

The Republic of South Sudan

Ministry of Agriculture and Forestry

The Project for Livelihood Improvement  
in and around Juba for  
Sustainable Peace and Development

Final Report

February, 2012

Japan International Cooperation Agency (JICA)

System Science Consultants Inc.

Chuo Kaihatsu Corporation

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JR
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This report is the final report for the 'Project for Livelihood Improvement in and around Juba for Sustainable Peace and Development' which was implemented between March 2009 and February 2012. During the project period, South Sudan achieved its independence in July 2011 and the new government has been established. Along the independence, administrative reforms at both central and state levels were carried out. As the counterpart agencies of the Project have also experienced administrative reforms, their organisational names and structures have been changed. The report uses both old and new names depending on the timing when a specific activity was conducted.

## PROJECT PROFILE

Project Title	Project for Livelihood Improvement in and around Juba for Sustainable Peace and Development (LIPS)
Project site	Juba County, Central Equatoria State
Project Period	March 2009 to February 2012 (36 months)
Sector	Community development, Agriculture extension, Capacity building
Donor	The Government of Japan/ Japan International Cooperation Agency (JICA)
Type of Assistance	Technical cooperation (Grant)
Responsible Agencies	<p>(Responsible Agency)</p> <p>(1) The Ministry of Agriculture and Forestry (MAF/RSS) Although originally Ministry of Cooperatives and Rural Development was the responsible agency, it was consolidated into MAF in 2011).</p> <p>(Implementation Agency)</p> <p>(2) The Ministry of Cooperatives and Rural Development (MCRD/CES) At the beginning of LIPS, implementation agency was the State Ministry of Social Development, Gender and Religious Affairs (MSDGRA/CES). In 2010 the Directorate of Community Development that was a part of MSDGRA was separated and became MCRD/CES.</p> <p>(3) The Ministry of Agriculture and Forestry (MAF, CES)</p>
Project Objectives	Basic conditions for extension of livelihood improvement models suitable for various communities in and around Juba are established.
Overall Goal	Livelihood improvement models suitable for various communities in and around Juba are widely utilized in Juba County.
Project Components	<ol style="list-style-type: none"> <li>1. (Manuals): Developing basic tools in extension of Livelihood Improvement Models. This includes (i) Development of Community Development tool kit and (ii) Development of Agricultural Technology Packages</li> <li>2. (Human Resources Development): Capacity development of the government staff and community leaders in extension of Livelihood Improvement Models</li> <li>3. (Institutional Development): Strengthening institutional and financial Capacity of MCRD and MSDGRA in effective operation of Livelihood Improvement Models</li> <li>4. (Model Project): Implementation of Model project adapting Livelihood Improvement Models</li> </ol>

## CURRENCY

Currency Unit:	February 2009	Sudan Pound (SDG)
	February 2012	South Sudan Pound (SSP)
Exchange Rate: (JICA rate)	February 2009	US\$ 1= SDG 2.28
		JPY 1 = SDG 0.0253
	February 2012	US\$ 1= SSP 3.00
		JPY 1 = SSP 0.0391

## MEASUREMENT UNIT

1 Feddan = 24 Kirat = 4,200 m<sup>2</sup> = 1.038 acres

## FISCAL YEAR

Before the independence:	1 <sup>st</sup> January to 31 <sup>st</sup> December
After the independence:	1 <sup>st</sup> July to 30 <sup>th</sup> June

## ABBREVIATIONS AND ACRONYMS

AAHI	Action Africa Help International
AEO	Agriculture Extension Officer
ARDI	Amadi Rural Development Institute
CDO	Community Development Officer
CDP	Community Development Plan
CDM	Community Development Manual
CES	Central Equatoria State
CO	Cooperative Officer
C/P	Counterpart (for LIPS project)
CPA	Comprehensive Peace Agreement
FAO	Food and Agriculture Organization
FFS	Farmer Field School
FT	Farmer Teacher
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (former GTZ)
GOSS	Government of Southern Sudan
ha	Hectare(s)
IDP	Internally Displaced Person
JCC	Joint Coordination Committee

JICA	Japan International Cooperation Agency
LFDP	Livelihood and Fishery Development Project
LIPS	Project for Livelihood Improvement in and around Juba for Sustainable Peace and Development
LRA	Lord's Resistance Army
MAF	Ministry of Agriculture and Forestry
MARF	Ministry of Animal Resources and Fisheries
MCRD	Ministry of Cooperatives and Rural Development
M&E	Monitoring & Evaluation
MSDGRA	Ministry of Social Development, Gender and Religious Affairs (CES)
NGO	Non-governmental Organization
NPA	Norwegian People's Aid
PDM	Project Design Matrix
PRA	Participatory Rural Appraisal
PY	Project Year
RD	Record of Discussion
RSS	The Republic of South Sudan
SIFSIA	Sudan Institutional Capacity Programme: Food Security Information for Action
SAFDP	Support to Agriculture and Forestry Development Project
SPCRP	Sudan Productive Capacity Recovery Programme
SSLDP	Southern Sudan Livelihood Development Program
SSC	System Science Consultants Inc.
SSCCSE	Southern Sudan Centre for Census, Statistics and Evaluation
TOR	Terms of Reference
TOT	Training of Trainer
UNDP	United Nations Development Program
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children's Emergency Fund
UNOCHA	United Nations, Office for the Coordination of Humanitarian Affairs
WFP	World Food Program (of the United Nations)
WS	Workshop

## **PREFACE**

The 21-years civil war caused not only the destruction of the infrastructure but also the institutional collapse. While the war shattered the socio-economic base of the population, one of the most appalling impacts is evident in the loss of local capacity for self-reliance including traditional network of kinship, communal social support, collaboration which are the sources of sustainable community development. To recover the livelihood of the people, especially in rural area, the former Ministry of Cooperatives and Rural Development/RSS (it was consolidated into Ministry of Agriculture and Forestry in 2011) plays a vital role in enhancing cultural, social and economic empowerment of the people of South Sudan.

In 2009, in response to a request from the Government of Southern Sudan, the Government of Japan decided to conduct the Project for Livelihood Improvement in and around Juba for Sustainable Peace and Development (called LIPS) and entrusted its implementation to the Japan International Cooperation Agency (JICA). JICA sent a team composed of experts from System Science Consultants Inc. and Chuo Kaihatsu Corporation led by Mr. Sachio Yamamoto to Juba from March 2009 to February 2012.

This Report summarises the project activities and achievements during the said project period. The activities conducted through LIPS have been geared towards achieving the Goal that the President General Salva Kiir Mayardit stated as “taking town to rural area of the country”. The Project contributed to the development of the Government’s Rural Development Policy, manuals for community development and agricultural development, and capacity development of extension officers. These are very important tools to assist the Ministry to deliver sound rural development services and respond effectively to the challenges and opportunities ahead.

The Project was implemented in close collaboration with its counterpart Ministry, the former Ministry of Cooperatives and Rural Development/RSS, the State Ministry of Cooperatives and Rural Development/CES, the State Ministry of Agriculture and Forestry/CES, and other development partners. We hope for continuous collaboration with our sincere partners toward the further betterment of the livelihood of the people in rural area of South Sudan and the enhancement of friendly relations between Japan and the Republic of South Sudan.

Lastly, we would like to express our sincere appreciation to our stakeholders for their close cooperation.

## **EXECUTIVE SUMMARY**

“Taking town to rural area of the country” is a priority of new nation of the Republic of South Sudan. Without well-being in rural area, reconstruction of the country will never be realised. In 2009, former Ministry of Cooperatives and Rural Development (currently Ministry of Agriculture and Forestry) initiated three years project “Project for Livelihood Improvement in and around Juba for Sustainable Peace and Development (called LIPS)” aiming to develop a mechanism of community development services. Between 2009 and 2012, the Project offered government staff and rural South Sudanese in Juba County integrated livelihood development opportunities through various types of training and implementation of model projects. This Report summarises project activities and achievements during said project period.

### ***PROJECT OUTLINE***

#### *Overall Goal*

Livelihood of the community people will be widely improved through the adaptation of “Livelihood improvement models” in and out of Juba County.

#### *Project Objective*

Basic conditions for extension of livelihood improvement models suitable for various communities in and around Juba are established.

#### *Target Groups*

LIPS’s target groups are: i) senior officers of the Ministry of Agriculture and Forestry, the Republic of South Sudan (a former Ministry of Cooperatives and Rural Development/ GOSS), two types of extension officers, e.g. Community Development Officers (CDO) and Agricultural Extension Officers (AEO) in the Government of Central Equatoria State (CES), and community people in Juba County.

#### *Project Components*

To achieve above objective, LIPS had various activities according to following four components;

Component 1: *‘Manuals’* Basic Tools for community development services are developed. This includes: i) community development manuals, and ii) Agricultural technology packages.

Component 2: *‘Human resources development’* Capacity of the relevant government staff and community leaders in extension of Livelihood Improvement Models is strengthened



Component 3: *'Institutional development'* Institutional Capacity of MCRD/GOSS/CES, and MAF/CES in effective operation of Livelihood Improvement Models is strengthened.

Component 4: *'Model project'* The Model project adapting Livelihood Improvement Models are implemented.

## ***PROJECT ACHIEVEMENTS***

### *Component 1: Manuals*

Following manuals are developed for community development and agricultural extension based on the experiences from field work of CDO and AEO during project period;

- (1) Community Development Manual and its Summary Version
- (2) Vegetable Growing manual "Step by Step Agriculture"
- (3) LIPS Agricultural Extension Approach
- (4) Rural Development Directory

It is expected that these manuals will help CDO and AEO in planning and implementing of community-based projects.

### *Component 2: Human resources development*

In summary, the Project's achievements in this component were that:

- The Project provided various types of training opportunities for senior officials of MCRD, CDO, AEO and community leaders. The trainings include in-house training by JICA Experts, Study tours to Japan and regional countries and OJT. A total of over 100 people enjoyed these training.
- CDO and AEO increased practical skills through implementation of Model projects in 6 Bomas in Juba County.
- Community leaders who are members of Boma Development Committee (BDC) and traditional authorities acquired how to organise community and how to mobilise resources.

### *Component 3: Institutional development*

In summary, the Project's achievements in this component were that:

- New Rural Development Policy of MAF/RSS was developed after a series of consultations with government officials from 10 States. The policy makes the vision, principles and strategies in community development more clear.
- Communication and information sharing between MCRD/GOSS and State Ministries are

enhanced through national workshops and national situation survey by inspectors.

- MCRD/CES office was renovated in 2009 and this made CDO's work more efficient.
- Two demonstration farms were constructed in Kworjik-Luri and Kapuri. During project period, demonstration farms display modern technology of farming and provided basic training over 500 farmers, AEO, CDO, students.

#### *Component 4: Model project*

In summary, the Project's achievements in this component were that:

- The Project with CDO selected 6 Bomas in Juba County as model communities. For this selection, the project conducted socio-economic survey which collected data from 784 household in 30 Boma in 8 Payams in Juba County. In each model community, Boma Development Committees (BDC) was composed with 5-10 members.
- Each model communities developed Community Development Plan (CDP) under the leadership of BDC. To implement CDP, a total of 42 groups were formed for agriculture and income generation activities (IGA). At the same time, community people work together to improve the situation of health, education and water supply.
- Implementation of these community based projects was supported by the Project financially and technically. Broad range of trainings, e.g. farming technologies, business management, bread making, fishing, lulu soap making, leadership, PTA management, etc. were provided by CDO, AEO and external trainers.
- Some of the impacts of these model projects appear visibly. For example, many members of farmer groups adopted basic technologies such as line sowing, spacing, weeding, intertillaging at their farm. These practices improve the productivities and 70% of farmers felt that they have better production.
- Farmer teachers (total 32 in 6 model communities) are also one of the outputs from the model projects. Many farmer teachers work as village extensionists and compensate for absence of AEO in the area.
- On the other hand, there are some signs of improvement of community capacity, although it requires times. Typical changes are relationship among community members. Many people point out cooperation got better and people are more united after the commencement of the Project. Women also engaged in community activities such as meeting and communal works.

## ***PROJECT INPUTS***

### *JICA Experts and Counterparts*

During the 36-month project period, a total of 15 JICA experts totalling 108.47 MM (man/month) was assigned in LIPS. From the side of South Sudan, 50 fulltime counterpart personnel (48 CDO, 2 AEO) have been assigned to the Project. In addition, over 30 officials, mainly senior staff from counterpart ministries, have participated in the Project as members of committees (e.g. policy development, manual development), workshop organisers, trainers of training and project supervising.

### *Training in Japan and the Third Countries*

The Project offered training opportunities for senior officials, CDO and AEO from MCRD/GOSS, MCRD/CES, MAF/CES in abroad. A total of 13 counterparts visited and received training in Japan and 48 counterparts participated in study tours in Kenya and Uganda.

### *Facility and Equipment*

Although the Project did not target facility construction in its activities, LIPS funded some facilities to enhance project management and training, and to implement model projects. These are renovation of CDO office, construction of two demonstration farms, Nyamini community centre and 16 boreholes at five model communities.

Equipment and materials which are necessary for implementing project activities also have been provided. Those are machinery and equipment for agricultural production, transportation means for CDO and AEO, computers, equipment for CDO's offices and others. In addition, over 200 titles of reference books were provided for CDO and AEO for their leaning.

### *Local Costs*

Local cost as operational expenditure for implementing activities in the Project from commencement of the Project to February 2012 is JPY 118,422,000 (USD 1,520,648 in current exchange rate) in total. The biggest portion of the cost was used for the implementation of model projects (component 4) and it accounts for 32.8 % of total cost

## ***CONCLUSION, LESSONS LEARNED AND RECOMMENDATIONS***

Because of long-lasting civil war, many extension officers in South Sudan lacked field experiences. Under this situation, 50 CDO and AEO enjoyed full-course of community development in Juba County. In this sense, the Project was a groundbreaking initiative designed to impact South Sudan's high rate of poverty and low level of rural community development. Without doubt, the foundation laid by LIPS provides an excellent springboard for continued integrated community development initiatives in South Sudan.

From the experiences of LIPS, following recommendations can be made for developing programmes related to community development and agricultural extension in South Sudan;

- Recommendation-1. Community Development Fund that offer the chances for communities to implement their own small projects should be established by MAF/RSS in collaboration with development partners. Community development is realized in the process of “Doing & Learning” by community peoples. Such fund enables communities to tackle their challenges. What is necessary for current South Sudan is its peoples to build capacities through these experiences.
- Recommendation-2. Joint work of CDO and AEO should be promoted under new MAF/RSS which includes a pair deployment of CDO and AEO to an extension office. MAF/RSS should consider reformation of current status of the Directorate of Community Development at State level.
- Recommendation-3. CDO should help liking BDC as a formal organisation with the Juba County or Boma administration so that they can continue working for their communities.
- Recommendation-4. Community Development Manual should be extended from CES to all other States. In this process, it is recommended to effectively utilise CDO and ARDI instructors who were trained in LIPS.
- Recommendation-5. Vegetable Production in Juba County should continuously be promoted. Collaboration with private sectors may fulfil areas where the government alone cannot achieve. The Vegetable Growing manual will help producers.
- Recommendation-6. CDO in Juba County should continue their work as much as they could. One way is to focus on the communities around Juba City so that the availability of transport will have minimum impacts on their activities. CDO shall also open their office for community people to utilise and exchange information.
- Recommendation-7. CDO, together with BDC should continue their efforts to link the model plan/projects with other development partners. The official network built during the implementation of LIPS will help CDO to find some good partners in near future.
- Recommendation-8. When rural development is conducted in South Sudan, measures which strengthen community’s solidarity needs to be included in its activities. It is important to think not only economic reconstruction but also reconstruction of social relations for rural development during the post war period. MAF/RSS shall endeavour in coordination among the government and development partners for them to provide comprehensive rural development services.

### The Project in Numbers

Items	Number	Unit
1. JICA Experts	15	experts
2. Fulltime counterparts from MCRD/CES and MAF/CES	50	CDO/AEO
3. Total beneficiaries (government staff)	98	persons
4. Total beneficiaries (farmers, community people)	9,000	persons
5. Model Bomas selected by the Project	6	Bomas
6. Farmer groups formed	26	groups
7. Membership of farmer groups	759	households
8. The size of land cultivated for group farming	87.5 (36.8)	Feddan (ha)
9. Farmer teachers appointed	32	farmers
10. IGA groups formed	12	groups
11. Agricultural training courses conducted	53	Times
12. Participants of agricultural training courses	1,161	man/times
13. Participants in trainings in Japan	13	persons
14. Participants in study tours to neighbouring countries	48	persons
15. Participants in domestic study tours	51	persons

## LIPS FINAL REPORT

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# **INTRODUCTION**

## **1. BACKGROUND OF THE PROJECT**

The civil war that lasted for 21 years had finally ended in 2005 in South Sudan. In July 2011, the nation achieved independence and started a long journey for its reconstruction and development. However, the scar left by the civil war on its socio-economy is enormous and the journey for development will not be completed overnight.

The national population census conducted in 2008 reveals that over 50% of the citizens is forced to live under the poverty line (SSCECE 2010). The new born nation of South Sudan possesses the land which is 2.7 times bigger than Uganda, its neighbouring country. The most of its land is arable and the country is rich in natural resources including oil and water system. With its population composed of relatively young generation, South Sudan is a country with full of development potentials. However, the nation is currently unable to utilise such potentials efficiently due to the limited modern knowledge and technologies. As a result, the food self-sufficiency is not achieved, the literacy rate remains 27% and the mortality rate under 5 years old is 10.2%. The lives of its citizens are still hard. In South Sudan, 83% of its people live in the rural area. In other words, the reconstruction and development of the nation is equivalent to the rural development.

The economic reconstruction in South Sudan started in urban areas and the disparity between living conditions of people in urban and rural areas tend to grow bigger. Under such circumstances, MCRD (later integrated with MAF) is an agency that oversees rural development as it facilitates citizens' self initiated actions towards socio-economic development in rural area. There are over 200 CDO deployed under MCRD. On the other hand, MAF is responsible for agricultural development which is a driving force for rural economy. Over 300 AEO work under MAF being engaged in agricultural extension services. However, the long lasting civil war restricted their activities and deprived CDO and AEO of opportunities of further training/ studies. CDO and AEO, therefore, lack practical experiences and have limited knowledge and technologies for rural development.

LIPS is a 3-year project aiming at human resource development and the establishment of rural development models in CES. The project was initiated in 2009 with former MCRD as its responsible agency. During the project period, LIPS developed the 'Rural Development Policy 2012', 'Community Development Manual', 'Vegetable Growing Manual "Step by Step Agriculture"', while providing a series of trainings for over 300 stakeholders including the Government staff, extension officers, and village leaders.

## **2. CONTEXT OF RURAL DEVELOPMENT IN SOUTH SUDAN**

At its initial stage, the project conducted various surveys in order to understand the current situation of rural development in Juba County. Aiming at grasping the situation of rural villages, the

socio-economic and agriculture survey was carried out targeting 30 Payams within Juba County (refer to the LIPS survey report 2009). The problem analysis workshop was organised for CDO/AEO to understand the situation of the extension systems. In May 2011, another survey was conducted for the purpose of reviewing the extension services for rural, cooperative and agricultural development in all the 10 states in South Sudan. Due to the civil war, the information on rural livelihoods and development is very much limited and this hampered South Sudan in establishing rural development plans. Yet, after the signing of the CPA, information gradually began to be accumulated as donors and NGOs are now actively involved in development activities in South Sudan. Furthermore, the first national population census after the war was conducted in 2008 which has updated the basic statistical data for the entire nation.

The poverty level in rural area in South Sudan is severe. Rural development and agricultural extension services by the government are not fully reaching to remote villages. Many of these challenges found in accelerating rural development are common in other African nations. However, the situation is more serious in South Sudan due to the negative legacy of the civil war. This includes: weak administrative functions; undeveloped systems; a lack of social capital in rural villages; and low education levels. The environment surrounding the project site is described below.

#### A. Population and Geography of LIPS's Target Area

- Central Equatoria State consists of 6 Counties. Juba County, LIPS's target area, is composed of 16 Payams and over 200 Bomas (Boma is the lowest administrative unit). Juba is the largest city in South Sudan with its population of 236,717 (a total of Juba town, Munuki, Kator and Gondokoro). In 2009, the total population of Juba County is 368,436 (SSCCSE, 2010).
- Juba is located at about 4.87°N 31.60°E and its altitude of approximately 500 m.

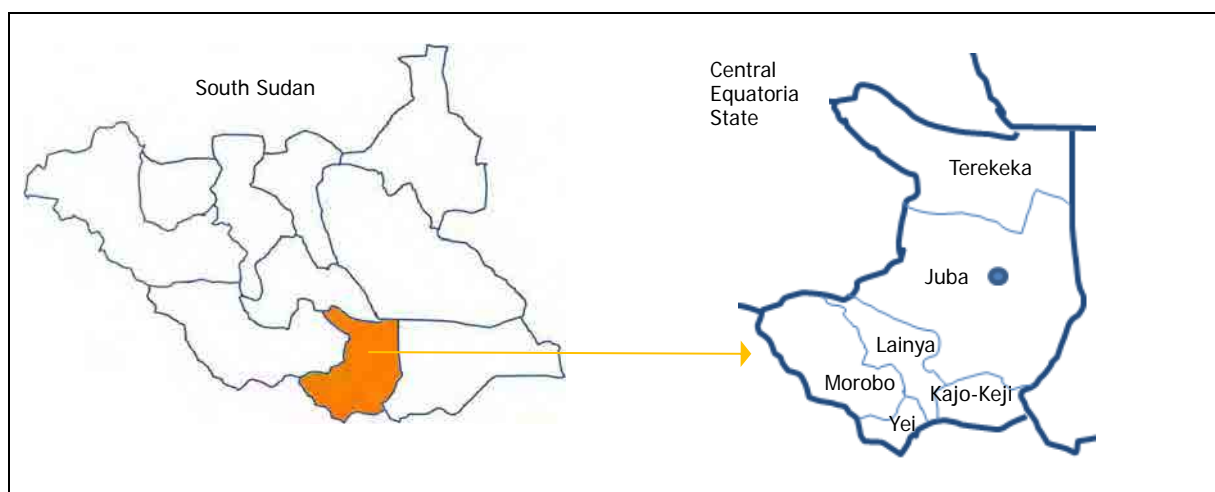
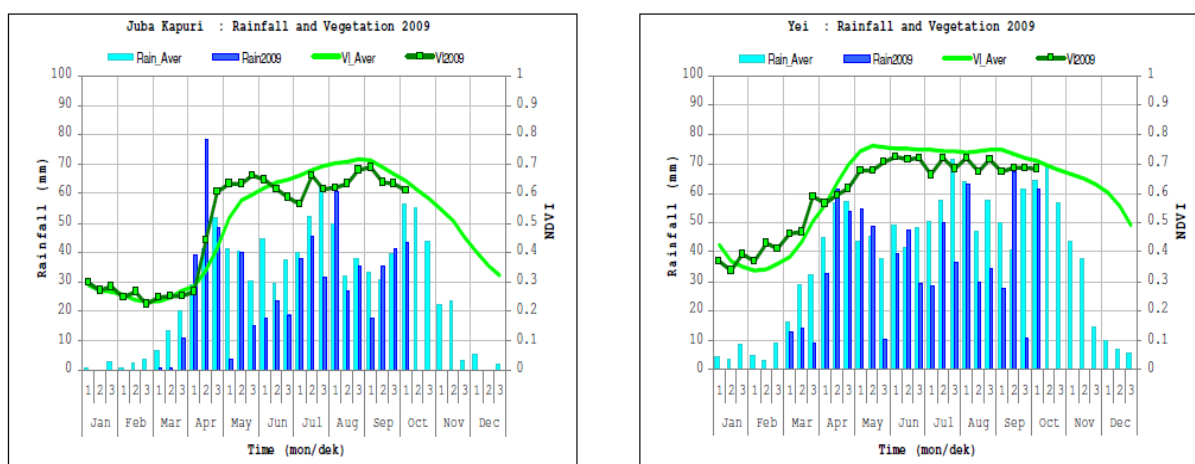


Fig. 1-1: Location of Central Equatoria State and its Counties

- Juba has a tropical wet and dry climate and temperatures are high all year-round (avg. 28C). Annual rainfall is around 1,000 mm which concentrates in the rainy season from April to October. Precipitation during June and July is limited and its rainfall pattern in this short-dry period often affects the agricultural production in Juba. Farmers in the Model communities of the project point out that the rainfall pattern becomes irregular in recent years. In 2010, the rainy season started only in June. On the other hand, the short-dry period lasted longer than expected in 2011. Both situations affected agriculture in the area.



