular time of the year or certain phase of the lunar cycle or even certain cultural events.
- **Monitoring of development should be conducted.** Monitoring of the ISFP project at country level was considered either inadequate and in many cases nonexistent.

Project evaluation

- **Project must be evaluated.** This is a costly but essential part of the project and should be written into the plan and the budget. Proper timing is essential to assess impacts and identify pitfalls and successes for planning of similar future interventions.
- Evaluators should be briefed. Evaluators of projects such as the present ISFP assistance should be briefed at the regional level to know exactly the kind of information and data to collect. This is particularly important where a number of individuals are involved; as evident from the amount of important data missing in the country reports and also the inconsistency amongst the reports.

ANNEXES

Annex 1: Quantity of inputs distributed in each country

Countries	Cook Islands	Fiji	FSM	Kiribati	RMI	Nauru	Niue	Palau	PNG	Samoa	SI	Tonga	Tuvalu	Vanuatu	Total
Inputs Distributed															
Seeds:															
Rice (kg)		680							42000		,			1,600	44,300
Vegetables (packets)	185		480		400	11	140	900		3,960	780	1,800	1,600	3,100	12,500
Planting material (pieces)		18500	6,300	20600	16,200					44000				74,600	180,200
Fertilizers (bags)	35	2160				50	25		300	1,270	1,250		48		5,100
Pesticides (litre)		70										28			100
Other inputs															
Pigs (number)										92	82	185			350
Chicken (number)	1000		3,000	650			1,300								6,000
Stock feed (bags)	750		1,100	940			460				150	540	156		4,100
Tools (items)		300		2,500	450	450		4,900	470		1,500				5,700
Equipments (number)		9			4				105		8			20	150
Nursery supply (items)	1185						1,250			8,500					10,900
Construction materials (items)	733			1,700			150			1,100		25,000			28,700

FSM Federated States of Micronesia; RMI Republic of Marshall Islands; PNG Papua New Guinea; SI Solomon Islands

Annex 2: Country average socio economic characteristics of sample households in SAP Subregion

Countries	Cook Islands	Fiji	FSM	Kiribati	RMI	Nauru	Niue	Palau	PNG	Samoa	Solomon Islands	Tonga	Tuvalu	Vanuatu
Avg. age	-	50	48.7	-	50.3	-	-	52.4	42	46.8	43	46.7	-	42
Avg. family size	-	6.8	7.6	7	7.3	-	-	4.5	9	9.8	5.7	4.1	-	6.7
Avg. Land holding (ha)	0.4	6.4	1.0	0.02	0.67	-	0.3	0.7	5.7	1.5	3.3	2.1	-	9.4
Avg. animal holding														
Cattle	0	7.2	0	0	0	0	0	0.2	0	0	0	0	-	6
Goats	27	38	0	0	0	0	0	0	0	0	0	0	0	0
Pigs	8	11	3.7	2	3.7	2	5	0.5	8	5	4	6	4	4.3
Chicken	30	27	16	6	18	2	5	3	5	6	6	6	4	6
Avg. months per year with sufficient resources to feed family	12	5.8	11.2	2	11.2	-	12	12	-	8.4	7.2	8.2	-	10.7