Source : CFSAM 2011, 2009

Fig. 1-2: Rainfall pattern at Juba (left) and Yei (right) in CES

## B. Rural Livelihood

- 50.4% of population is living under poverty line in South Sudan. Poverty is more severe in rural area (55.4%) against 24.4% in urban area (SSCCSE, 2010).
- 78% of population engaged in agriculture (including pastoralist). Yet, traditional rain-fed system cannot secure national food security. As a result, farmers have to diversify the source of livelihood including environmentally unsustainable activities such as charcoal making.
- According to the results of the socio-economic survey conducted by LIPS in 2009 with a target of approximately 800 households, the livelihood situation in Juba County is characterized as follows;
  - ❖ (Education attainment): Only a minority (17%) of male household heads had completed at least the basic level of education. Among the female household heads, an even lower proportion of 4% had completed elementary school.
  - ❖ (Orphans and disabilities): There is a high incidence of households with orphans (39%). This

can in part be attributed to the adverse effects of the war and the generally poor livelihoods and susceptibility to disease that lead to the deaths of many parents. A relatively high disability/chronic illness prevalence rate exists in most parts of the county with nearly one in every four households (24%).

- ❖ (Death): There are significantly high levels of reported infant deaths with one in six households (17%) from July 2007 to June 2009.
- ❖ (Migration): In spite of the effects of the war on migration and people's status of residence, majority (73%) of Juba County residents today are those who had stayed on during the war (stayees; 73%). In contrast, returnees and IDPs constitute 11% and 14% respectively.
- ❖ (Land ownership): Majority of households (87%) either own land or have rights to use land. The median land size held by households is 2 feddans while the modal land size is 1 feddan. 75% of all households, own only 4 feddans or less.
- ❖ (Livestock): 53% of households do not have any livestock. The two leading reasons for low livestock populations are; diseases (43%) and insecurity (37%). Goat is the most common type of stock (87%) kept by most households that have livestock. On average, each household has 9.6 goats while the modal number of goats is 2.
- ❖ (Employment): A large amount of male household heads in Juba County is engaged in agriculture. Female household heads have a relatively higher presence in crop farming (58%) compared to men at (46%).
- ❖ (Household cash income): The main sources of income in households include; sales of charcoal and wood products, sales of food crops, public and parastatal salaries, and sales of construction materials (such as stone, sand, grass) and handcrafts. As the most widely reported source of household income, the mean monthly household income from the sales of charcoal and wood products is 179.9 SDG. Comparatively, men are the dominant receivers of household incomes from most of the sources. On the other hand, women dominate incomes from remittances (57%), the sales of food crops (55%) and the sales of construction materials and handcrafts (49%).
- ❖ (Types of Crops Cultivated): Sorghum is by far the most commonly grown crop in households as reported by 80% of households. The second, third and fourth most widely grown food crops are; groundnuts (58%), sismsim (55%), and maize (47%). Beans (42%) and vegetables (29%) are ranked as fifth and sixth. Other less widely cultivated food crops include; cassava (20%) and millet (15%).
- ❖ (Household Food Sufficiency): Up to 80 percent of households still remain food insecure. Among Juba communities, 61% of households survive on only a meal a day. According to farmers, low rainfall accounts for 86% of all low crop yields. Only 7% of the farmers attribute low crop yields to poor farming methods compared to 3% and 2% of the farmers

who attribute low yields to soil infertility and lack of inputs. Another 2% of farmers attribute their low crop yields to pre-harvest losses.

- ❖ (Farmer Access to Extension Information): Majority of farmers (81%) do not receive any extension services on farming. AEO (agricultural extension officers) and local farmers are the most common providers of extension services to farmers. Officers from local humanitarian organizations are the third most common providers of extension services to farmers. In contrast, CDO (community development officers) account for only 2% of extension service providers.
- ❖ (Farmers' Training Needs): The four major farmer training needs of the local farmers include; planting timing and methods, pre-harvest crop protection, farm input use and post-harvest crop protection.
- ❖ (Access to communal facilities): The most common social facility is community centre as reported by 34% of households. Yet, a significant proportion (44%) of households is located in areas with no social amenities at all.

Table 1-1: Indicators of South Sudan

Indicator	Value	Note
Area	644,329 km <sup>2</sup>	110% of Kenya and 270% of Uganda
Number of State	10	
Number of county	79	
Number of Payam	499	
Number of Boma	2,135	
Population	826 million	72% are younger than 30 and 51% are younger than 18
Rural population	686 million (83% of total)	
Growth rate of population	2.05%	
Average household size	7/household	7/HH in CES
Population density	12.82/km <sup>2</sup>	1/10 of Uganda, 1/5 of Kenya
Literacy rate (age 15 and above)	27%	22% in rural area against 53% in urban area
Access to safe water	55% (53% in rural area)	
Time to obtain water	38% need more than 30 minutes.	
Use of toilet	20%	
Infant death rate	102/1,000	
Under-five mortality rate	135/1,000	
Maternal mortality rate	2,054/100,000	
Use of firewood and charcoal for cooking	96%	
Poverty ratio	51%	55% in rural area against 24.4% in urban area; 43.5% in CES
Gini index (disparity in income levels)	46%	The same as Cameroon, DRC, Gambia, Kenya, Rwanda etc.
Ownership ratio of mobile phone	15% (8% in rural area)	
Ownership ratio of bank account	1%	
Population engaged in agriculture	78%: 644 million	Including pastoralist

Source: Statistical Yearbook for Southern Sudan, etc.

### C. Extension Service

In 2011, LIPS conducted a situation survey on community development and agricultural extension services in 10 states. Followings are the summary of the findings of this survey and other LIPS surveys conducted within Juba County.

(Number of CDO and AEO)

- Approximately 800 extension officers, i.e., AEO, CDO and Cooperative Officers (CO) in the whole South Sudan. The states with larger number of extension officers are those that have managed to increase young officers after the CPA. Educational background of these officers is basically above school certificate level. Quite a few university graduates are found among CDO except Central Equatoria State.
- The female ratio in CDO is relatively high (28.7%) when it is compared to AEO (0.3%). However, the number of female officers is still low considering the importance of the role of females in agriculture and livelihood improvement in rural villages.

Table 1-2: Number of CDO, CO and AEO in 10 States

State	CDO		CO		AEO		Total
	Total	Female	Total	Female	Total	Female	
1. Upper Nile	33	17	30	6	3	na	66
2. Jonglei	12	1	29	3	55	na	96
3. Unity	3	1	4	1	23	na	30
4. Warrap	29	na	30	na	51	1	110
5. Northern Bahr El Ghazal	8	5	24	2	15	3	47
6. Western Bahr El Ghazal	13	3	15	7	26	2	54
7. Lakes	14	1	25	3	56	na	95
8. Western Equatoria	11	3	17	3	11	1	39
9. Central Equatoria	84	30	55	6	27	na	166
10. Eastern Equatoria	30	7	26	na	38	4	94
All States	237	68	255	31	305	11	797

Source : Interview survey to the State Ministries

(Challenges of CDO and AEO)

Despite the fact that there are numbers of extension officers in South Sudan, most of these officers are



stationed in the capital state unable to provide necessary extension services in rural area. Without field services by extension officers, rural development never comes true. Although there are some differences between CDO and AEO, the key factors that limit activities of extension officers are common and are categorised as follows;

(1) Poor guidance by the ministries

- No clear plans or strategies for rural extension. No job description.
- There is no coordination/communication among the Central Government, the State Government, and the Local government (County).

(2) Poor knowledge and skills

- A lack of training opportunity or on the Job Training (OJT). Training provided by donors is too short and not practical.

(3) No means of transportation to go to community.

Table 1-3: Number of vehicles owned by 2 directorates in the state ministries.

State	Community Development		Agricultural Extension	
	Car	Motorbike	Car	Motorbike
1. Upper Nile	1	2	4	0
2. Jonglei	0	0	5	4
3. Unity	0	0	3	6
4. Warrap	0	0	2	2
5. Northern Bahr El Ghazal	0	0	5	0
6. Western Bahr El Ghazal	0	0	2	12
7. Lakes	1	5	4	7
8. Western Equatoria	0	1	1	6
9. Central Equatoria	5	6	5	4
10. Eastern Equatoria	1	0	2	2
Total	8	14	33	43

Source : Interview survey to the State Ministries

(4) No field office (County or payam office) and extension materials

- For the state ministries of agriculture, SPCR (Sudan Productive Capacity Recovery Programme) and SAFDP (Support to Agriculture and Forestry Development Project) have contributed to the construction of main office in every state. Yet, the preparation of facilities at County and Payam level is behind.
- In case of the state ministries in charge of community development, almost all of them do not

have their own county office.

- A lack of agricultural tools, seeds and pesticides. No training facilities for farmers.
- A lack of reference books and manuals

(5) Insecurity

- Tribal conflict is widely observed in the whole country. Not only security reason but it is also difficult to access to the community by road block.

(6) Limited number of development partner to work with

- CDO has no development partners. Attachment of CDO to NGO is not widely conducted.
- AEO/CDO cannot participate directory in the development project implemented by FAO, IOM and SSRRDC.

Table 1-4: Number of development partners working with extension officers

State	CDO	CO	AEO
1. Upper Nile	0	0	5
2. Jonglei	2	0	4
3. Unity	0	0	5
4. Warrap	0	2	3
5. Northern Bahr El Ghazal	1	0	8
6. Western Bahr El Ghazal	0	0	15
7. Lakes	0	0	3
8. Western Equatoria	0	4	12
9. Central Equatoria	1	0	5
10. Eastern Equatoria	13	5	11
Total	17	11	71

Source : Interview survey to the State Ministries

(7) No operational budget

- In the most of states, operational budget is almost zero for field work except those that work with development partners

(8) Low incentive

- Low salary and frequent delay of payment
- No extension allowance
- No promotion.

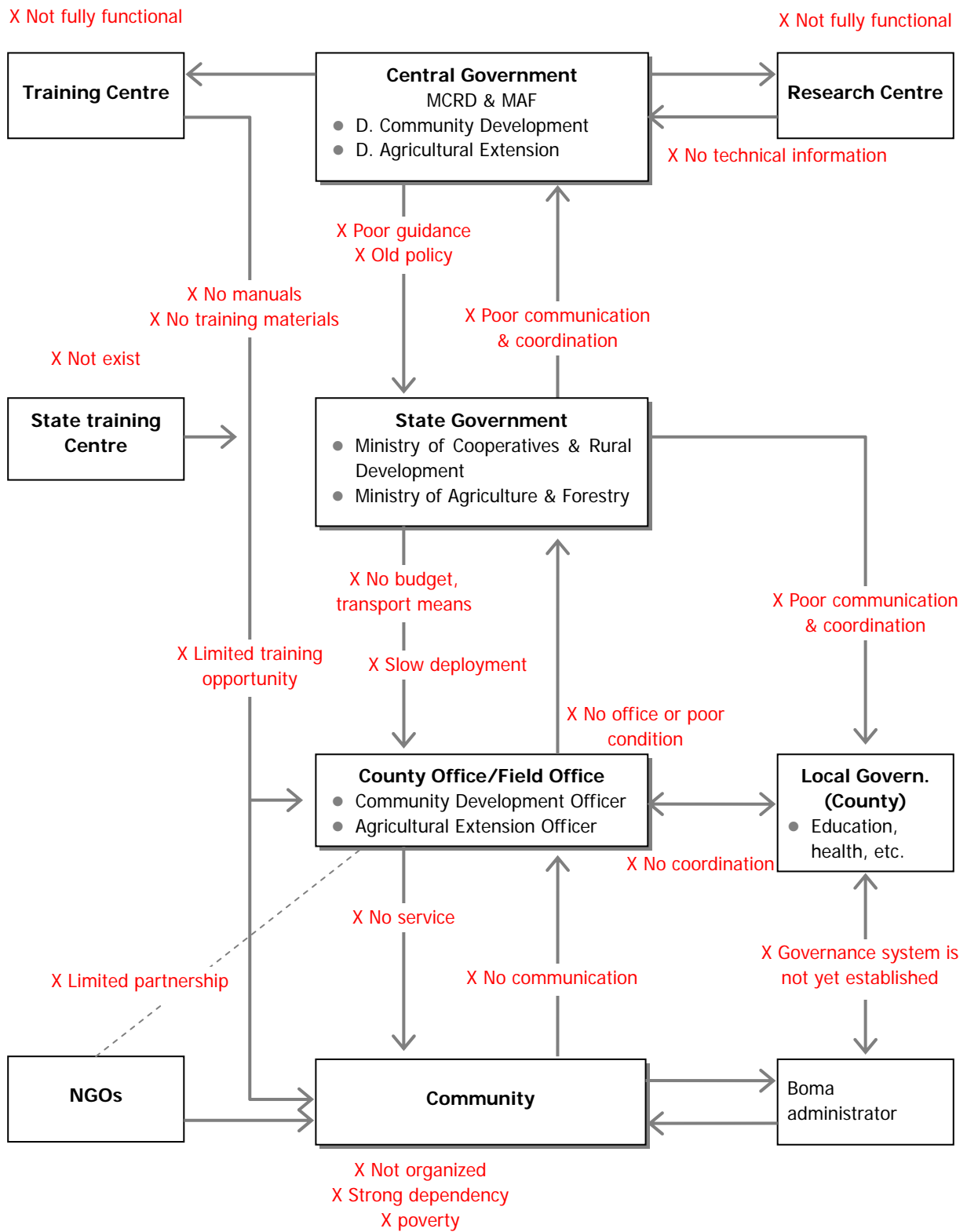


Fig. 1-3: Issues of extension service system in South Sudan

## **PROJECT OUTLINE**

### **1. OBJECTIVES**

#### *Overall Goal*

Livelihood of the community people will be widely improved through the adaptation of “Livelihood improvement models<sup>1</sup>” in and out of Juba County.

#### *Project Objective*

Basic conditions for extension of livelihood improvement models suitable for various communities in and around Juba are established.

### **2. TARGETING**

LIPS’s target groups are peoples in three layers. The first group is managerial staff in rural development, especially officers of the former Ministry of Cooperatives and Rural Development, the Republic of South Sudan (RSS). They are responsible for developing policy and various types of guidelines for community development. The second group is two types of extension officers; Community Development Officers (CDO) and Agricultural Extension Officers (AEO) in the Government of Central Equatoria State (CES). They are known as facilitators who promote participatory development with community people on the frontline of rural development field. The third group is rural people living in poverty and food insecurity in Juba County, CES. Within this group, LIPS strives to reach the poorest of the poor who LIPS believe have the potential to take advantage of improved access to assets and of opportunities for better agricultural production and rural income-generating activities.

### **3. PROJECT COMPONENTS**

Empowering target groups is a core principle of our engagement. The Government could guide extension officers through providing sound policy and guidelines. Extension officer could guide community people with appropriate knowledge and skills. Community people could increase the ability to make better decisions about the use of resources such as infrastructure, labour and knowledge for enhancing well-being of residents in the community. These are the basis of LIPS and are a prerequisite for sustainable community development in South Sudan.

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<sup>1</sup> In LIPS “Livelihood Improvement Model” means a mechanism for CES to promote community development services. This mechanism primarily based on two processes that are i) enhancing community capacity and ii) learning basic knowledge and skills on modern agricultural technologies.

In this sense LIPS sets following four project components;

Component 1: Manuals

Component 2: Human Resources Development

Component 3: Institutional Development

Component 4: Model Project

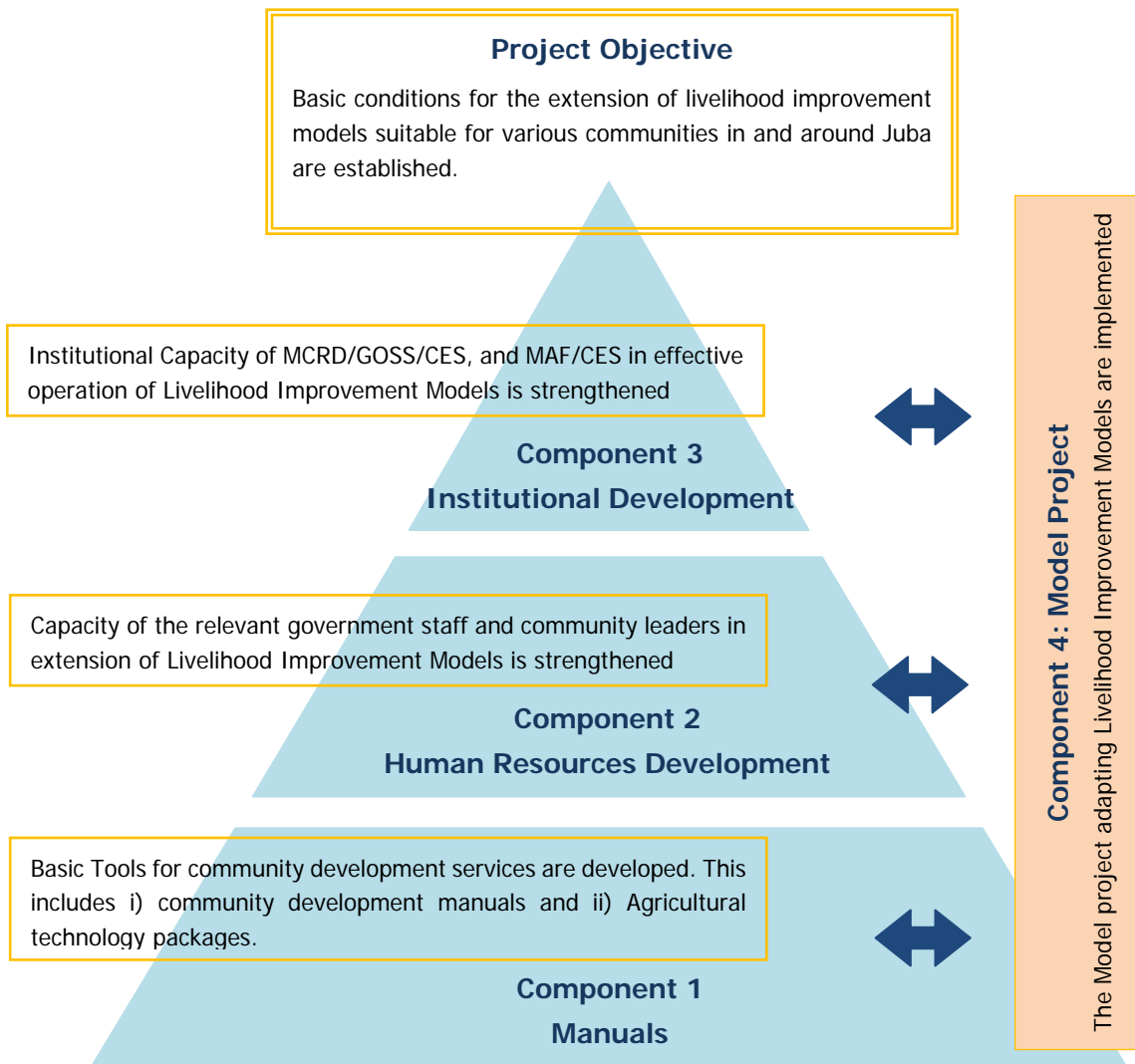


Fig 2-1: Structure of LIPS's four project components

## **4. PROJECT EXECUTION**

### **A. Implementation Schedule**

The project has been implemented for over a three-year period from March 2009 to February 2012 (refer to Appendix-1). Although there are short breaks due to the national referendum (Jan. 2011) and the independence (July 2011), the Project has been completed based on the original schedule.

### **B. Project Start-up**

The Project started three month after the signing of the “Record of Discussion” between JICA and the Government of Southern Sudan on 10th December 2008. On March 2009, the first JICA expert has arrived and started a project in Juba.

The Three Year Work Plan for LIPS was prepared after a series of preliminary consultations with the government officials and technical personnel (refer to the LIPS Three Year Work Plan). This included meetings with the Ministry of Cooperatives and Rural Development/GOSS, Ministry of Social Development, Gender and Religious Affairs/CES, and Ministry of Agriculture, Forestry, Animal Resources and Fisheries/CES. Other meetings were also organized with FAO and NGOs.

The kick-off workshop, one day brainstorming and work planning workshop, was organized with MCRD/GOSS on 28 April 2009 and 95 participants attended the workshop. Out of 95, 39 are from the Government, communities and NGOs including the Minister of MCRD/GOSS, the Deputy Governor of CES and the Minister of MSDGRA/CES. During the workshop, priorities for community development were discussed. Another additional workshop with 25 staff from MAFARF/CES was also organized on 30 June 2009. LIPS also had an introductory meeting with the Commissioner of Juba County on 6 August 2009. The topics included LIPS activities, the situation of deployment of field staff (AEO/CDO), and communication mechanism between the County and LIPS. With these introductions, LIPS was initiated.

### **C. Project Modification**

During the three-year project period, LIPS had no major modification on its activities.

Since the CPA, the central and the state government reformed the structure of ministries. As a result, LIPS’s counterpart ministries also changed during project period as shown in the table below.

Table 2-1: Reformation of LIPS's responsible and implementation Ministries

Name of Ministries		Note
Original (2009)	Current (2012)	
Ministry of Cooperatives and Rural Development/GOSS (MCRD)	Ministry of Agriculture and Forestry/RSS (MAF)	After the independence (2011), MAF merged MCRD.
Ministry of Social Development, Gender and Religious Affairs/CES (MSDGRA)	Ministry of Cooperatives and Rural Development/CES (MCRD)	After the national election (2010), CES created the new Ministry of MCRD. As a result, the Directorate of Community Development moved to the new Ministry with Directorate of Cooperatives.
Ministry of Agriculture, Forestry, Animal Resources and Fisheries/CES (MAFAF)	Ministry of Agriculture and Forestry/CES (MAF)	The Ministry was divided into two ministries in 2010.

#### **D. Monitoring and Evaluation (M&E)**

The LIPS monitoring and evaluation system includes the Joint Coordination Committee (JCC) and the mid-term and final evaluations conducted by independent survey teams. The JCC had an oversight for ensuring that project activities are implemented in a manner consistent with the project objectives. The JCC was held once a year (refer to the M/M). The mid-term and final evaluations were conducted in November 2010 and September 2011 respectively. The survey teams with counterpart ministries verified the achievement and implementation process of the Project in terms of five evaluation criteria (Relevance, Effectiveness, Efficiency, Impact and Sustainability) based on the Record of Discussion (R/D) and the Project Design Matrix (refer to the evaluation reports).

Regarding to the M&E of the Model project, a regular meeting between JICA experts and counterpart personnel (all zonal team members and field management directors) was held every Monday to discuss the current situation/progress in the communities. In addition, Boma Development Committees (BDC) of 6 Model communities conducted an annual evaluation at the end of project year using a participatory evaluation approach.

# PROJECT ACHIEVEMENTS

## 1. ACHIEVEMENT BY COMPONENTS

### COMPONENT 1: MANUALS

**Basic tools for community development services have been developed.**

The lack of methodology for rural community development is one of the factors that impede the extension activities. At the start of LIPS, MCRD did not have any manuals that guide CDO therefore CDO did not have clear ideas on how to promote community development. Likely, agriculture extension service was not properly delivered either because information that AEO and farmers could access was very much limited. Responding these situations, the Component 1 aims at developing manuals for CDO and AEO to improve their services.

The role of CDO is community empowerment. The role of AEO is education of farmers on agricultural techniques. It should be noted that many aspects of the work of AEO overlap with that of CDO. As people in rural areas largely depend on agriculture, basic knowledge and skills on agriculture is indispensable also for CDO. On the other hand, participatory approach through the empowerment of farmers is now adopted to agriculture extension instead of top-down training approach. Needless to say, livelihood improvement cannot be achieved without rural development. Considering these points, three types of LIPS manuals have been developed for both CDO and AEO to be able to use in the field, as below. In addition, rural development information including a name list and educational materials, has been collected aiming for accelerating information dissemination or communication by RSS and Directorate of Rural development in all other states.

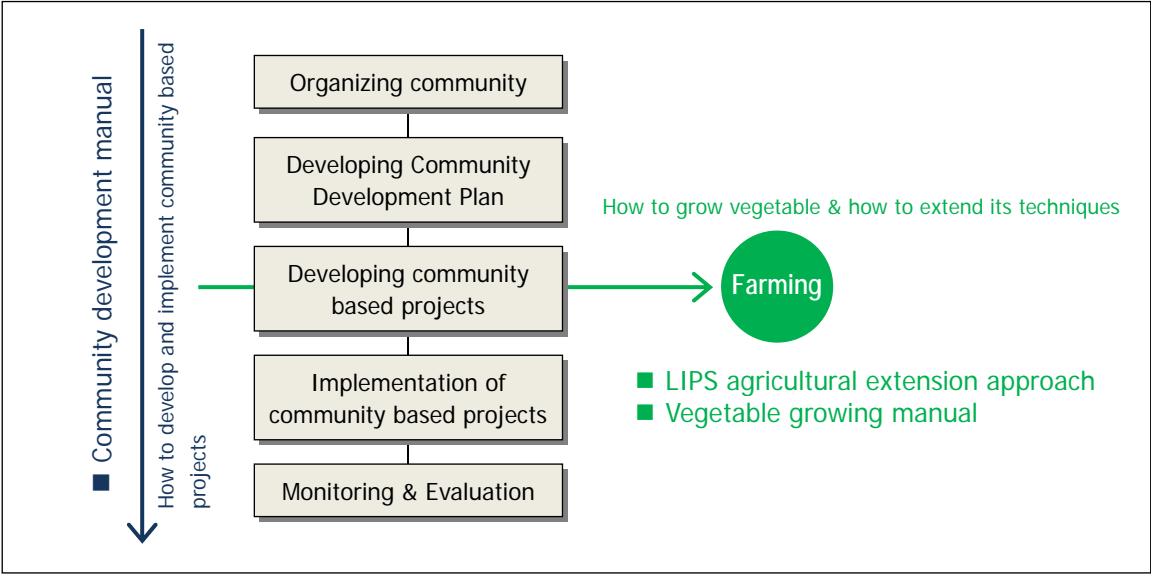


Fig 3-1: Structure of LIPS's manuals



## A. Community Development Manual

Community Development Manual (CDM) spells out principles and standards of community development and various ways which CDO can work effectively and efficiently. Starting from the basic roles and responsibilities of a CDO, the CDM elaborate the process of community-based planning and implementation in detail by 6 steps (refer to Fig 3-1).

Step 1: Confirmation of TOR, establishment of supporting system, understanding of policies and laws, formulation of visiting group, and establishment of information sharing methods

Step 2: Understanding of communities, selection of target communities

Step 3: Sensitization and mobilization of communities, organization within communities, leadership training for Boma Development Committee

Step 4: Guidelines and procedures for Community Development Plan, participatory planning, preparation of planning, and analysis of present state, recording and planning by communities

Step 5: Funding for implementing the plans, proposal preparation, implementation of community development project

Step 6: Monitoring and evaluation

Working Group (WG) of the CDM was first organised in 2009 by the LIPS experts and the senior CDO staff in Juba County. The main activity was to collect and review the existing materials on community development used in neighbouring countries in Africa. In 2010, while implementing community-based projects in the model sites, LIPS experts prepared the draft CDM by compiled the original documents developed for the implementation of LIPS in 2010. In the third year, 2011, the Working Group was reorganised. This time the members were not only from the CDO, but also from the trainers of Amadi Rural Development Institute (ARDI) and the planning officers (Director General and Director) from the MCRD/GOSS (which is now MAF/RSS). A number of the review meeting on the draft CDM were held before publishing the draft final (version 1.3).

When the draft final was issued in August 2011, the WG held trainings on how to use CDM for the CDO. Total of 50 CDO in Juba County and from other counties in Central Equatorial and Western Equatoria have received these training



Review meeting with CDM Working group



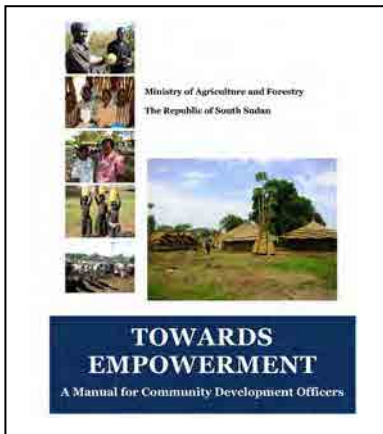
CDM Training for CDO in Juba County



CDM Training for CDO in other Counties

It is intended not only for CDO but for any other community development workers (CDW) working for rural development. CDO in Juba County are already familiar with the contents of the manual and only refer to it as the reminder. After the training of CDM to the county CDO, they are going to use it for making the community development plans in their target communities.

Summary version of CDM is also prepared. In this version, 6 steps of the community development process are described more briefly using diagrams. This is useful for especially for trainers or CDO who have gone through the basic training on CDM as a reminder.



### **Box-1 Community Development Manual (CDM)**

This manual is developed to help CDO and other community development workers for better understanding on the roles, works and responsibilities. The manual is also filled with useful information on related topics that will build on their existing knowledge. Although the approaches of community development must be flexible and dynamic reflecting the situations in the community, this manual spells out principles and standards of community development and various ways in which CDO can work effectively and efficiently. The manual explains a series of community development works by 6 steps as follows.

#### **STEP 0 "BEFORE YOU GO TO THE FIELD"**

- 0-1. Understand your job "Job Description of CDO"
- 0-2. Supporting Structure of CDO
- 0-3. Supporting Policy and Legislations
- 0-4. Let's Form your Team
- 0-5. Information Sharing System

#### **STEP 1 SELECTING THE TARGET COMMUNITY**

- 1-1. Understanding Communities: How do you get information?
- 1-2. Selection of the Target Community

#### **STEP 2 ORGANIZE YOUR COMMUNITY**

- 2-1. Community Sensitization and Mobilization
- 2-2. Community Organization
- 2-3. Leadership Training for BDC Members

#### **STEP 3 COMMUNITY-BASED PLANNING**

- 3-1. The Contents of the Community Development Plan (CDP)
- 3-2. Key Principles of the Community-based Planning
- 3-3. Procedure of Community-based Planning
- 3-4. Pre-Planning
- 3-5. Situation analysis by community: "What is the situation in our community?"
- 3-6. Documentation and Finalization of the CDP

#### **STEP 4 IMPLEMENTATION "FINANCING COMMUNITY PROJECTS"**

- 4-1. Financing Community Development Plan
- 4-2. Preparing proposal; "How can you attract donor's interest?"

#### **STEP 5 MONITORING AND EVALUATION (M&E)**

- 5-1. What is M&E?
- 5-2. Why M&E?
- 5-3. How to Monitor a Community –Base Project?
- 5-4. How to Evaluate a Community –Base Project?
- 5-5. Participation of the Community in M&E

## **B. Vegetable Growing Manual “Step by Step Agriculture”**

This manual is a textbook which instructs the basic techniques of vegetable cultivation along the work process. Target crops are nine in total, including sorghum, maize and groundnuts, most important in and around Juba, and those of which cultivation is expected to expand in the near future, such as tomato and cabbage. As target users are both agriculture extension officers and farmers, pictures and figures are frequently used in a plain way, for even the illiterate population and those who do not understand English.

As CDM is compiled based on the rural development activities by CDO, this vegetable cultivation manuals also reflects the true experiences of cultivation trial and agriculture training in Demonstration farms. In South Sudan, no agricultural experiment station has been in full play, hindering the manual preparation, with little accumulation of information. The preparation procedure is as follows.

- Collection of existing literature: information on crops in neighbouring countries (2009)
- Formulation of a framework of the manual (Draft 1.0) and developing training materials (2010)
- Start of cultivation in Demonstration farms (May, 2010)
- Meeting with nursery companies of Kenya and Uganda over varieties suitable for Juba (2010)
- Monitoring and evaluation of the activities of the farmers groups (2010-2011)
- Discussion with those involved in vegetable production, stakeholder workshops for vegetable production (2011)
- Compilation of Draft ver. 2.0, organization of a manual evaluation committee at MAF/CES (2011)

## **C. Field Guide for LIPS Agricultural Extension Approach**

LIPS agricultural extension is adopting an intensive training method for the farmers’ groups and Farmer teachers, which were conducted in Demonstration farms and 6 Model communities. This guidebook is compiling the implementing procedure of these approaches. The procedure is categorised into the eight steps below in the book and the AEO/CDO activities and the lessons learned by LIPS at each step are explained.

- Step1: Group formation
- Step 2: Land acquisition
- Step 3: Land clearance
- Step 4: Developing cropping plan
- Step 5: Delivering start-up package
- Step 6: Training
- Step 7: Implementation of farming
- Step 8: Monitoring & evaluation

## Box-2: Vegetable Growing Manual “Step by Step Agriculture”

The manual is developed to help AEO and other leaders in the agricultural sector including leaders in rural communities, farmer teachers for better understanding of vegetable and field crop cultivation.

### SECTION 1: GETTING STARTED

#### 1. OPPORTUNITIES AND CHANCES

- Let's take a look at local markets
- How to get necessary materials?

#### 2. SEED

- Seed selection
- Condition of germination
- Germination and growth after emergence

### SECTION 2: Basic of Cultivation

#### 1. VEGETABLES

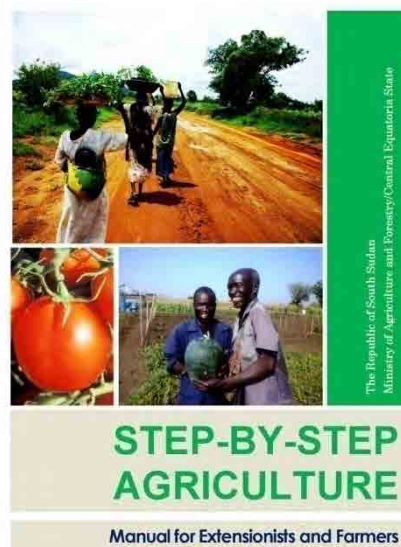
- Raising seedlings
- Land preparation
- Transplanting
- Soil amendment
- Fertilizer application
- Crop management
- Pest control
- Harvest

#### 2. FIELD CROPS

- Land preparation
- Sowing
- Fertilizer management
- Pest control
- Post harvest management

### SECTION 3: Production Manual

- TOMATO
- EGGPLANT
- WATERMELON
- CABBAGE
- KALE
- OKRA
- GROUNDNUTS
- MAIZE
- SORGHUM



#### **D. Rural Development Directory**

Rural Development Directory was prepared in order to improve the network and linkage of the Directorate of Community development between the National and States as well as inter-State. Directory contain the name, position, postal address, email address (if any) and the phone number of the Director General, Directors and the key officers in the Directorate of Community Development.

Rural Development Directory was prepared in response to the outcome of the series of meeting with the Directorate of Community Development in 10 States. It was concluded during the first workshop in June 2011 that developing the directory would promote the communication between the Ministry Headquarter and the State Ministries and reduce the existing problem of budget stagnation and information. Through the two national workshops, information necessary for the directory was collected from the concerned officers.

Directory will be distributed as the final output of the LIPS project and it is going to be used widely by Directorate of Community Development in the Headquarters and State Ministries.

#### **E. Rural Development Tool Kit (DVD)**

All the manuals and documents listed above are made available as the digital data saved in a Digital Versatile Disk (DVD) for the Project Partners. DVD contains all the manuals and documents listed above developed by LIPS during its project period. DVD has a clear outline so that the users can access to the specific documents. DVD will be made available to the CDO in the Headquarters and every State Ministries. It should also be made available for other communities workers for their educational materials.

The Following table summarise achievements of Component 1 by output indicators set in LIPS PDM (project design matrix).

Table 3-1: Summary of achievement in Component 1 by evaluation indicators

Indicator	Level of Achievement
1. Community development manuals are developed in participatory manner	Community Development Manual (CDM) was developed reflecting the experiences of LIPS's 3 years field work. In this process, Manual Development Working Team was formed by the C/Ps of MCRD/GOSS, MCRD/CES and Amadi Rural Development Institute (ARDI) and has participated in data collection and review of the CDM. Manual is authorized by MAF/RSS and planned to distribute to all 10 states.
2. The developed manuals are positively evaluated by relevant stakeholders including CDO.	The draft Manual was distributed to C/Ps for their reference. In 2011, trainings on how to use CDM were provided for CDO in Central Equatorial State. Total 50 participants enjoyed CDM that is only manuals for CDO in South Sudan.

Indicator	Level of Achievement
3. Agricultural technology package are developed in participatory manner	The draft of Agricultural Manual “Step by Step Agriculture” was developed by the initiative of experts. Contents was feed-backed the opinion from AEO and farmers as well as experiences of demonstration farms. Stakeholders’ workshops on vegetable growing that formed by private producers and NGOs also contributed to its content.
4. The developed packages are positively evaluated by relevant stakeholders including AEO.	The draft manual was distributed to C/Ps and reviewed by MAF/CES. MAF/CES evaluated positively and agreed that they make it as official manual of MAF/CES. Copies of the Manuals were distributed at Agricultural trade fair in October 2011 and got great interests from participants who are interested agricultural business.
5. Number of farmers who adapt agricultural technical packages is increased	Even before the completion of the Manuals as a publication, its contents were partially used as training materials for AEO and farmers. As a result, some of the basic skills such as line sawing, spacing, weeding, were now commonly adopted by group farmers supported by the Project. According to interview survey to Farmer Teachers (F/T), 24 of out 29 F/T adopted at least one basic field techniques (83%). It was observed that F/T actively adopt new knowledge that they got through the Manuals and training in challenging of new crops and technologies.

## **COMPONENT 2: HUMAN RESOURCES DEVELOPMENT**

### **Capacity of the relevant government staff and rural community leaders in extension of Livelihood Improvement Models is strengthened.**

The civil war seriously impaired the administrative functions. It especially affected agencies engaged in rural development which their activities mainly take places in rural areas. Extension officers were not given enough chances to participate in further training even after the CPA. A limited number of training or/and seminars were mainly composed of classroom lectures. As a result, extension officers including CDO and AEO lack up-to-date knowledge and technologies that require practical abilities. Under the Component 2, a wide range of trainings was offered to CDO/AEO and other stakeholders in the rural development sector aiming to strengthen their practical abilities.

#### **A. Ministry of Cooperative and Rural Development**

(1) **Main target group:** Senior officials (Undersecretary and Director Generals) and inspectors

(2) **Target area strengthened:** policy making, project management and communication skills

#### **(3) Training**

- Training in Japan: A tailor made training was conducted in October 2010. The MCRD advisor (a former Undersecretary) and the Director General in Planning visited Japan for 20 days experiencing the Japanese public administration system on agriculture and cooperatives, and cases of livelihood improvement activities. The training was effective to clarify the strategic objectives of the rural development policies.
- Training in the third country: Study tours were organised in Kenya (2009) and Uganda (2010). The Director General and the Director in Rural Development had participated and studied projects in rural development and activities of extension officers in each country.
- Policy planning and preparation of a manual (OJT): A rural development plan was summarised through a series of workshops on policy planning since 2010. All Directors in MCRD participated in its committee. The Director General and the Director in Planning lead preparation of a manual on rural development as members of manual writing group.
- National Survey and Rural Development Workshop (OJT): MCRD took an initiative to organise the rural development workshop that summoned government representatives in rural development sector from all 10 States in South Sudan. Three inspectors participated in the ‘Survey on the Situation of Rural Development and Agricultural Extension’ which was conducted in 2011 and summarised survey results.

#### **(4) Impacts**

Through the implementation of above explained activities, following impacts were observed.



- Active communication was observed between the central and state governments which facilitated further understandings towards current situations and challenges each agency faces. Since the signing of CPA, there was no opportunity for all government representatives to get together. The project contributed in one of the functions of the government which to create a shared vision for rural development among all states in the nation by organising a national workshop. MCRD, as a central government, regained its role in taking an initiative for improving the situation of rural development in the nation.
- The target group gained further capacities in understanding basic concepts towards rural development and planning rural development projects through a series of trainings, workshops and monitoring of the LIPS project. Especially, the examples of livelihood improvement officers and rural gender groups in Japan, made the participants to reconsider the importance of supporting farmers' groups in South Sudan. The outcomes have been reflected in the Rural Development Policies and the State survey report.

## B. MCRD/CES

- (1) **Main target group:** CDO (48 CDO whom are deployed at its Juba office) and ARDI instructors
- (2) **Target area strengthened:** planning of rural development projects, practical abilities for the project implementation and leadership capacities
- (3) **Training**

CDO are the main target for the LIPS project and therefore a number of training opportunities was offered to CDO. A characteristic of LIPS trainings is that the trainings are closely linked with activities in model projects in rural villages. In other words, it emphasises an integration of a theory and practice. A summary of trainings are listed in the table below.

Table 3-2: Summary of trainings provided to CDO

Type of training	Timing	Contents
In-house training (seminar, workshops by JICA Experts)	Mainly at early stage of the project (2009-2010)	<ul style="list-style-type: none"> <li>• Basic courses on participatory rural development which include basics in community development, its methodologies and job descriptions of CDO.</li> <li>• Methodologies for dealing with gender issues and capacity building of rural women through building improved furnaces.</li> <li>• Methodologies on socio-economic survey</li> </ul>
Specialised training by external trainers	Before the implementation of model projects and during the	<ul style="list-style-type: none"> <li>• Apiculture (Kageru Forestry Centre)</li> <li>• Goat rearing (MAF/CES)</li> <li>• Fisheries (FAO)</li> <li>• Bread baking (JCS/NGO)</li> </ul>

Type of training	Timing	Contents
	monitoring period	<ul style="list-style-type: none"> <li>• Operation and maintenance of a mill (CHF, WSHDO/NGO)</li> <li>• Malaria prevention, Community health (MOF/CES, PSI/NGO)</li> <li>• Lulu processing, soap making (Lulu work/NGO)</li> <li>• Borehole repair &amp; maintenance (MOW/CES)</li> </ul>
Computer literacy	Early stage	<ul style="list-style-type: none"> <li>• 11 CDO participated (plus 4 instructor of ARDI) in 3 month computer training course of MTC (Multi-service training centre).</li> </ul>
Study tours	Agricultural off-season	<ul style="list-style-type: none"> <li>• Visits to rural development projects and discussion with related Ministries and research institutes in Kenya and Uganda. CDO, ARDI instructors and AEO have participated in the study tours (sharing of experiences).</li> <li>• Visits to innovative farmers' groups at Yei and Mundri (Western Equatoria State)</li> </ul>
Training in Japan	Every year, in total of 7 times during the project period	Participation in group trainings on rural development organised by JICA (a total of 10 CDO and ARDI instructors have participated)
TOT (Training of Trainer)	Towards the end of the project period (2011)	TOT aimed to train leading CDO to be instructors. It was conducted in the fields of public health, gender and the usage of rural development manuals.
OJT	During the project period	The trainings carried out under LIPS aimed to provide necessary knowledge and technologies in order to implement model projects. Training impacts are further enhanced through trained CDO participating in the model project implementation (OJT). 48 CDO have participated in model projects.

#### (4) Impacts

CDO are considered to have acquired basic knowledge and technologies through a series of training explained above. The capacities they acquired are listed below.

(Capacity on planning and analysis)

- CDO have acquired basic skills on rural socio-economic surveys and participatory problem analysis. They have also studied how to reflect lessons learned from the first year experience on model projects to activities of the following year. In particular, the improvement was observed in following abilities: coordination of visiting days and number of CDO who visit the communities, acceleration of seed procurement, formulation of IGA proposal, problem solution ability in rural communities, etc.

(Capacity on decision making)

- A CDO meeting was conducted on every Monday to report activities of the preceding week and discuss challenges and way forwards. There are always challenges, either big or small, in activities at rural villages. Discussing such challenges in groups enhanced insights among CDO towards problems and built a capacity in decision making through exchanging hints for solutions. This opinion exchange was especially effective for CDO with limited practical experiences.

(Capacity on leadership)

- The name of 'CDO' was known by only 2.4% of villagers in model project sites when the project first started. After a year, 77.1% of villagers recognises the presence of CDO and appreciates their activities.
- Through a series of trainings organised by the project, CDO acquired basic knowledge on not only rural development but also agriculture, health and education among others. As a consequence, fields that CDO can conduct counselling have widened. When the project started, visits to the rural villages were always accompanied by JICA experts. The team of CDO began to take an initiative towards the end of the project.

(Capacity on cooperation)

- Over 15 organisations/institutes were effectively involved in the implementation of the model projects. JICA experts were coordinating with said organisations/institutes at the initial stage of the project. Yet, through collaborative activities at the project sites, CDO started to expand their own networks for cooperation towards the end of the project.
- CDO brought additional resources to Model communities through partnership between CDO development partners such as textbooks, teaching materials (UNICEF), mosquito net (NGO), drugs (MOH).

(Capacity on document preparation)

- 11 CDO and 4 ARDI instructors participated in 3 month computer training. As a result, they are now able to prepare documents using computers.
- The project introduced a format for recording extension activities. The writing capacities of CDO have improved through preparing records as they visit villages.

## **C. MAF/CES**

**(1) Main target group:** AEO

**(2) Target area strengthened:** Basic knowledge in vegetable production, methods on agricultural extension services

### (3) Training

Training of AEO especially focused on practical skills on how to grow crops and vegetable. This includes i) basic farm management skills, ii) experimentation of new crops/vegetable and variety and iii) marketing. A summary of trainings are listed in the table below.

Table 3-3: Summary of trainings provided to AEO

Type of training	Timing	Contents
In-house training (seminar, workshops, practical training by JICA Experts)	Mainly at early period of the project (2009-2010)	<ul style="list-style-type: none"> <li>● Agricultural extension basic course aiming to refresh AEO on the concept of modern agricultural extension. It covered wide area of topics such as policy, extension methods, farm management techniques, community mobilization, etc.</li> <li>● Basic courses on participatory rural development which focus farmer group formation and its management.</li> <li>● Stakeholder workshop on vegetable growing aiming to share the knowledge among MAF officers and private producers.</li> </ul>
Computer literacy	Early stage	<ul style="list-style-type: none"> <li>● 4 AEO participated in 3 month computer training course of MTC (Multi-service training centre).</li> </ul>
Study tours	Agricultural off-season	<ul style="list-style-type: none"> <li>● AEO, Directors of MAF/CES participated study tours to Kenya and Uganda (2009, 2010 &amp; 2011). Team visited farmer group and research institution including NaCRRI.</li> <li>● They also visited to innovative farmers' groups at Yei and Mundri (Western Equatoria State)</li> </ul>
Training in Japan	-	No counterpart from MAF attended training in Japan.
OJT	During the project period	Two AEO worked as farm managers of demonstration farms. AEO experienced all process of farming from land preparation to harvest/marketing. At the same time they conducted numbers of training course at demonstration farm and communities.

### (4) Impacts

Because of there are only two full time AEO are assigned to the Project, the impacts of training are generally limited compare to CDO that are counted 48 full-time staff. Although LIPS involve other officers in MAF/CES and MAF/GOSS (not counterpart ministry), without OJT it was hard to increase practical skills.

Through the implementation of above explained activities, following impacts were observed.

- AEO are able to apply basic agricultural knowledge in extension service, especially for field crop and vegetable cultivation techniques.
- AEO are able to assist farmers in group formation and its management.
- AEO are able to operate and manage a demonstration farm in terms of farming techniques, marketing and labour management.
- Officers in MAF/CES and MAF/GOSS increased the knowledge on the current situation of the farming and its potential.

Table 3-4: Skills level of AEO after training

Skills	Level
Variety of field crops and vegetable	AEO experienced growing over 40 types of crops and variety. Most of them are new in Juba. They conducted procurement of seeds in Juba and Uganda, therefore they have more idea on suppliers and price.
Land preparation	AEO worked with farmer group for selection and preparation of farm land. Yet, soil analysis technique is not enough, because the Project did not introduce analytic machine for soil test.
Sowing	They acquired basic skills according to the types of crops. To identify the timing of sowing, they need more experience. This is important knowledge because rainfall pattern is unstable in Juba County.
Vegetable seedling production	They acquired basic skills of nursery bed, seedling, watering, shading, thinning, transplanting. They can train farmers alone.
Field management	They acquired basic skills of watering, fertilizing, weeding, and mulching. Although they experienced to use fertilizer in the Project, yet more experience are required.
Pest and Diseases management	They faced many types of pest and diseases in demonstration farm and group farm. Then they have more knowledge on these troubles. Yet, they do not have enough knowledge on identification and its counter measures.
Harvesting	They acquired basic skills and knowledge. Yet, the Project did not train them on storage practically. They need more training.
Marketing	They sold the products from demonstration farm and group farm. Then they have idea of customers, price and profitability.

#### D. Community Leaders

- (1) **Target group:** BDC (Boma Development Committee) members and traditional chiefs in the Model Boma.

(2) **Target area strengthened:** Leadership that enhance community participation in the CDP, organising community and promotion of collective works among community members.

### (3) Training

OJT that is implementation of CDP is a main tool of training, because the community builds motivation and capacity through participation and active involvement in decision-making process and implementation. In addition, LIPS organize training workshops (a total of 8 times, 18 days) and 197 man/times of community leaders participated. In these training workshops, community leaders learned;

- Concept of leadership
- Role of BDC, traditional leaders, Boma Administrator and Payam Director
- Participatory planning, implementation and monitoring & evaluation
- Team building and group management for self-reliance society
- Sustainability of BDC (after the Project)

### (4) Impacts

- 6 BDC established in each Model Bomas built a good relationships with traditional authority and local government.
- Community leaders increase leadership in mobilization of community resources. As a result;
  - ❖ Community members are more united than before
  - ❖ Community organize meetings
  - ❖ Community have more collaboration activities with men and women such as school construction and a hat for grinding mill.
- BDC takes more responsibility in negotiation with local government and development partners to implement Community Development Plan.
- Through the monitoring and evaluation of the Model projects, BDC and community leaders increase the knowledge on geography, resources and thought of villagers in their own community. Meetings (BDC meetings) made the leaders realize the ideas of the villagers, especially those who had not been able to attend meetings such as women and IDP.

The Following table summarise achievements of Component 2 by output indicators set in LIPS PDM.

Table 3-5: Summary of achievement in Component 2 by evaluation indicators

Indicator	Level of achievement
<p>2-1. Through participation in the training and study tour, CDO and AEO acquire new skills and knowledge</p> <p>2-2. 80% of CDO and AEO involved the LIPS receive a series of training</p>	<ul style="list-style-type: none"> <li>● LIPS offered 46 training courses and workshops, 6 trainings in Japan, and 6 study tours in and around South Sudan. 48 counterparts CDO enjoyed these training.</li> <li>● Among 48 CDO, 32 of them regularly visit communities and undergo OJT activities and as a result, have acquired new skills and knowledge.</li> <li>● According to the questionnaire, all CDO acquired skills and knowledge through training, workshop and visiting communities. (e.g. community mobilization and empowering methods and reporting and monitoring system)</li> <li>● A total of 30 officers in MAF/CES participated in various types training. These are 20 training courses and 5 study tours in and around South Sudan.</li> <li>● The two AEO, as fulltime counterpart, are going through OJT at demonstration farm, at the same time actively participated in training courses, and as a result they have acquired new skills and knowledge</li> <li>● BDC members and other community leaders (a total of 40) participated in 8 training workshops (58%). According to the group discussion, members of BDC acquired community mobilization and community management skills.</li> </ul>
<p>2-3. In more than 80% of training courses, more than 80% of training participants rank A or B in questionnaire form</p>	<ul style="list-style-type: none"> <li>● According to the questionnaire to CDO in 2010, 85.7% of CDO were satisfied with their work.</li> <li>● 72% of community leaders consider training courses very effective and adequate.</li> </ul>
<p>2-4. 80% of participants utilize acquired knowledge and skills at their working place</p>	<ul style="list-style-type: none"> <li>● Almost all the CDO consider that their offices have become more functional as a result of the Project implementation.</li> <li>● According to questionnaire to CDO, 24 of 26 CDO utilize newly acquired skills and knowledge in their working place. (92%)</li> <li>● According to group discussion at community, 4 out of 6 BDC actively utilized acquired knowledge, such as community mobilization and management, at their communities.</li> <li>● AEO utilize acquired skills and knowledge through OJT at demonstration farm, and transfer the skills and knowledge to farmers at model communities.</li> </ul>
<p>2-5. CDO/AEO have a clear sense of purpose and systematically and independently</p>	<ul style="list-style-type: none"> <li>● According to the field visit record, the number of visit by CDO increased from 13.7 times / month in 2009, 65 times / month in 2010. The rate of field visit is maintained in 2011.</li> <li>● In 2010, zonal team visited community as part of training, and therefore, many CDO visited the community. In 2011, teams of CDO were allocated to zonal teams and sector teams to provide systematic service to communities. Thus, the number of CDO</li> </ul>

Indicator	Level of achievement
	<p>visiting community decreased.</p> <ul style="list-style-type: none"> <li>● In 2010, LIPS gave per diem to CDO when they visited communities. Although per diem is not given in 2011,, CDO still regularly visit communities.</li> <li>● Two AEO visit model communities to monitor the situation and advise/instruct farmers.</li> <li>● According to the interview survey of LIPS member farmers conducted by the Project, the ratio of farmers of model communities recognize CDO and their activities sharply increased to 97.4% from 2.4% before the commencement of the Project. In addition, 77.4% of those farmers are satisfied with CDO' services.</li> </ul>
<p>2-6. More than 80% of CDO recognize the improvement in terms of commitment, motivation and cooperation towards their job</p>	<ul style="list-style-type: none"> <li>● According to questionnaire to CDO, 85.7% of CDO is satisfied with their job. CDO feel more confidence about their skills and are motivated to transfer their skills and knowledge to community members. They are even more motivated to see community change through their intervention. CDO also learned importance of group work</li> <li>● 77.1% of 616 farmers consider CDO's activities quite helpful.</li> <li>● CDO have enhanced its network with other organizations and currently carry out activities with 19 organizations such as governmental agencies, UN and NGOs.</li> <li>● Boma Development Committee (BDC) was established at each model community, decision-making framework/system among farmers was formed.</li> <li>● According to group discussion, 4 out of 6 BDCs were active in community and voluntarily fixing problems in the communities, such as starting school for children, coordinating with other organizations to bring more aid to the community, and etc.</li> </ul>



## Component 3: Institutional Capacity Development

### **Institutional Capacity of MCRD/GOSS/CES in effective operation of Livelihood Improvement Models has been strengthened.**

Though an approach towards the livelihood improvement has been identified, the government still needs to carry out said approach. At the central government, the way to conduct rural development is not clearly indicated in its policy. The state government that engages in actual implementation of rural development activities lacks staff and facilities/ equipment to train rural communities. Other impediments include: insecure revenue sources for carrying out a livelihood improvement approach; a lack of a monitoring system for activities; a lack of a sound communication and reporting system among those involved. This component aimed to improve these organisational challenges. Yet, due to time and resource constraints, the outcomes of activities remained limited.

#### **A. Rural Development Policy**

The current policy, the ‘policy framework and strategy 2007/8’ was prepared as to respond to CPA and its contents mainly focus on organisational structures and functions of MCRD. The vision, attitudes and priority areas of the government towards rural development are vague and therefore the policy review was urged along the establishment of a new nation. Under such circumstance, LIPS organised a first policy meeting at MCRD in June 2010 and continued organising periodical meetings at a director level. On the 16th and 17th of June 2011, LIPS organised a workshop on extension services at Juba and invited directors in charge of community development, cooperative development and agricultural extension from 9 states out of 10 states in South Sudan. The policy planning committee was set up during the workshop. From the 3rd to the 5th of August 2011, Directors of Rural Development, and those of Cooperative, from the entire nation, were summoned and a draft policy paper was prepared.

Table 3-6: List of Policy Development Committee

1. Advisor for MCRD	Mr Bortel Mori Nyombe
2. Undersecretary	Prof. Mathew Udo
3. Director General for Planning and Training	Mr. Rev Oneil
4. Director General for Planning and Training	Mr. John Pangech
5. Director General for Cooperatives Development	Mr. Abdon Ayuen
6. Director General for Community Development	Mr. Alphonse Okot
7. Director General for Administration and Finance	Mr. Nugget Awadia
8. Principle, Amadi Rural Development Institute	Mr. Victor Mabruk
9. LIPS/JICA (CTA)	Mr. Sachio Yamamoto
10.LIPS/JICA (Community development expert)	Ms. Bernadette Kyanya

The preparation of the policy got delayed from the original schedule. The delay was due to changes of the Minister of MCRD and the consolidation of MCRD with MAF within a series of administrative reforms. The policy was initially prepared as a ministerial policy for MCRD. Yet, MCRD being consolidated with MAF, the policy became a part of the agricultural policy and its content has also been changed to community development.

A policy paper, even if approved by parliament, will not make any effect if it is not properly utilized. Its usefulness (utility) mainly will be a result of what happens next. The policy should not only be read, but also discussed and understood, not only by community/cooperative workers, but by their supervisors, manager and planners, by leaders and officials, at all levels, who control or influence what goes on in the communities and cooperative development. The production of the paper should be treated as an opportunity to advocate for the principles embodied in the paper. This is very important for MCRD which is not yet fully recognised by population.

**B. Enhancing Communication and Information Sharing**

One of the weaknesses of MCRD/GOSS is the communication ability. Rural development requires participation of various stakeholders and the role of MCRD is to coordinate these actors’ participation. However, MCRD failed to function in collecting information on rural development and was unable to grasp activities of state governments. As a result, MCRD cannot transmit information towards outside and failed to find development partners to conduct project in collaboration. This again led to further weakening of its information gathering capacity. This component provided activities which facilitate MCRD/GOSS to engage in active communication with stakeholders.


Table 3-7: Major meeting and workshops organised by MCRD/GOSS

Meetings/WS	Date	Contents
Leadership workshop for Payam Directors, Boma Administrators, Chiefs, Headmen and BDC members	15-16 Jun. 2010	26 participants from MCRD, local government (Juba County, Payams, Boma), traditional chiefs and BDC members discussed on their roles in community development.
Rural Development Forum (RDF)	27 Jul. 2010	60 participants from MCRD, MAF, NGO, donors discussed on i) MCRD’s Rural Development Policy and Strategy and ii) current activities and problems of donor/NGO projects. Although after workshop, RDF Committee was established and members agreed to regularly hold RDF, it was suspended because of unstable MCRD structure.
Stakeholder workshop on agricultural inputs.	9-10 March 2011/ 1-2 Sep. 2011	67 participants from MAF, MCRD, researchers, Juba Univ., NGOs, private producers, seeds companies discussed on potential of vegetable growing in South Sudan. Then, in September 2011, follow-up workshop was conducted by same members.

Meetings/WS	Date	Contents
Rural Development Workshop “Enhancing Field Extension Services”	16-17 Jul. 2011	76 participants from MCRD, MAF, representatives from 10 states, NGO and donors discussed on the issues of extension and collaboration among MCRD, MAF and development partners.
Policy planning workshop	3-5 Aug. 2011	50 participants from MCRD and representatives of Directorate of Community Development and Directorate of Cooperatives from 10 states discussed on MCRD’s policy and relationships between MCRD/RSS and State Ministries.

### C. Rehabilitation of MCRD/CES Office

Securing facilities for extension services and transportation means are prerequisites for conducting rural development activities. MCRD/CES had lacked both so that LIPS supported. For transportation means, LIPS purchased 5 vehicles and 5 motor bikes which enabled CDO to visit rural villages. There was an office building for CDO. Yet, there was neither furniture nor electricity which LIPS complemented. In addition, the Project equipped one of the rooms with 4 computers, a photocopy machine and over 100 reference books. The counterpart CDO for LIPS are based in the capital city of Juba. They need to travel some distance to reach villages and therefore vehicles are needed for them to provide extension services. Securing vehicles is difficult for state governments with its tight finance. The sustainability is also questioned since the usage of vehicles burdens the government’s operational costs. Though it was not realised during the project period, it is necessary to build a system through building extension offices in rural areas where CDO can station. They are then able to provide extension services using bicycles or/and motor bikes from these offices.

	<p><b>Opening of new CDO office, Juba</b></p> <p>20<sup>th</sup> October 09, new CDO office was opened by the MCRD, GOSS. For opening of this office, LIPS equipped office furniture, computer, textbooks and built generator and electrical installation works. At information centre, over 100 reference books regarding to community development are available as well as photocopy service. Four computer with internet connection also help CDO in data collection and report writing.</p>
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### D. Construction of Demonstration farm

Farmers in Juba County are conducting farming for subsistence purpose in traditional system and they lack the information on modern technologies, including crop/variety, fertilizer, pesticide, etc. In Juba County, currently, there is no agricultural training centre where farmers and extensionist could learn modern technologies. LIPS highly respect practice training and “Seeing is believing” is one of the key tools of extension. In this sense, LIPS built 2 demonstration farms in Kworjik-Luri and Kapuri as

training centre for AEO and farmers.

Main objective of LIPS demonstration farm is to inspire the farmers to challenge to increase farm products through looking, touching and leaning improved technology and have following 3 functions.

(1) Demonstration of;

- New crops and varieties suitable in and around Juba
- Agricultural technologies
- Agricultural tools and equipment
- Economic variability of agriculture

(2) Training for;

- Farmers (especially LIPS farmers groups)
- Extension staff (AEO/CDO)
- Other relevant parties (private companies, students of Juba University)
- General visitors (pupils, NGO etc.)

(3) Production

- Cost recovering of demonstration farm operation through sales of farm products
- Enhancement of the visibility of demonstration farms through vegetable marketing

The following table summarises the contents of two demonstration farms in Kworjik-Luri and Kapuri. A map and photos of Kworjik-Luri demonstraton farm, are presented below.

Table 3-8: Outline of LIPS's 2 demonstration farms

Items	Kworjik-Luri	Kapuri
Location	Kworjik-Luri Boma Northern Bari Payam	Rombur Boma Northern Bari Payam
Opening	May 2010	July 2010
Land size	0.5 ha (Farming area is approx. 2,700 m <sup>2</sup> )	0.65 ha
Facility	Training hall, storage, toilet, shallow well + water tower, fence	Training hall, storage, toilet, shallow well, fence, drip-irrigation system
Equipment	Basic agricultural hand tools, water pump, motorcycle	Basic agricultural hand tools, water pump, motorcycle
Operation period	November to July	April to November
Staffing	Farm manager (he doubles as managers of two demonstration farms) plus 5 labourers (local farmers)	Farm manager (he doubles as managers of two demonstration farms) plus 5 labourers (local farmers)
Others	Adjacent to demonstration farm, approx. there are 5.5 ha (13 feddan) of group farm.	Adjacent to demonstration farm, approx. there are 5.5 ha (13 feddan) of group farm.

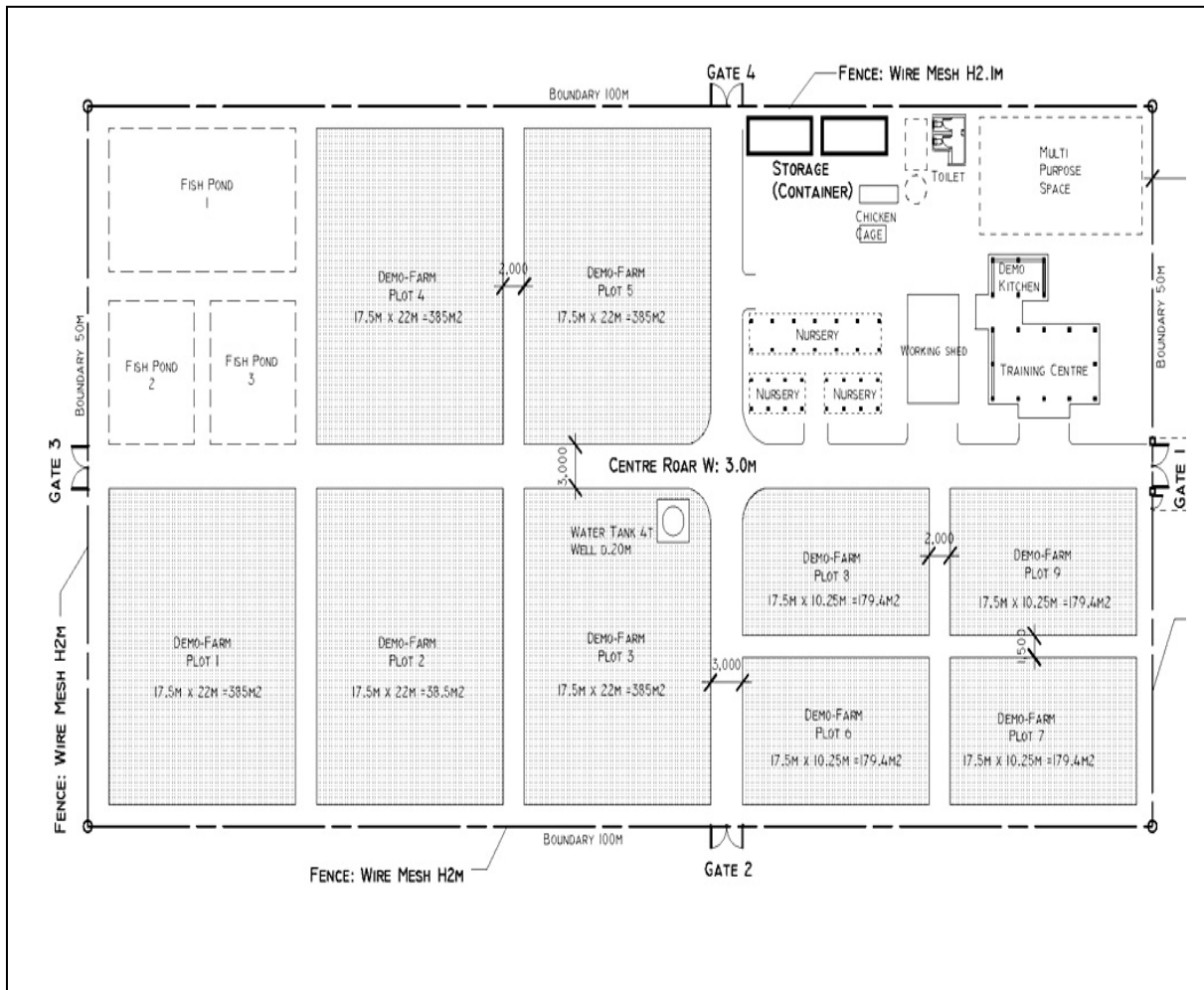


Fig. 3-2: Layout map of LIPS Demonstration farm (Kworjik-Luri)

The Following table summarises achievements of component 3 by Output indicators set in LIPS PDM.

Table 3-9: Summary of achievement in Component 3 by evaluation indicators

Indicator	Status of achievement
1. "Rural Development Policy Framework and Strategy" is established and approved by GOSS and CES	1) "Rural Development Policy Framework and Strategy" was discussed and agreed in the Policy Formulation Workshop in Aug. 2011. After that, opinions were collected from the stakeholders during the workshop in Feb. 2012, which were reflected in the final version. With the responsibility of MCRD Undersecretary, approval process is going through within the ministry.
2. Clear job description including tasks, qualification and required training for CDO is established and approved	In the Community Development Manual, job description of CDO is articulated. And also, it will be mentioned with in Policy Guideline which will be formulated in Sep.2011,
3. Through introduction of improved information systems, every CDO and other stakeholders are able to access necessary information	CDO could obtain necessary information of stakeholders from the chapter of "useful information" in Community Development Manual. Reporting procedure of CDO and regular meetings by MCRD/CES were also introduced.
4. Rural Development Forum is regularly held and information is shared among stakeholders	1) The first Rural Development Forum was held in July 2010 to increase information and coordination among actors and to improve the flow of information. RDF Committee was established and members agreed to regularly hold RDF. 2) However, due absence of Minister of MCRD/GoSS, second RDF had not yet held.
5. Necessary information from 10 states are compiled at MCRD / GOSS through national survey.	National survey was conducted and the present situation of each 10 state was reported to MCRD / GoSS. The workshop was conducted to discuss the current issues especially on budget transfer.

**Component 4: Model Projects**

**The Model project adapting Livelihood Improvement Models have been implemented.**

The Model projects are considered as a verification project which examines the effectiveness of LIPS’s community development approaches that is characterised by integrated rural development in collaboration with CDO and AEO. Of course, the Model project itself aims at improving of livelihood in the Model community, yet primary objectives are examination of the approach and capacity building of extension officers i.e. CDO and AEO. The result of monitoring and evaluation of these Model projects was feedback to the activities of the Components 1 to 3 described in previous sections.

Selection of Model Boma was starting point of this Component. The project selected 6 Model Boma in Juba County by end of 2009. After planning of Community Development Plan, first project action that is agriculture component started in April 2010. During the Project period, CDO, AEO and community people could experience the project implementation for two years.

**A. Objectives of Model Project**

- To strength practical knowledge and skills of CDO and AEO though implementation of the Model projects.
- To compile lessons learned from the model project to community development and agricultural manuals.
- To empower Model communities and farmer groups to make decisions to improve their livelihood and to act on them.
- To adopt improved technologies that farmer learned in the Model project.

**B. Process of Model Project**

Approach of the Model project takes typical participatory methodology including participatory rural appraisals (PRA), project cycle management, technical skills training, basic financial and participatory monitoring and evaluation (PM&E). Its process is roughly divided into 9 steps as shown in following table.

Table 3-10: Planning process of model project

Steps	Participants	Event	Timing
1. Socio-economic survey in Juba County	Survey consultants CDO	Structured questionnaire survey (784 households from 30 Bomas, 8 Payams in Juba County). Gender analysis in Nyamini Boma.	Jun to Aug 2009
2. Selection of 6 Model Communities	CDO	CDO meetings (setting up selection criterias)	Aug to Sep 2009

Steps	Participants	Event	Timing
3. Community Profiling	CDO Community members	Participatory appraisal (Social and Resource Mapping, Trends and Changes, Historical Profile, Venn diagram, Seasonal Calendar, Livelihoods analysis, Service provider interviews, Well being analysis, SWOT analysis)	Oct to Nov 2009
4. Formation of Boma Development Committees (BDC)	CDO Traditional chief Opinion leaders	Community meetings	Nov 2009
5. Community based planning	CDO, BDC Community members	Visioning and strategic planning workshop among BDC, community leaders and local government staff	Feb to Mar 2010
6. Approval of community development plan (CDP)	CDO, BDC Traditional chief Local government (Boma, Payam, County)	Documentation of CDP Meeting with local government (signing for approval)	Apr to May 2010
7. Proposal writing for model projects	CDO, BDC Livelihood improvement practice groups (LIPG)	Filling LIPS proposal writing format LIPF meeting & BDC meeting	May 2010 to Jun 2011
8. Implementation & monitoring of model projects	CDO, BDC Livelihood improvement practice groups	Financing to model projects including mobilization of community resources Training of LIPG members Visit & consultation by CDO	Jun 2010 to Feb 2012
9. Evaluation of model projects	CDO, BDC Livelihood improvement practice groups	Evaluation survey (questionnaire survey) and yeild survey Participatory evaluation BDC meeting	Oct to Nov 2010 Oct to Nov 2011

## C. Activities

### (1) Socio-economic survey in Juba County

To know the life of rural community is a starting point of the Model project. The Project carried out the socio-economic survey in Juba County was from 29 June to 8 July 2009 adopting five selected aspects of the community (i: household demographic data, ii: household resources, iii: livelihood activities, iv: agriculture, and v: household livelihood incomes). The survey collected data from 784 households, key informants and focus groups drawn from 30 Bomas in 8 Payams of Juba County



(Rajaf, N-Bari, Tijor, Rokon, Dolo, Ganji, Lirya and Bungu). It provides comprehensive understanding towards livelihood status of rural people in Juba County and the baseline data for the implementation of the model projects for CDO.

In addition, the project and Gender Focal Group of CDO conducted the gender analysis during June and July 2009 at Nyamini Boma (Nyamini Centre and Wunliet) to explore the socio-economic status which women are placed. Through the analysis, CDO identified the factors affecting women's access to and control over resources in their households and rural communities. The result clearly shows challenges that women are facing. For example, 48% of women have experienced problematic pregnancy. Women are also experiencing child death (50%), gender based violence including rape (48%), and suffering from a large burden of house work. Furthermore, poor knowledge of mothers on illness and hygiene was observed, which could have affected children's health. For example, some mothers are not know cause of malaria, do not know treatment for dehydration of children. On the other hand, women are undertaking numbers of income generating activities and engaged in 'collective' activities as members of a group (33%).

## **(2) LIPS Model Communities**

The Project identified following six communities as Model sites after the socio-economic survey and a series of consultations with CDO. The communities are all located in Juba County.

- a) Kworjik-Luri/Kworjik-Luri Boma/Northern Bari Payam/Juba County
- b) Kapuri/Rombur Boma/Northern Bari Payam/Juba County
- c) Nyamini (including Nyamini Centre, Wunliet, Bongajur)/Northern Bari Payam/Juba County
- d) Bungu/Bungu Boma/Bungu Payam (Bungu is Payam head)/Juba County
- e) Sirrimon/Sirrimon Boma/Dolo Payam/Juba County
- f) Kansuk/Kansuk Boma/Rajaf Payam (Kansuk is Payam head)/Juba County

For the selection of Model Boma following criteria was adopted.

- Security and Accessibility: During the selection of the model communities in Juba County, the factors which make CDO work' physically difficult such as security and accessibility were firstly taken into account. The areas where security was not established were excluded as well as long-distance community from Juba town. Therefore all Model Bomas are located within 2 hours drive from Juba city.
- Leadership and consolidation: In the next step, communities were screened by their "potentiality" in terms of leadership, cohesion and available natural resources that could indicate the possibility of the community development with the full utilization of local resources (both human and natural) to take place. This also includes ability of leaders to lead others, mobilise villagers for meetings, make decisions for collaborative works to build roads or church.

- **Geographical Balance:** Lastly, LIPS considered geographical balance as of the important criteria in order to see the environmental, cultural and geographical impact of the project. Geographical spread also allowed CDO to be recognized widely throughout Juba County.

The following table summarises brief profile of LIPS Model communities.

Table 3-11: Brief Profile of LIPS Model communities

Zone*	Community	Population	Main ethnics	Characteristics
Northern	Kworjik-Luri	656**	Bari, Mundari	Semi-urban (10 km from Juba)
	Kapuri	513***	Bari, Mundari	Most farmers are refugees
	Nyamini	1,544	Mundari , Bari	Mixed community
South	Bungu	2,737	Bari	Relocated village (de-mined area)
West	Sirrimon	1,524	Nyangara	Farest from Juba (50km)
East	Kansuk	300	Bari	Access to Nile river, returnees from Uganda

*Souse: Community Development Plan (2009-2012)*

*Remarks: \* Zone means CDO's working zone; \*\*115 households (Calculated by multiplying by 5.7). 5.7=average number of one family in Juba County; \*\*\*90 households (same as the previous remark)*

### (3) Boma Development Committee

The purpose of establishing a Boma Development Committees (BDC) is to organize community people structurally at the Boma level and creating a partnership between the community and the public/private (NGO) sector for improved service delivery system. LIPS supported every model community to establish their own BDCs, composed of around 11-13 members including men, women and youth who possess a good potentials of leadership. Their first job was to formulate their Community Development Plan (CDP) with the rest of community members in order to clarify their future visions and strategies for development. Leadership training of BDC went side by side with the implementation of the model projects in their communities. The following table summarises the role of BDC in implementation of CDP.

Table 3-12: Role of BDC defined by themselves in implementation of CDP

Community Level	<ul style="list-style-type: none"> <li>● To encourage people in the community to participate in development activities including CDP</li> <li>● To Monitor and Supervise activities of the groups organized under LIPS (e.g., Farmers' group)</li> <li>● To consult on issues arising from the groups and their activities</li> <li>● To assist in the decision making of the groups</li> <li>● To ensure materials delivered to the community are used effectively and kept</li> </ul>
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	<p>safely</p> <ul style="list-style-type: none"> <li>● To approve the activities proposed by the groups or individuals</li> <li>● To mediate on conflict between and among members</li> <li>● To train (with CDO) the community on leadership skills</li> <li>● To ensure groups follow the rules they have set to manage themselves</li> </ul>
Regional Level (County, Payam and Boma Levels)	<ul style="list-style-type: none"> <li>● To act as a contacting point for the organizations (Government, NGO, International) coming to the community for developmental work</li> <li>● To report to Boma and Payam Administration about the activities based on CDP</li> <li>● To approaching organizations for marketing the CDP</li> <li>● Coordinate and share the information with other BDCs</li> </ul>
BDC Level	<ul style="list-style-type: none"> <li>● To manage personnel affairs among the BDC members</li> <li>● To manage and allocate budget available for activities</li> <li>● To participate in the BDC meeting organized by the members or organizations like JICA/LIPS as and when necessary</li> <li>● To supervise the implementation of the CDP at community level</li> </ul>

#### **(4) Community Development Plan (CDP)**

BDC of each model community developed a Community Development Plan (CDP) in February 2010 with their community members and was approved officially in May 2011. During the planning process, active participation of the community, including men, women, youth and existing farming group process was observed. Community based workshops and meetings were held to ratify the plans and get community consensus. In May these CDPs for 6 Model Communities were approved and signed by relevant officials; these are i) undersecretary of MCRD/GOSS, ii) Executive Director of Juba County, iii) Payam Director and Boma Administrator. Boma is the smallest administrative unit. Currently, in South Sudan, there has been no system established to make development plan within Boma and allocate budget for it. Therefore, CDP formulated through LIPS has no legal implication. However, local government is aiming to have such planning process with the bottom-up approach with Payam, and County, and they have officially approved it with signature. It is expected to generate conversation between rural communities and local governments with further enhancement of their relation, through submission of CDP to the government. The framework of CDP is standardized by LIPS, namely, CDP includes 6 basic component; i) Agriculture, ii) IGA, iii) health, iv) education v) water and vi) security. Major contents of CDP by site are shown in the table in next page.

LIPS has been promoting holistic approach and group activities through their implementation of CDP. Activities which provide opportunity for people to work together for the same purpose, including group farming, group-based income generation activities, and construction of public facilities, have been effective in building social relationship among the local population who have been experiencing tensions among themselves, i.e. different tribes, or original villagers/returnees and IDPs. This is particularly crucial in Southern Sudan where social capitals do not function due to long years of conflict.

Table 3-13: Summary of CDP of 6 Model Boma

	Kworjik-Luri	Kapuri	Nyamini	Bungu	Sirrimon	Kansuk
<b>1. Agriculture Component</b>						
Forming farmer's group	●	●	●	●	●	●
Seeds & tools supply	●	●	●	●	●	●
Skills training	●	●	●	●	●	●
<b>2. Income generation activities (IGA)</b>						
Business loan			●			●
Vocational training	●		●		●	
Poultry	●			●	●	
Grinding mill		●	●	●	●	
Bread making	●	●	●		●	
Beekeeping		●		●	●	
Tree seedling		●		●		
Tailoring	●	●				
Timber selling					●	
Lulu oil processing			●		●	
Goat raising	●				●	
Fishing						●
Small shops						●
<b>3. Health</b>						
Construction of health post			●	●	●	●
Drug supply		●		●	●	
Health/MCH education	●	●	●	●	●	●
Training of CHW & TBA	●	●	●	●	●	●
Health management committee				●		
Construction of toilet	●					●
<b>4. Education</b>						
School construction		●	●	●	●	●
Learning material supply		●		●	●	●
School meal					●	
Uniform					●	
Adult literacy class	●					●
Deployment of teacher			●	●	●	●
Incentive for volunteer teacher	●			●	●	
Training of teachers			●		●	
Establish/training of PTA	●		●	●	●	
Education campaign	●					
School IGA	●				●	
<b>5. Water</b>						
Repairing or new borehole	●	●	●	●	●	●
Training on O&M	●	●	●	●	●	●
<b>6. Security</b>						
Construction of police post			●	●	●	●
Gun collection					●	
De-mining				●		
Forming community police	●	●	●	●	●	
<b>7. Others</b>						
Renovation of road						●
Introduction of cooking stove					●	

## (5) Model Projects

There are various activities included in CDP which villagers assessed their necessity. The scale of CDP is well over the capacity of villagers to achieve only by themselves. There are mainly two reasons. One is that essential social infrastructure such as schools, health posts, and wells are lacking from the village. Another reason is that despite Boma being a minimum administrative unit, there is no budget from the government. CDP therefore becomes a plan to receive assistances from the outside. LIPS selected and implemented a priority project from CDP which could enhance self-reliant efforts among villagers and was achieved within USD 10,000 per village. Its basic procedure is: (1) selection of a priority project through discussion among BDC and villagers; (2) preparation of a proposal including its cost estimates by CDO and BDC; and (3) assortment and implementation of projects which can be supported by LIPS and those need to be requested to other aid agencies. The following table summarises Model projects implemented in Model communities.

Table 3-14: List of Model Project Implemented in Model communities

Community	Agriculture	IGA	Water	Education/Health
Kworjik-Luri	Farmer group Farmer teachers	Bakery School Garden	2 new boreholes 2 repair	
Kapuri	Farmer group Farmer teachers	Bee keeping	1 new borehole 1 repair	Health education
Nyamini	Farmer group Farmer teachers	Poultry	1 new borehole 3 repair	Community Centre Health education
Bungu	Farmer group Farmer teachers	Bee keeping Grinding mill Goat Raising	1 new borehole 2 repair	Primary School (funded by Embassy of Japan)
Sirrimon	Farmer group Farmer teachers	Bee keeping Lulu soap making	1 new borehole 2 repair	Hygine training
Kansuk	Farmer group Farmer teachers	Bee keeping Fishery Small shop	NA	Community Centre (provision of materials)

※ Kworjik-Luri-Luri has some potential advantages compare to other model communities. First, exist of perennial river water in the community. Combining with good access to Juba town and fertile land, this makes Kworjik-Luri potential vegetable supply centre. There are milk productions which are not commercialized in Mundari (cattle keeper) community. There are also many mango trees. On the other hand, conflict among Bari, Mundari and SPLA is issues concerned in community development.

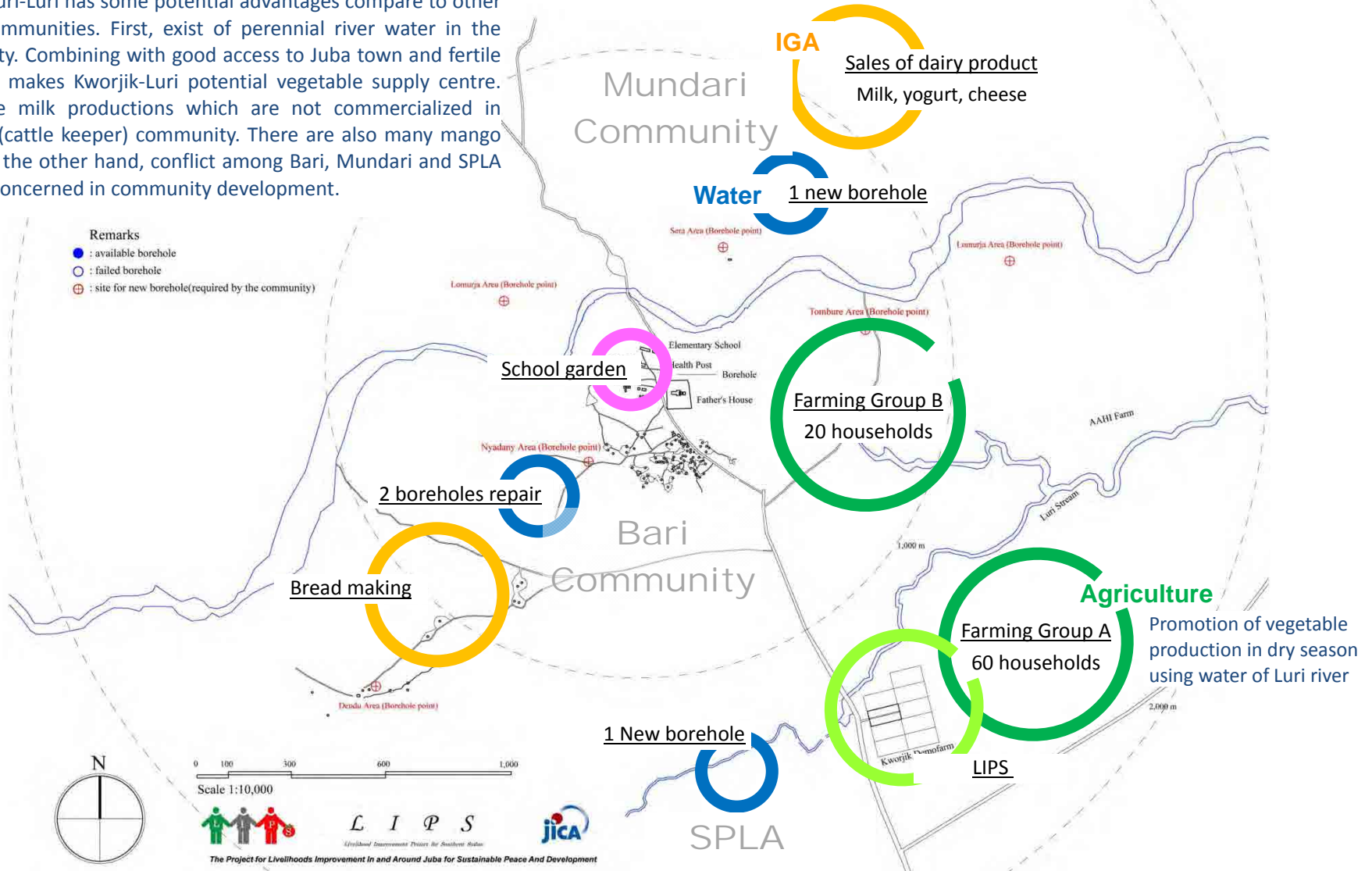


Fig 3-3: Model Projects in Kworjik-Luri

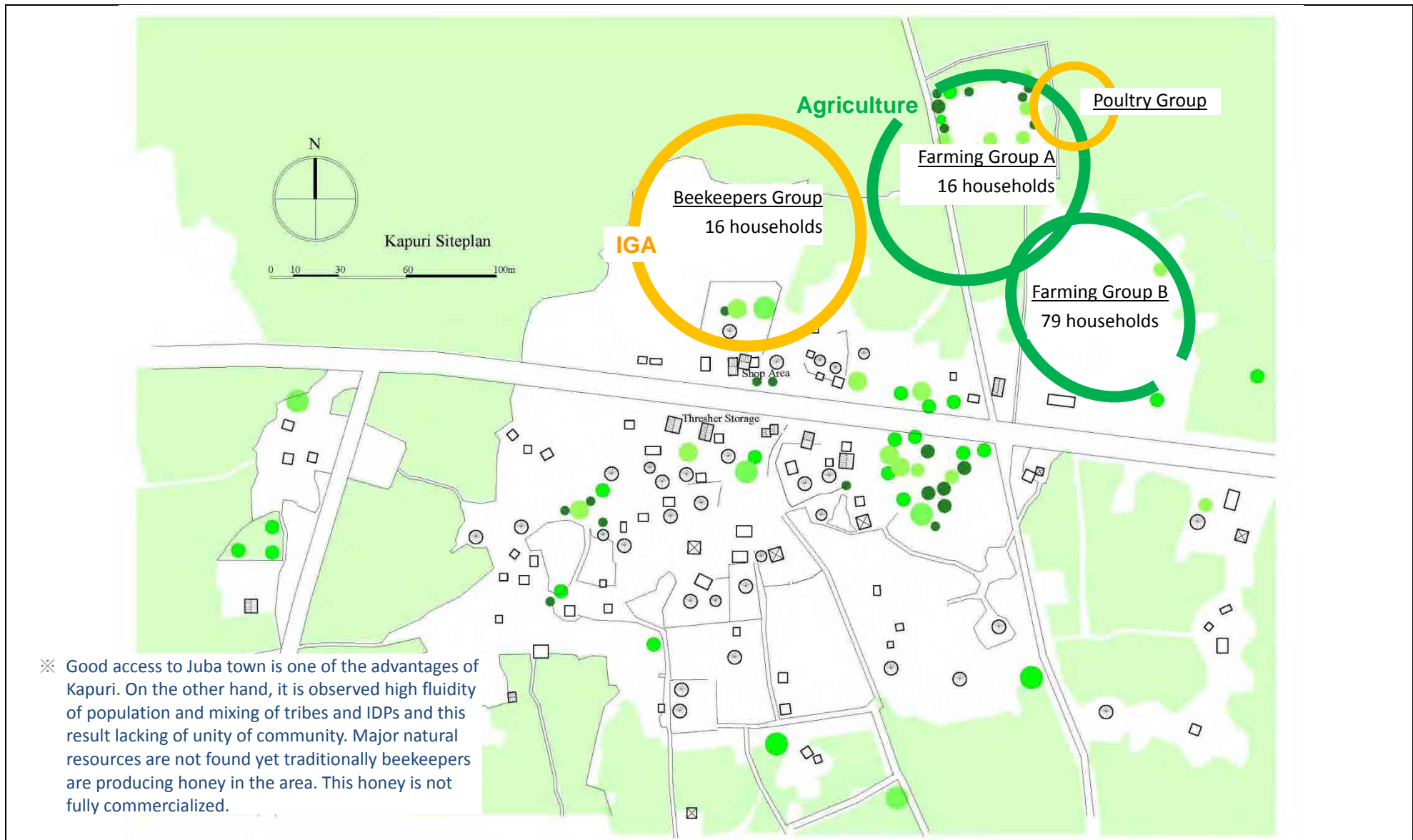


Fig 3-4: Model Projects in Kapuri

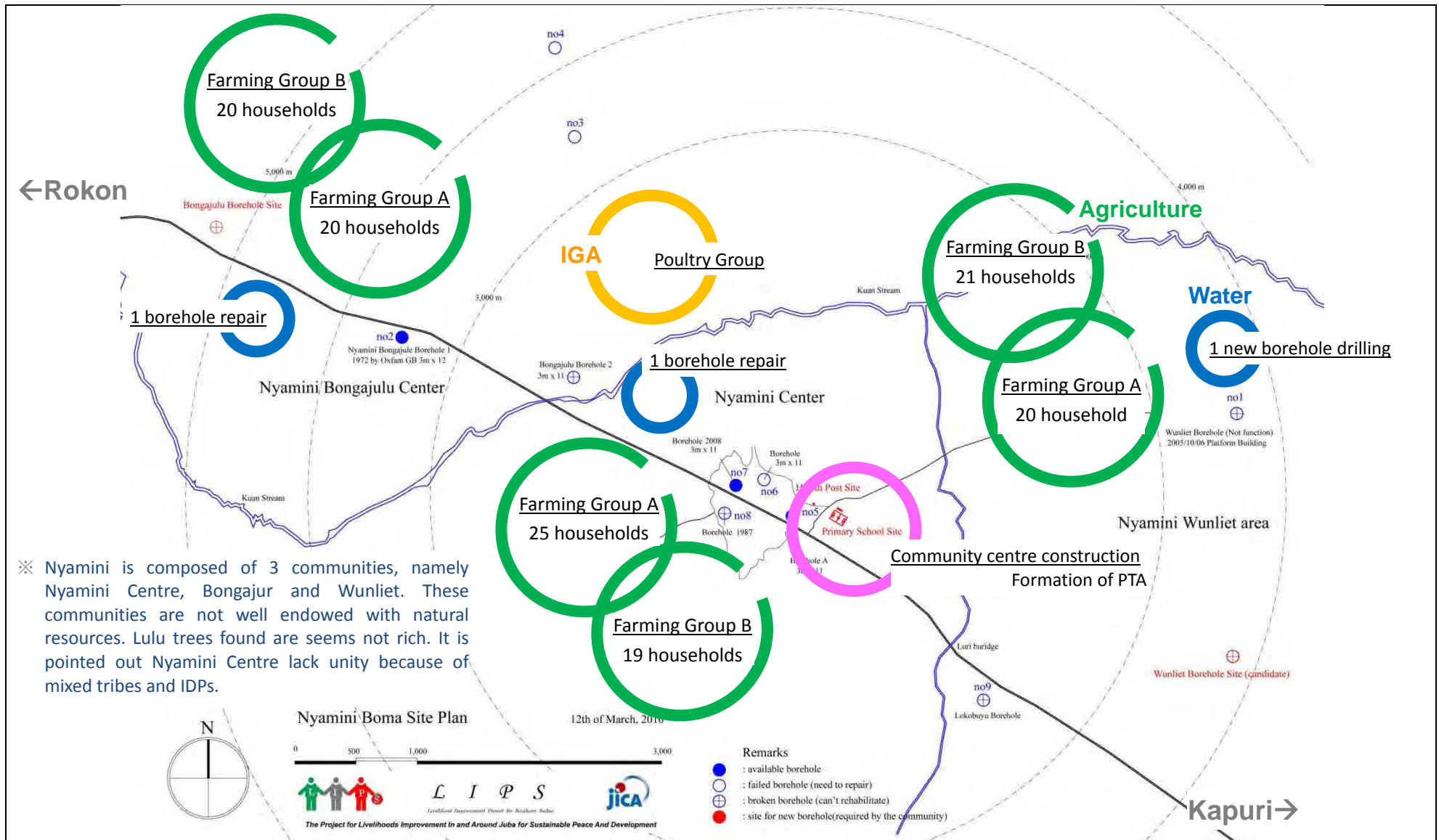
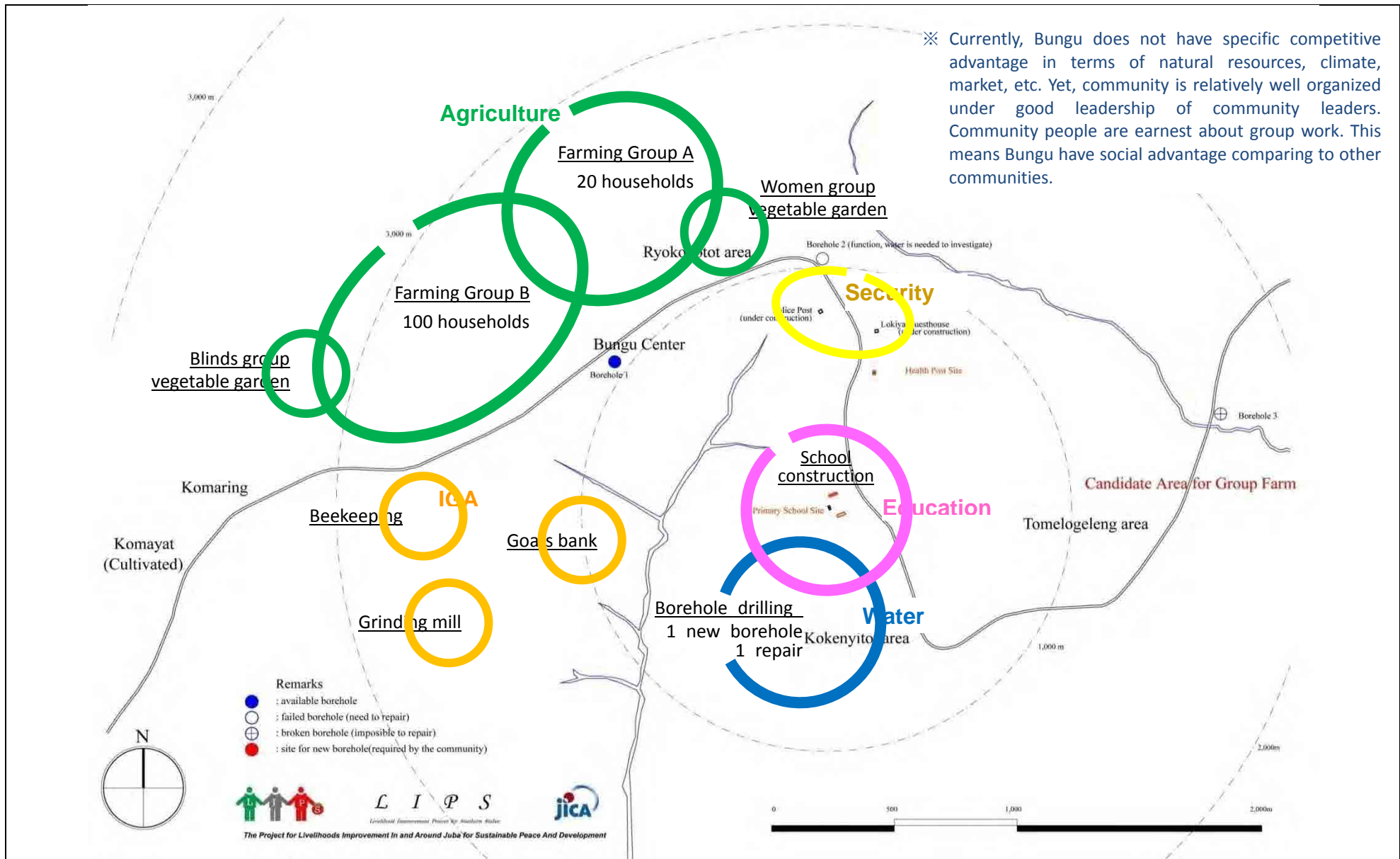


Fig 3-5: Model Projects in Nyamini





※ Currently, Bungu does not have specific competitive advantage in terms of natural resources, climate, market, etc. Yet, community is relatively well organized under good leadership of community leaders. Community people are earnest about group work. This means Bungu have social advantage comparing to other communities.

Fig 3-6: Model projects in Bungu

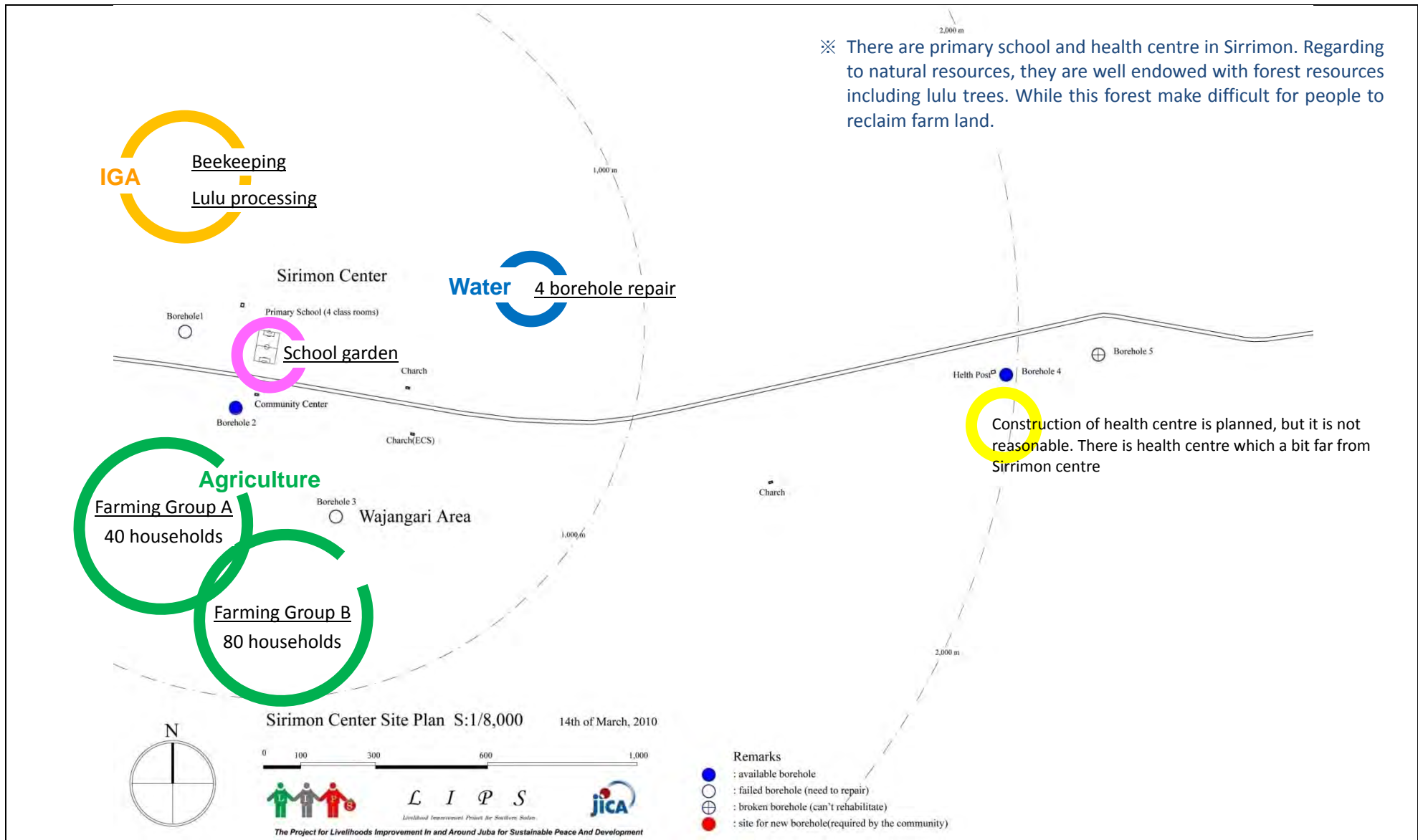


Fig 3-7: Model Projects in Sirrimon

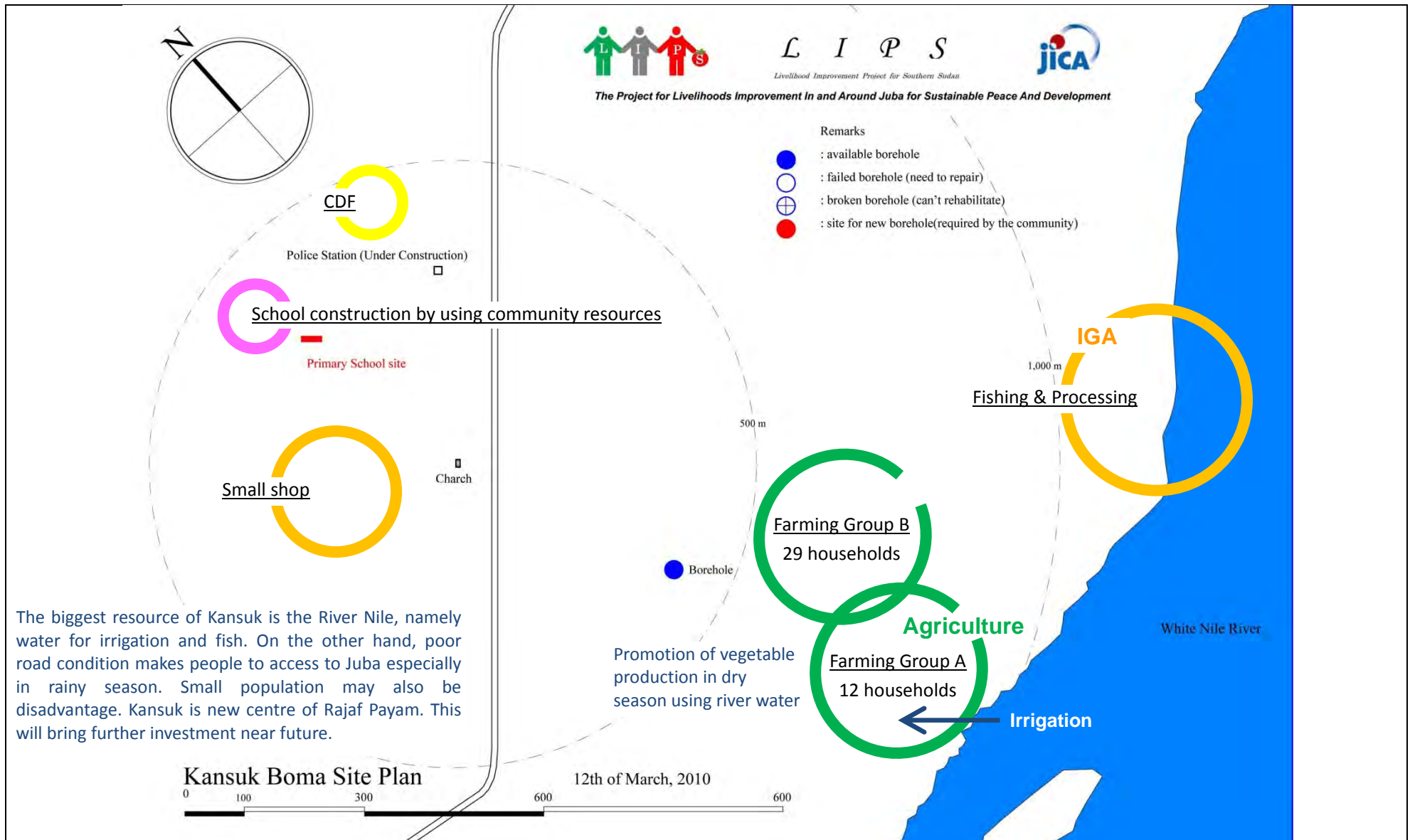


Fig 3-8: Model Projects in Kansuk

## **a) Agriculture Component**

Agriculture is one of the most important economic sectors in South Sudan, but long-lasting civil war has hindered this nation for restoring economic activities including agriculture, of which base has been totally destroyed since the end of the war. Agriculture is almost only the economic activities that the local people can stand on their life as cash making resource. However, agricultural productivity in the traditional way is not so high as fully supporting their life, and there is ample potential to improve techniques to enhance the productivity. All the Community Development Plan respectively formulated by the six Model sites, includes the increase in agricultural production. In response to this, a variety of training for technical improvement, crop seeds of improved varieties, and farm equipment have been provided to Model farmers, with the aim of increase in production through the improvement of farming techniques.

### **1) Objectives**

The objective of the agriculture component is to improve livelihood of local smallholder farmers in the production of field crops and horticultural crops. Specific objectives have been set as below;

- To increase food security by increasing yield of field crops through proper crop management and use of improved varieties
- To introduce horticultural vegetable cultivation as a mean of increasing income of the local communities
- To examine the effectiveness of LIPS's agricultural extension approaches and to feedback its lessons learned into agricultural manuals (component 1).
- To increase practical knowledge and skills of AEO through actuation involvement to model project.

### **2) Activities**

Corresponding to agricultural component in the Community Development Plan in each Model communities, LIPS introduce intensive training system to selected farmer groups in the communities. This approach is based on the group-based learning process as with Farmer Field School, which have been also promoted by the government or NGOs in South Sudan. Its bottom line is; first to formulate farmers groups, second to make a cropping plan in collaboration with the farmers, and finally to provide training in rural communities. The characteristics of LIPS agricultural support include training of general farmers at Demonstration farms and fostering of practical/innovative farmers (Farmer Teacher) at each village, as well as intensive guidance for these groups. As no farm has existed in Juba County to be a model for farmers, LIPS established the Demonstration farms as a learning environment to "learn by watching". Furthermore, fostering of Farmer Teacher is designed on the basis of intensive training of farmers highly motivated towards agricultural improvement after being selected by CDO/AEO. As training for Farmer Teachers is expected to take quicker effect than that for

general farmers, this approach is aiming that their farming practices will become models in each village and enhance natural ripple effect to other farmers. Especially the Farmer Teacher approach has been officially approved by MAF/CES as a method to increase effectiveness of agricultural extension (any farmer who were properly trained by LIPS received an official certificate from MAF/CES) .

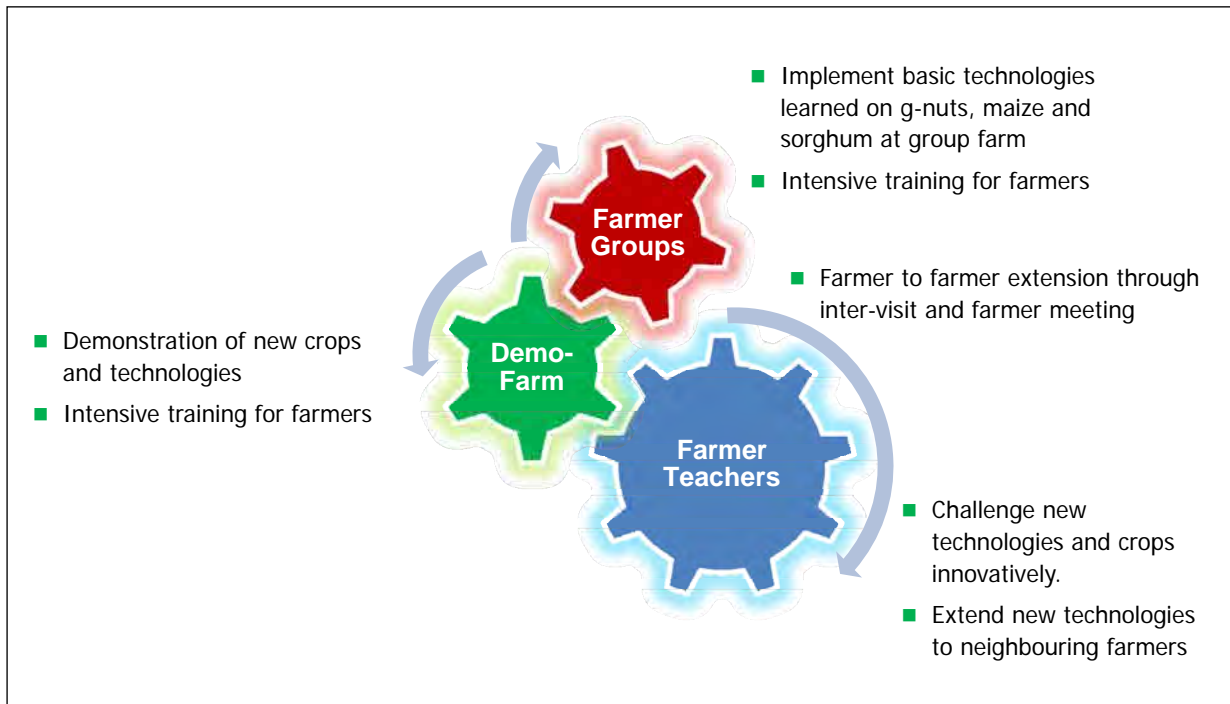


Fig. 3-9: Basic approach of LIPS in agricultural component

#### a. Farmer Group Support

LIPS formed 30 farmer groups in 6 Model communities and total of 577 households are involved. Supports to farmer group took following 8 steps.

1. Group formation
2. Land acquisition
3. Land clearance
4. Developing farming plan
5. Delivering start-up package
6. Training
7. Implementation of farming
8. Monitoring & evaluation

### *Step 1: Group Formation*

This step included following activities;

Dissemination: Members of BDC is explained the concept of farmer group support under the Project. After this meeting, BDC disseminate this information to the community members by all means. In this point, community member may internally start formation of their groups.

Orientation: BDC organize community meeting facilitated by CDO/AEO Team. In this meeting, the concept and activities of farmer group is introduced. The meeting is open for all kinds of community members.

Grouping: After orientation, BDC and CDO/AEO team facilitate grouping considering number of members in a group, location of their house, gender, leadership etc. Only one member of the household/family is allowed to be the member of the group. Other family members could be registered as sub-members. Maximum number of a group must be 20. If more than 20 people apply to be a member of a group, it will be separated in to 2 groups. Considering the capacity of the Project, maximum number of groups at community level also is limited as one for Group A and five for group B.

Training: LIPS provide introductory one day training on the farming practice. This process works as screening of serious members prior to finalisation of membership. For absence of this training, nobody could be a member.

Registration: After training, participants are recognized as a member of the group and are registered.

Group leaders: The members must select committee composing at least the chairperson, the secretary, and the treasurer.

Group rule: The rule should be formulated together, agreed upon and enforced/obeyed by every member of the groups. For the formation of the rule, CDO facilitate by using “model of the rule” prepared by the Project.

At the beginning of Model project, LIPS guided the communities to form 1 to 5 farmer groups in each Model communities. These groups were categorized into two: Group A, as a group with a common farm land, and Group B as a group of farmers who individually cultivate their own land. Group A has the advantages that they can as a member acquire an individual farm land in a group farm land, more intensive training can be regularly provided from the project at the group land, and coordinated efforts can promote the efficacy of farm works. The disadvantages of Group A are that a member cannot select an agricultural landscape by himself, and that cooperative efforts can be imposed on individuals, etc. For the farmers who cannot have access to any good land (e.g. refugees/IDP, women), especially, the common farm land will be a big incentive. On the other hand, those who prefer to put the techniques they learnt in practice at their own land select Group B with higher flexibility. And as a result, 11 Group A and 19 Group B were formulated in LIPS model communities in 2010.

Table 3-15: Numbers of farmer groups and memberships in 2010 and 2011

Model Boma	Group type	Number of groups		Number of members	
		2010	2011	2010	2011
1. Kworjik-Luri	A	3	1	61	12
	B	1	0	21	0
2. Kapuri	A	1	1	16	16
	B	4	0	80	0
3. Nyamini	A	3	1	59	15
	B	3	3	59	34
4. Bungu	A	1	1	20	20
	B	5	5	100	100
5. Sirimon	A	1	0	40	0
	B	4	4	80	60
6. Kansuk	A	1	1	12	14
	B	2	2	29	10
Total	A	11	5	208	77
	B	19	14	369	204

The number of farmer group reduced from 30 to 19 in 2011. This is the result of evaluation of activities by CDO and group members. Through the experience of 2010, members not positive for group works were excluded and farmer groups were also reformed. At starting of group formation, many farmers and BDC members do not fully understand the concept of the project before registering as a member although they have chances to listen to explanation or screening). Their motives for registration vary from the hope for seriously receiving agriculture training to hope for simply getting seeds. Furthermore, CDO and AEO, who are supposed to provide advises to them, do not see the picture of the people in the rural areas in the first year. Therefore, the project has been through a process of formulating rather large groups in the first year and of reducing the size of the groups in the second year. It took an important role for strengthening the solidarity of the groups that the members has discussed the future of the groups by themselves.

Table 3-16: Characteristics of farmer group type A and B

	Group A (Group Farming)	Group B (Individual Farming)
Standard	(Membership) Maximum 20 members per group. Only one member shall register from one household. (Farm land) Area of a plot per member shall be 0.5 feddan. Total area shall not be larger than 10 feddan.	(Membership) Maximum 20 members per group. Only one member shall register from one household. (Farm land) No limitation.
Criteria for Membership	<ul style="list-style-type: none"> <li>● Small scale farmer who has currently no cultivated land or have farm land not more than 5 feddan.</li> <li>● Resident not far from group farm (max. 30min by walk).</li> <li>● Permanent settler in the Target Village</li> <li>● Experience in agriculture or willing to learn.</li> <li>● Strongly committing on active and Participated in the meeting organized by LIPS and the community.</li> <li>● Agreeing with group rules.</li> </ul>	<ul style="list-style-type: none"> <li>● Small scale farmer who has cultivated land not more than 5 feddan.</li> <li>● Having a land to be cultivated in coming season.</li> <li>● Permanent settler in the Target Village</li> <li>● Experienced in agriculture or willing to learn.</li> <li>● Strongly committing on participated in all the meeting organized by LIPS and the community.</li> <li>● Agreeing with group rules.</li> </ul>
Advantages	<ul style="list-style-type: none"> <li>● Collective works among members. The members help each other at one group farm to maximize the production and sales</li> <li>● A full package support by the project including tractor, seeds, equipment, training and regular guidance.</li> <li>● Enhanced information exchanges among members at group farm.</li> <li>● Chances for increasing the members/ areas in the next year, if the group performs well.</li> </ul>	<ul style="list-style-type: none"> <li>● Free works at his/her own farm. The members can basically freely decide their farming activities. The member can select the best place by him/herself.</li> <li>● Semi support package by the Project including seeds, equipments and training (irregular).</li> <li>● Progress of activities will not be affected by other members.</li> <li>● Chances for more supports in the next year if the individuals perform well.</li> </ul>
Disadvantages	<ul style="list-style-type: none"> <li>● Some activities are regulated by group. Members should spend more effort on group management.</li> <li>● Plot size is regulated by group.</li> <li>● Progress of activities will be affected by member's participation and contribution.</li> </ul>	<ul style="list-style-type: none"> <li>● Less technical support by the Project including no tractor service.</li> <li>● Success depends on the capacity of individual rather than that of the group</li> <li>● No group management in individual plots as the members work as individual</li> </ul>

*Step 2 & 3: Land Acquisition and Land Clearance*

A land required for establishing Group A, farm is provided by each Model sites. As Table 3-17



indicates, farm land were provided to the farmers groups (area: 87.5 feddan in 2010, and 35 feddan in 2011). South Sudan is characterized by its low population density and abundant land suitable for agriculture. Thus, in LIPS Model sites, it is rather easy for villagers to acquire a land from their community. However, most lands are located in bushy are, making it difficult for individual households with less manpower to reclaim. Furthermore, for some groups such as IDP's or women's', access to lands is limited. One of the advantages of the group farm approach is to establish a new farm land through reclamation works or negotiation by a group. LIPS supported this to create an opportunity for the villagers to take action.

Table 3-17: Land allocated to farmer group by communities

Unit: feddan

Model Boma	2010		2011	
	No. group A	Land size	No. group A	Land size
1. Kworjik-Luri	3	30	1	3
2. Kapuri	1	7.5	1	7.5
3. Nyamini	3	30	1	7.5
4. Bungu	1	10	1	10
5. Sirimon	2	20	0	0
6. Kansuk	1	10	1	7
Total	9	87.5	4	35

Table 3-18: Role of community and LIPS in land acquisition and land clearance

Activities	Role of community	Role of LIPS
Land acquisition	<ul style="list-style-type: none"> <li>● Providing available land to farmer group by traditional authority</li> </ul>	<ul style="list-style-type: none"> <li>● Facilitation between farmer group and traditional authority.</li> <li>● Land survey and mapping of group farm.</li> <li>● Preparation of land use contract.</li> </ul>
Land clearing	<ul style="list-style-type: none"> <li>● Mobilizing community labour force</li> </ul>	<ul style="list-style-type: none"> <li>● Providing tools for land clearance.</li> </ul>
Ploughing & harrowing	<ul style="list-style-type: none"> <li>● Mobilizing community labour force for harrowing</li> </ul>	<ul style="list-style-type: none"> <li>● Hiring tractor for ploughing.</li> </ul>
Plotting	<ul style="list-style-type: none"> <li>● Allocation of plots to members</li> </ul>	<ul style="list-style-type: none"> <li>● Plot measuring</li> </ul>

## Land Survey and Land Clearance for Group Farm



LIPS staff takes measurement of group farm. To support contract between group and community on land use is also role of external facilitation team.



Group member work together for land clearance. In some group land, it takes time for clearance and its members could miss cropping activities of the year.

## Ploughing and Harrowing



LIPS provide tractor for ploughing



Group members work for harrowing

## Plotting



One group farm is built, its land is divided into individual member's plots. Each plot is 0.5 feddan, basically.



Signboard for each plot helps AEO/CDO to monitor the performance of members. At the same time, it brought responsibilities to the members.

*Step 4: Developing Farming Plan*

In tandem with farm preparation works, the farmers' groups are supposed to make their own cropping plan in collaboration with CDO/AEO. LIPS prioritizes a support for farmers of Model sites to acquire basic farming techniques. As most farmers aim at improving the current condition of food self-sufficiency, most important field crops in the field were selected, namely groundnuts, maize and sorghum as target crops. In addition, sweet potato and cassava of drought-resistant varieties were newly introduced, considering that the irregular rainfall in Model sites affects crop production. The varieties suitable for the Juba environment were discussed at the Seed Selection Workshop in March of 2010, with the participation of 13 concerned personnel, including seven MAF staff and three farmers. The farming method LIPS took is conventional rainwater farming during a rainy season without irrigation, synthetic fertilizers, or pesticides, from the standpoint of use of local resources in the villages.

Table 3-19: Basic plan of group farming

	Planting Groundnut	Planting Maize
Sowing time	May to June	May to June
Harvesting time	August to November	July to November
Variety preferred	<ul style="list-style-type: none"> <li>● Red beauty (improved/2010)</li> <li>● Serenut-2 (improved/2011)</li> </ul>	Longe 5 (improved)
Seeding rate	61.9kg/ha	19.0kg/ha
Planting density	50×30cm	80×40cm
Planting system	Single cropping on flat bed	Single cropping on flat bed
Sowing	Hill seeding (3 seeds/hill)	Hill seeding (2 seeds/hill)
Intertillage	Intertillage is recommended to be done after initial growth is over	Intertillage is recommended to be done after initial growth is over
Pesticide	Nil	Nil
Fertilizer	Nil	Nil

*Step 5: Delivering Start-up Package*

The major impediments for the farmers in Model sites are the lack of sufficient farm tools, and the lack of seeds possibly due to no restoration and poor access to seeds. Therefore, LIPS provided the farm tools and seeds in the table below as Start-up package to 577 group members. Regarding to seed procurement, most improved seeds used in the project were imported directly from Uganda and Kenya as the only choice; there was no supplier of such seeds in Juba as of 2010. South Sudan has not established a quarantine system yet and no mean of delivery has been developed, either. This made the

project to take time for seed procurement and the remained challenge was the delay of seed delivery to the farmers and the unavailability of seeds requested by them. As of 2011, a few acting branches of Kenyan and Ugandan seed companies have been established and accepted requests. However procurement is still difficult as the prices are high and it takes time for acquisition when there are limited number of stock.

Table 3-20: Contents of LIPS Start-up Package

	Group A		Group B	
	Items	Amount	Items	Amount
Tools	Hoe	1 pies/member	Hoe	1 pies/member
	Spade	1 pies/member	Spade	1 pies/member
	Panga (bush knife)	1 pies/member	Panga (bush knife)	1 pies/member
	Wheelbarrow	1 pies/4 members	-	-
	Watering can	1 pies/member	-	-
Seeds	Groundnuts	4-5kg/member	Groundnuts	4-5kg/member
	Maize	1-1.5kg/member	Maize	1-1.5kg/member
	Sorghum	0.5kg/member	Sorghum	0.5kg/member
	Cassava	10 stocks/member	Cassava	10 stocks/member
	Sweet potato vine	Moderate amount	Sweet potato vine	Moderate amount
	Vegetable	Moderate amount		

LIPS request the members to refund 50% of seeds in Start-up package after harvesting, from the standpoint of sustaining group activities and fostering responsibility of the group members. The refunding rate of 2010 was 25.4% at Group A and 15.3% at Group B (Table below). Refunded seeds were redistributed to the farmers groups from LIPS in 2011.

Table 3-21: Number of group members who refunded seeds

Sites	Group A			Group B		
	Registered	Refunded	%	Registered	Refunded	%
1. Kworjik-Luri	60	0	0.0	21	6	28.6
2. Kapuri	16	14	87.5	63	0	0.0
3. Nyamini	65	16	24.6	60	12	20.0
4. Bungu	20	5	25.0	100	17	17.0
5. Sirrimon	40	14	35.0	80	10	12.5
6. Kansuk	12	5	41.7	29	9	31.0
Total	213	54	25.4	353	54	15.3



CDO weighed and packed 3 types of field crop seeds for each member.



Distribution of seeds



A member received start-up package



Distribution of tools

### Step 6: Training

A series of training was conducted both at group farm of each Model Boma and at Demonstration farms by LIPS experts and AEO, targeting the members of farmers groups. The tables below are summarizing the numbers of training and trainees in 2010 and 2011, and the contents of the training.

Table 3-22: Numbers of training and participants in 2010 and 2011 (Group farmers)

Category	Training Site	2010		2011	
		No. training	Participants	No. training	Participants
Field crops	Demonstration farm	3	101	3	54
	Model sites	10	353	6	80
Vegetable cultivation	Demonstration farm	3	36	10	164
	Model sites	8	155	0	0
Others	Demonstration farm	1	9	1	14
	Model sites	1	30	0	0

Category	Training Site	2010		2011	
		No. training	Participants	No. training	Participants
Farmer-to-farmer visit	-	6	157	1	8
Total	-	32	841	21	320

LIPS training aims that the group farmers will acquire basic farming techniques. General contents of the training are listed in the table below; in the first year of the Model project (2010), LIPS emphasized on groundnuts and maize cultivation over sowing, weeding, intertillage, and post-harvest management, etc.. In the second year (2011), training included vegetable cultivation which require advanced management skills.

Table 3-23: Basic curriculum of LIPS farmer training

Classification	Items	Details
1. Preparation	(1) Farm planning	<ul style="list-style-type: none"> <li>● Crop calendar</li> <li>● Crop rotation</li> </ul>
	(2) Land preparation	<ul style="list-style-type: none"> <li>● Selection of farm land</li> <li>● Soil type</li> <li>● Ploughing and harrowing</li> <li>● Ridging</li> </ul>
	(3) Seeds	<ul style="list-style-type: none"> <li>● Selection of variety</li> <li>● Procurement of seeds</li> </ul>
2. Planting	(1) Sowing	<ul style="list-style-type: none"> <li>● Sowing method</li> </ul>
	(2) Vegetable seedling production and nursery management	<ul style="list-style-type: none"> <li>● Nursery bed</li> <li>● Seedling</li> <li>● Watering</li> <li>● Shading</li> <li>● Thinning</li> <li>● Transplanting</li> </ul>
3. Care	(1) Field management	<ul style="list-style-type: none"> <li>● Watering</li> <li>● Fertilizer</li> <li>● Weeding</li> <li>● Mulching</li> </ul>
	(2) Pest and Diseases management	<ul style="list-style-type: none"> <li>● Prevention</li> <li>● Pest control</li> <li>● Diseases control</li> </ul>
4. Harvesting	(1) Harvesting and sales	<ul style="list-style-type: none"> <li>● Harvesting</li> <li>● Storage</li> <li>● Packing/container</li> <li>● Sales &amp; marketing</li> </ul>
	(2) Cooking	<ul style="list-style-type: none"> <li>● Nutrition of vegetable</li> <li>● Cooking of vegetables</li> </ul>

*Step 7: Implementation, Monitoring & Evaluation*

Monitoring by CDO/AEO teams were done once or twice a week for the activities in each group farm of Model sites. At this time, the teams provided the guidance about weeding, intertillage and pest control. In November of 2010, a questionnaire investigation was conducted for all the group members to evaluate their activities. As for yield, surveys were conducted in 2010 and 2011 from August to November (refer to “b. Production” in p.69).

Table 3-24: Monitoring and evaluation activities to farmer groups by the Project

Types of M&E	Timing	Contents
Regular visit & guidance	1-2 times per week	<ul style="list-style-type: none"> <li>● Pest/termite management (pesticide application)</li> <li>● Check condition of nursery seedlings and transplants</li> <li>● Check weather condition</li> <li>● Check field management method</li> <li>● Assist for selling products</li> </ul>
Interview survey	Nov. 2010	<ul style="list-style-type: none"> <li>● Farm condition</li> <li>● Economic activities</li> <li>● Education level</li> <li>● Family condition</li> <li>● Village status</li> </ul>
Evaluation WS	Nov. 2010 Sep. 2011	<ul style="list-style-type: none"> <li>● Reflection of farming performance</li> <li>● Seed requirement</li> </ul>
Yield survey	Aug.-Nov. 2010 & 2011	Yields per unit area of groundnuts and maize were surveyed with collaboration of CDO/AEO and the sampled members.

As mentioned previously, LIPS supported 577 households in 30 farmers groups in 2010. After evaluation of 2010, the Project reorganized these farmer groups. Then, in 2011, 285 farmers groups were selected among the original ones, and 20 groups were reformulated, referring to the performances of group members and results of seed refunding in 2010. For reorganization of these groups, the CDO/AEO teams discussed with the farmers’ groups over the activities of the previous year for the groups themselves to improve the original approaches. On evaluation, through the discussion among CDO, AEO, group members and LIPS, farmers who have high motivation towards agricultural improvement were selected as Farmer Teachers (MAF/CES approved them later).



Interview and field observation



Yield sampling survey

### **b. Farmer Teacher**

“Farmer teacher system” is an unofficial mode of agriculture extension, which is derived from the idea that farmers themselves work as “extensionists” in their communities. The concept has been experimentally suggested by LIPS to help disseminate agricultural techniques in communities in a situation with a limited number of agriculture extension officers. Farmer teacher is not a so-called teacher who teaches theories at a classroom, but the one who can practically demonstrate innovative farming techniques to the community “in doing” at his/her own farms.

Farmer teacher (F/T) has been defined by LIPS as follows;

1. a model farmer who can show the success of farming in the community. Farm of F/T is demonstration farm that showcased the technologies and new crops;
2. a farmer who challenges new and innovative farming technologies. F/Ts are the researcher in the community;
3. a farmer who share what he/she learn with other farmers in the community;
4. a farmer who you have passion for improving farming and never stop learning.

In 2011, 32 farmers were selected as Farmer teachers from the 6 model sites, upon the evaluation of CDO and community people, in consideration of results of farming condition or voices of neighboring farmers. Intensive trainings were then conducted twice in both Demonstration farms (1st: 5 days in Kworjik-Luri, 2nd: 2 days in Kapuri) to train them mainly for improving farming techniques, marketing strategies and leadership, followed by continuous monitoring and advising.



Table 3-25: Training for farmer teacher and farmer group member

Types of training	Contents	
	Farmer teacher (F/T)	Farmer group
Centre-based training	In addition to short-term training, Project provided 5 days intensive training at demonstration farm for all F/T.	Basically training is conducted at group farm in their community. Some representatives participate training in demonstration farm (one-day course).
Study tour	Most of F/T attended domestic study tour to Yei and Munduri.	Representatives attended domestic study tour. Members had a chance to attend inter visit programme among farmer groups of each model communities.
Monitoring	Visiting of F/T farm (individual farm) is conducted irregularly (1-2 times/M) .	CDO/AEO visit regularly group farm (1-2 times/W) and provide guidance.
Start-up package/equipment	Seeds of basic crops plus vegetables. Some basic tools used during training also provided.	Seeds of basic crops e.g. G-nuts, Sorghum & Maize.

### 3) Results of Agriculture Component

#### a. Changes of farming practices

During the Project periods, some basic farming technologies are gradually taking root among the group members. At the same time, attitude and commitment toward agriculture are also changed. Although these changes may not bring dramatic incensement of the production, it must be a first step for them to be a professional farmer. It is very important sign that some farmers say techniques and knowledge they learned are more valuable than emergency aid because its stay forever with the community. The changes observed are summarised as follows;

- Regarding to the technologies, line sowing, seed spacing, weeding and nursery bed preparation are getting popular among farmer group members and farmer teachers in all Model communities. Farmers believe line sowing and good spacing make farm management easier and crops and vegetable stronger against non-member farmers consider its takes too much time and does not change production.
- According to group members, they have more communication among farmers on farming practice and collective work. This communication is not limited within group members and they also discussed with other non-members in the community.
- Some group members started growing and sales of vegetable (tomato, eggplant, kale, etc) in their communities by their own investment. This is observed in all Model community.

- Farmer increased the numbers of crops at their farm. For example, cassava was not popular crops in the Model communities, yet, after the Project it became popular. Especially, virus resistance variety that Project introduced was appreciated by farmers. It was observed that stocks of casaba were distributed from members to other farmers. During study tours, members also purchased vegetable seeds and fruit nursery from advanced farmers.
- Farmer is increasing self-help activities. For example, in 2011 farmers group in Nyamini (Wunliet) plough their farm themselves once they know the Project does not bring a tractor. Vegetable group members in Kapuri are carrying water by push cart for long distance for vegetable growing business.
- Farmer teachers actively transfer their knowledge and skills to other farmers in some community. Their farm also works as small showcase of new technology and community people aware their enthusiasm on agriculture.

Before

After

### Line sowing



Because of seed broadcasting, many seeds are wasted. Different crops are sown in a same field, which is inconvenient to manage and yields themselves are not promising.



By introducing a line sowing method, it became easier to work in the field, for example for weeding, pruning and intertillage.

### Weeding



As weeds were left among the crops, this made field works more difficult and even lowered the yield.



Good weed management helped to increase the yield. Weeds were taken away from the field for sanitary purpose to prevent dissemination of pests

### Intertillage



Many of the farmers left G-nuts field without tilling after sowing, and this made the soil surface remain hard till the time of harvest. The hard layer could be a reason of low yield.



Due to the introduction of intertillage, farmers became more conscious about preparing the environment more suitable for the crop to grow.

### Bed preparation



As bed was not prepared, soil could be run off during a rainy season. Management works were also difficult.



As farmers started to prepare beds and keep spacing for various vegetables, management became easier and the frequency of runoff became less.

### Transplanting



As seedlings were often handled carelessly, a root ball could become easily exposed after uprooting. This could cause injury on the roots.



As farmers started to handle seedlings carefully, roots are well protected with the soil.

### Staking of tomato



Tomato fruits could be easily spoiled by creeping down the ground without being properly supported.



As some farmers started to use locally available wooden poles for supporting tomato, it became easier to take care of the plants

## Farmer Teachers



Farmer teacher easily copy the technologies demonstrated at LIPS demonstration farm. As a result their garden become mini demonstration farm in the community (left: eggplant, right: G-nuts).



Farmer teachers are more innovative and challenge new technologies with their original idea (left; experiment of fertilization, right: animal trap in a maize field)



Farmer teacher often train other farmers. They are playing a role of community extensionists.



Farmer teachers are more commercial oriented farmers. Many of them are selling their products in the community.

## b. Production

The Project conducted sample survey of farmer group members on yield of groundnuts and maize at harvest season in 2010 and 2011 (84 and 35 samples in 2010 and 2011 respectively). As a result, the yields of the farmers groups were generally high compared to the FAO statistical data. However, it is still difficult to conclude about the effectiveness of the agriculture model project only with the results of the survey. This is because of the inaccurate information collected by AEO/CDO as a part of their training, the small number of samples, and the lack of information on general members in the target sites, and the irregular inconsistency of the weather both in 2010 and 2011. Referring to the difference between Group A, B, and Farmer teachers, it is difficult to lack of the sample number, it is difficult to evaluate the effectiveness of the different approaches, due to the lack of the sample number and the difference of cultivation environment of each individual farms.

### Overview

According to an attitude survey research, members of the farmer groups and Farmer teachers are satisfied with their production in 2010 and 2011 (2010: 68.9% of members were satisfied). This might be contributed by expansion of farm land as well as increase of productivities. According to the evaluation survey in 2010 targeting 566 members, each member increased an average of 0.21 feddan of cultivation area by support of the Project. This brings some additional production regardless of the productivities. This survey estimated that farmers got \$341 worth of additional production in this year.

It was not expected that only the improvement of basic farm management techniques which LIPS instructed for farmers, would to a large extent increase productivity. Productivity is affected by mainly by rainfall and fertility of the land rather than techniques. Especially it is difficult to overturn the natural condition by basic techniques that LIPS teach for farmers. In Juba County rainfall was irregular in both 2010 and 2011. In 2011, there are some differences depends on the area, farmers faced the problem of short rainfall during June to July. Because this period is growing season of major crops, production got damage in wide area. Especially where the crops were at early stage got serious damage.

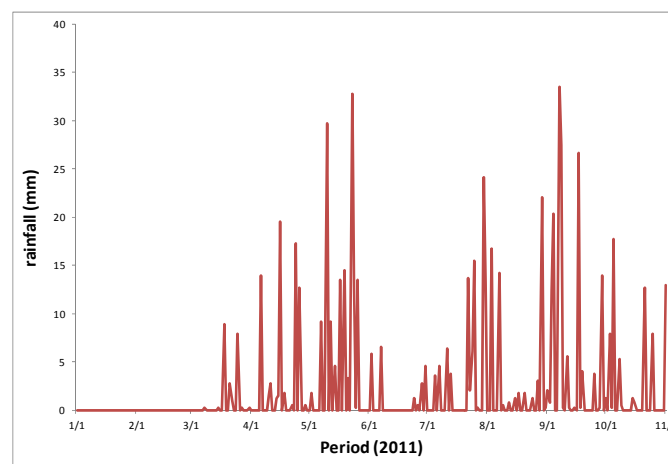


Fig. 3-10: rainfall pattern in Juba in 2011

General observations on the production in each Model communities are as shown in following table.

Table 3-26: Summary of production at 6 Model Boma in 2010 and 2011

Community	Crops	Result
Kworjik-Luri	Field crops & vegetables	Data collection of field crops was impossible in 2010 due to the flood for Group A and due to the fail in yield survey arrangement. A vegetable cultivation group organized by former demo-farm workers managed to have a tomato yield higher than the national average in 2010. In 2011, too, the new vegetable group organized by several group members cultivated in a farm adjacent to the demonstration farm with the assist by LIPS.
Kapuri	Field crops & vegetables	Plain land and soil is relatively fertile. Severe occurrence of pests was observed on vegetables. In 2011, fertilizer was applied on maize and groundnuts in the Group A land concerning about any injury by continuous cropping.
Nyamini	Field crops	There are 3 group farm in Nyamini Boma, e.g. Nyamini Centre, Wunliet and Bongajur. In Nyamini Centre, most farmers abandoned cultivation in a group farm in 2010 and chose the Group B approach in 2011, which resulted in better production than that of 2010. In Wunliet, group farm located where soil is moderately less fertile. In spite of good care of field management such as weeding, production was extremely low both in 2010 and 2011. In Bongajur, the Group A showed a good performance in 2010 by filling most of the plots in the group farm with crops, but due to its relatively unfertile soil, it seemed the yield was rather low. Data collection was impossible both in A and B due to the fail in survey arrangement. In 2011, the Group A approach was not taken as it was impossible to clear the stumps in the newly selected farmland. It was possible to take the data only from a Farmer teacher in 2011.
Bungu	Field crops	Group A: Slanted land and poor soil fertility affected lower production and many members gave up cultivation. In 2011, fertilizer application contributed to the increase in yield. Group B: Soil is relatively fertile compared to Group A, probably because household wastes contribute to increasing the soil nutrients. This resulted in higher yield of Group B than that of Group A.
Sirrimon	Field crops	In 2010, Group A failed to cultivate due to the late land clearance and stagnancy of water causing poor drainage. In 2011, there was no Group A officially formulated but four Group Bs were formulated instead (Kapuriyot, Longoyot, Center and Lulu). Each of them was led by a Farmer teacher and spontaneously selected a common farmland. Due to the good guidance by the Farmer teachers, all the group showed well-united attitude and many of the members managed to cultivate in individual plots.
Kansuk	Field crops / vegetables	In 2010, although the soil of Group A was very fertile, the farm activity failed due to the poor drainage. Group B soil was rich and yield reached at a satisfactory level. In 2011, Group A selected a new land to avoid the water stagnancy and this resulted in a satisfactory level of yield. Vegetable cultivation was introduced to a group of farmers who were

Community	Crops	Result
		interested in and this target was narrowed in 2011 to Farmer teachers. Due to the rich water source, vegetable cultivation was relatively successful especially at those who had high motivation.

### Yields of Groundnuts

Throughout the consecutive two years, the yields of groundnut produced in each site exceeded the national average (10-year average rate), except Wunliet. Total average yield was 2.77t/ha in 2011, which was drastically increased from the yield obtained in the previous year (1.27t/ha). The results are shown in the table below.

Table 3-27: Yields of groundnuts of farmer group members in 2010 and 2011

Model site	Yields (ton/ha)		Remarks
	2010	2011	
1. Kapuri	2.05	4.11	Fertilizer was applied in 2011
2. Nyamini (Nyamini Centre)	1.55	-	
3. Nyamini (Wunliet)	0.49	0.45	
4. Bungu	0.90	3.91	Fertilizer was applied in 2011
5. Sirrimon	1.18	4.50	
6. Kansuk	1.46	0.88	
(Average of the sites above)	1.27	2.77	
7. Demonstration farm (Kworjik-Luri)	4.81	4.30	
8. Demofam (Kapuri)	2.24	2.94	
National average (FAO)		0.79	

The variety of seeds distributed to the farmers in 2010 is “Red beauty” with the expected yield of 1.86 ton/ha in the Ugandan favorable environment (using the LIPS seed rate mentioned above), while the one distributed in 2011 is “Serenut 2” with the expected yield of 2.17 t/ha. Due to the large size of seeds, Serenut 2 is expected to yield higher than other varieties (the expected yields are calculated from the information of an Ugandan seed supplier, NASECO Seeds). Considering the high germination rate in all the sites throughout the two years, the increase in the yield on average could be partly due to the change of the variety.

The drastic increase in the yield was observed in three sites: Kapuri, Sirrimon, and Bungu. Wunliet and Kansuk, might have been damaged by the short-period drought during August due to the late planting (July). This late planting could have also negatively affected the potential capacity of groundnuts’ fruiting behavior, as groundnuts are short-day plants. Considering the low yield for the consecutive two years in Wunliet, this might be also because of low fertility of the soil in addition to unfavourable



climatic condition.

The highest value in the yield was recorded in Kapuri (5.94t/ha from farmers teachers' field). This is conspicuous to other sites and even general farmers in Kapuri produced 4.11t/ha on average despite early planting in May encountering with severe drought in June. In Kapuri, yield was relatively high in 2010 (2.05t/ha) as well and this could be due to the earliest sowing, which could contributed to developing the groundnut plants to the growth level capable of the drought condition. The good field management such as weeding and intertillage could be one of the reasons, in addition to the original fertility of the soil.

The increase in the yield in the same farmland in 2011 is probably due to the application of fertilizer concerning about any nutrient deprivation by continuous cropping. As for Bungu, Group farm is located in a slanted land with erosion of the surface soil that caused low fertility and consequently low yield (0.90t/ha). In 2011, application of fertilizer helped to increase the yield (3.91t/ha).

#### Yields of Maize

In 2011, yields of maize were higher than that of the national average. LIPS has distributed seeds of improved variety (Longe 5), and it seems that the effectiveness of the variety appeared in farm lands with a certain level of fertility.

Table 3-28: Yields of maize of farmer group members in 2010 and 2011

Model site	Yields (ton/ha)		Remarks
	2010	2011	
1. Kworjik-Luri	1.18	-	
2. Kapuri	4.17	5.46	Fertilizer was applied in 2011
3. Nyamini	3.15	1.49	
4. Kansuk	3.08	4.80	
5. Sirrimon	2.30	1.00	
6. Bungu	1.65	4.95	Fertilizer was applied in 2011
(Average of the sites above)	2.59	3.54	
7. Demonstration farm (Kworjik-Luri)	5.30	2.36	
8. Demofam (Kapuri)	3.65	5.74	
National average (FAO, 2010)		1.24	

Planting density of maize varied depending on each farmer (2-5 seeds/hole, sometimes broadcasted) and spacing varied, too (30 cm - 100 m). LIPS has trained farmers using a sowing standard of dibbling with 40-cm-spacing with the density of 1-2 seeds/hole. Through line sowing, weeding and intertillage became easier, which could have affected the increase in the yields.

Certain level of damages by pests was observed throughout the planting time such as termite and beetle. Birds were also the most threatening enemy during maturity stage. Majority of cobs in the Kworjik-Luri Demonstration farm were seriously attacked by birds at maturity stage in 2011 and this attack has contributed to sharply decrease the yield in the year. The highest yield in Kapuri for the consecutive two years could be explained with the same reason for the groundnuts production above. There has been no report of bird attack in Kapuri. Although some members were conscious about the actual damage by monkeys, they managed to harvest the maize before the damage became serious. This could also support the effect of the attitude contributed to the high yield. The yield of Sirrimon in 2011 could be because of the later sowing than the other sites.

### Yields of Farmer Teachers

Farmer teachers (F/T) are the ones who were selected as highly-motivated farmers among their groups, considering their performance in 2010. However, it was impossible to figure out the difference between F/T and other members over yields, throughout the survey in 2011, mainly due to the lack of the sample number.

Table 3-29: Yields of groundnuts and maize of farmer teachers in 2011

Model site	Groundnuts (ton/ha)		Maize (ton/ha)	
	Farmer teacher	Other member	Farmer teacher	Other member
1. Kapuri	5.94	4.11	3.39	5.46
2. Nyamini	2.97	0.45	5.15	1.49
3. Bungu	0.97	3.91	5.29	4.95
4. Sirrimon	1.83	4.50	3.69	1.00
5. Kansuk	2.02	0.88	3.28	4.80
(Average of the sites above)	2.75	2.77	4.16	3.54
6. Demonstration farm (Kworjik-Luri)	4.30		2.36	
7. Demofam (Kapuri)	2.94		5.74	

### Use of Chemical Fertilizer

Basically, chemical fertilizer was not been used in the Model project. Exceptionally, synthetic fertilizer was applied in the two group farms in 2011: Bungu, for its poor soil fertility, and Kapuri, as many of the farmers showed high motivation towards the farm activities, and also due to the concern about injury by continuous cropping. As for maize, effects of fertilizer application were observed in Kapuri and even in Bungu where it showed extremely low yield last year. Especially in Bungu the yield was drastically improved with fertilizer application; 4.95t/ha from while it was only 1.65t/ha on average

last year.

Table 3-30: Results of fertilizer application in Kapuri and Bungu

	Kapuri (t/ha)		Bungu (t/ha)	
	2010 (no fertilizer)	2011	2010 (no fertilizer)	2011
Maize	4.35	5.46	1.65	4.95
Groundnuts	2.05	4.11	0.90	3.91

Table 3-31: Fertiliser used for Bungu and Kapuri

Site	Crop	Fertilizer type	Dose	Frequency	Style
Bungu	G-nuts	Urea	21.8kg / ha	Once (before sowing)	Broadcasting
		Superphosphate	24.3kg / ha	Once (before sowing)	Ditto
	Maize	NPK compound (15:15:15)	66.7kg / ha	Once (after germination)	2.1g (=pinch) / hill (plant)
Kapuri	G-nuts	Urea	21.8kg / ha	Once (before sowing)	Broadcasting
		Superphosphate	30.3kg / ha	Once (before sowing)	Ditto
	Maize	NPK compound (15:15:15)	66.7kg / ha	Once (after germination)	2.1g (=pinch) / hill (plant)

### Vegetable Production

(Vegetable Production by Farmer Group)

Juba is a new city with a population of 250,000 people in the rapid progression of internationalization after CPA. In its local markets, vegetables sold there are mostly from Uganda and Khartoum except locally produced leafy vegetables such as Morokheiya. As their high prices, local farmers are very interested in production and marketing of such vegetables. Therefore, LIPS has also conducted training for producing vegetables with higher cashability. Especially in Kworjik-Luri and Kapuri, which are within a 20-30 minute drive from the Juba centre, the project has intensively supported local vegetable cultivation also with seed provision. In 2011, a vegetable cultivation group was formulated in Kworjik-Luri comprised of 11 farmers (mainly women) who had interest in vegetable cultivation. They produced tomato, eggplants, okra and kale over a four-month-period, which resulted in SSP 7,826 in sales.

Table 3-31: Yield and sales of Kworjik-Luri Group farm

Sold tem	Yield (t/ha)		Unit price (SDG/kg)	Sales (SSP)
	Group farm	National average*		
Eggplant	5.20	19.05	3	3,309
Kale	1.91	-	5	2,020
Okra	1.60	11.90	3	509
Tomato	2.34	14.29	4	1,988
Total				7,826

\*National average = FAO (2009)

The following points can be derived from the results:

In general view, yields of all the crops were very low compared to national average of all Sudan in 2010 (FAO). Especially the extremely low yield of tomato (2.34 t/ha, only less than 15% of the national average), was mainly caused by severe drought and pest attack particularly by Fusarium Wilt and Verticirium Wilt. Eggplant was better in the growth although they were also seriously affected by drought condition at initial stage. Eggplant is slightly more tolerant to drought as compared to tomato. Despite the low yield (5.20 t/ha). Only okra was directly sown to the field without nursing. As a result, seed germination and initial growth were also seriously affected, which contributed to shortening of harvesting period. Kale was also affected by drought, but not so serious as other crops. Total yield was 1.91 t/ha which is almost satisfactory level considering of profitability. Production scale was too large to be managed by only 11 members, especially lack of male labor has delayed the crop management behind the plant growth.

(LIPS demonstration farm)

In the demonstration farms, as well as provision of agriculture training, production and demonstration of vegetables has been also done for farmers who had never produced vegetables which are not traditional. With a focus on common vegetables such as tomato, eggplants and cabbage, 18 kinds of vegetables were cultivated as a trial. During 2 season trials, it was observed that eggplant and kale are the most cash making crops in terms of demand from market and less constrain in cultivation process. Especially kale could not satisfy market demand despite so many orders from various sectors including hotels and restaurants in Juba. There is advantage of local kale production in sales since almost no supply by import is maintaining freshness. Among the several herbs tried, the unit price of coriander was extremely high, and pest/disease damage was seldom observed. The demand is limited in hotels and restaurants of the foreign capital sector, but its potential of for a high return is backed by the fact that the plant requires only a minimal area to be produced with less labour and that its production cycle is rather short (first products can be sold 1.5 months after sowing), These point suggest that such herbs can be suitable as a side job for female producers in Juba. On the contrary, tomato is realized as the most difficult crop to grow. Disease occurrence was so serious beyond the control level. Further study should be continuously done to establish appropriate techniques

contributing to stabilization of production. The table below is productivity of the representative 5 vegetables of Kworjik-Luri demonstration farm in 2011. All the vegetables had higher yield than that of the national average, except Kale, which has no data to compare with.

Table 3-32: Yield of some vegetable at demonstration farm and group farm

Item	Site	Yield (t/ha)
Eggplant	Demonstration farm	26.3
	National Average	19.0
Tomato	Demonstration farm	21.7
	National Average	14.3
Cabbage	Demonstration farm	30.9
	National Average	24.5
Okra	Demonstration farm	18.5
	National Average	11.9
Kale	Demonstration farm	18.5
	National Average	n.a.

*National average = FAO 2010 (cabbage = 2009)*

The table below is summarizing the result of vegetable growing at LIPS Demonstration farm. For the detailed technical information, see the agricultural manual “Step-by-Step”.

Table 3-33: Summary of result of vegetable growing at LIPS Demonstration farm

Vegetables	Findings
Cabbage	<p><u>Variety used:</u> Globe master (F1, heat tolerance). Seeds available at “Amiran Seeds” Kenya office (possibly obtainable through Juba branch)</p> <p><u>Point of cultivation:</u> Choose heat-tolerant varieties. As cabbage can be affected by moisture damage, select a well-drained place for nursing and transplanting. Use of pesticides is inevitable for cabbage cultivation especially during the seedling stage.</p> <p><u>Wholesale price:</u> SSP 2-3/kg at Konyokonyo market</p> <p><u>Remark:</u> The commonly distributed variety “Copenhagen” was also cultivated for trial. However due to its insufficient level of heat tolerance, this variety could not perform well in the Juba hot environment.</p>
Carrot	<p><u>Variety used:</u> Nantes; Canned viable seeds are available at seed shops in Juba (Agribusiness, etc.)</p> <p><u>Point of cultivation:</u> No specific pest was found during the cultivation period in Kapuri demonstration farm, both during rainy and dry seasons. Sow seeds when the soil is moistened after raining.</p> <p><u>Wholesale price:</u> SSP 10.5 kg at Konyokonyo market</p>

Vegetables	Findings
Coriander	<p><u>Variety:</u> Cory 1; Seeds available at Amiran seeds Kenya office (possibly obtainable through Juba branch). Locally packed seeds are also available at Konyokonyo market but have not been tried.</p> <p><u>Point of cultivation:</u> No specific pest was found during the cultivation period both in Kworjik-Luri and Kapuri Demofarm. It takes only a month after sowing till harvesting. At the trial in Kapuri Demofarm, crushed seeds germinated better than the uncrushed ones.</p> <p><u>Wholesale price:</u> SSP 30-50 kg at at the foreign capital sector.</p>
Cucumber	<p><u>Variety used:</u> Ashley; Canned viable seeds are available at seed shops in Juba (Agribusiness, etc.)</p> <p><u>Point of cultivation:</u> No specific pest was found during the cultivation period both in Kworjik-Luri and Kapuri Demofarm. Staking is recommended for market-oriented products.</p> <p><u>Wholesale price:</u> SSP 4.3 kg at at Konyokonyo</p>
Eggplant	<p><u>Variety used:</u> Black beauty, long purple; Canned viable seeds are available at seed shops in Juba (Agribusiness, etc.)</p> <p><u>Point of cultivation:</u> Cultivated in Demonstration farms and Model sites. Few diseases were found but not at the destroying level and rather easier to take care of even in local communities.</p> <p><u>Wholesale price:</u> Marketing: SSP 3.6 kg at Konyokonyo. Well sold at the foreign capital sector.</p>
Kale	<p><u>Variety:</u> Keeper, Georgia; Canned viable seeds are available at seed shops in Juba (Agribusiness, etc.)</p> <p><u>Point of cultivation:</u> As kale can be affected by moisture damage, select a well-drained place for nursing and transplanting. Although pesticides were sometimes applied for moth larvae at a growth point, no fatal insect was found in the local communities.</p> <p><u>Wholesale price:</u> SSP 9.8/kg at Konyokonyo market</p>
Lettuce	<p><u>Variety used:</u> Aviram (heat tolerant, iceberg type); Seeds available at Amiran seeds Kenya office (possibly obtainable through Juba branch).</p> <p><u>Point of cultivation:</u> Only tried in Demonstration farms. No fatal insect was found during the growth period. Once seedlings can be grown healthily, it is easy to take care of till harvest.</p> <p><u>Wholesale price:</u> SSP 5-10/piece</p>
Okra	<p><u>Variety used:</u> Pusa sawani, local varieties; Canned viable seeds of Pusa sawani are available at seed shops in Juba (Agribusiness, etc.). Moderately viable seeds of local varieties are available at Konyokonyo market.</p> <p><u>Point of cultivation:</u> Only tried in Demonstration farms.</p> <p><u>Wholesale price:</u> SSP 7.6/kg at Konyokonyo market</p>

Vegetables	Findings
Onion	<p><u>Variety used:</u> <u>Bombay red</u>; Canned viable seeds are available at seed shops in Juba (Agribusiness, etc.).</p> <p><u>Point of cultivation:</u> Only tried in Demonstration farms.</p> <p><u>Wholesale price:</u> SSP 5.2/kg at Konyokonyo market</p>
Squash (zucchini)	<p><u>Variety:</u> <u>Ambassador</u>; Canned viable seeds are available at seed shops in Juba (Agribusiness, etc.).</p> <p><u>Point of cultivation:</u> Only tried in Demonstration farms. AI</p> <p><u>Wholesale price:</u> SSP 7/kg at Konyokonyo market</p> <p><u>Remark:</u> Another cultivar (Dark green zucchini) did not perform well both in Kworjik-Luri and Kapuri Demonstration farms. Extremely high plant vigor hindered fruiting.</p>
Tomato	<p><u>Variety used:</u> Rio Grande, Shanty; Canned viable seeds of Rio Grande are available at seed shops in Juba (Agribusiness, etc.). Shanty can be obtained at Amiran seeds.</p> <p><u>Point of cultivation:</u> Only tried in Demonstration farms. Very difficult to control disease and pests.</p> <p><u>Wholesale price:</u> SSP 6.1/kg at Konyokonyo market</p>
Watermelon	<p><u>Variety used:</u> Sugar baby; Canned viable seeds are available at seed shops in Juba (Agribusiness, etc.).</p> <p><u>Point of cultivation:</u> Only tried in Demonstration farms. The pest control at the younger stage is critical.</p> <p><u>Wholesale price:</u> SSP 3.1/kg at Konyokonyo market</p>
Local leafy vegetables	<p>Species: Amaranths (gedegede), Morokheiya (kodra), etc.; Canned viable seeds are available at seed shops in Juba (Agribusiness, etc.).</p> <p>Point of cultivation: Only tried in Demonstration farms. Recommended to grow during the dry season for higher unit prices.</p>

## b) Income Generation Activity Component

Income Generation Activity (IGA) has been the core activity in rural communities together with agriculture. As it was found during the socio-economic survey, while their agriculture is far below the subsistence level, farmer's income opportunity is scarce in rural area where they have limited resources and ideas on diversifying their income. Charcoal burning and selling has been the main, ready available income source in the most of rural communities. However, from the environmental point of view, this activity is not at all sustainable. IGA was introduced in LIPS under these circumstances.

### 1) Objectives

IGA has two main objectives as follows:

- To empower community and people through planning and implementation of IGA projects
- To increase non-farm income opportunities for the farmers in model communities
- To encourage participation of women in economic activities.

### 2) Activities

A total of 12 IGA were implemented with 193 members (41% is women) in LIPS project. The most popular IGA was bee keeping as it was implemented in 4 communities because of their experiences. Some communities took advantage of their available resources: fishery in Kansuk and lulu processing in Sirrimon.

Table 3-34: List of IGA in 6 Model Communities

Activity	Location	Started	No of members		
			Total	women	(%)
1. Bread Baking	Kworjik-Luri	Oct. 2010	9	8	88.9
2. Bee Keeping	Kapuri	Jun.2010	23	0	0.0
3. Poultry	Kapuri	Apr.2011	16	8	50.0
4. Poultry for multipurpose centre	Nyamini	Aug. 2011	10	6	60.0
5. Lulu processing	Sirrimon	Mar. 2011	18	16	88.9
6. Bee Keeping	Sirrimon	Oct. 2010	10	0	0.0
7. Grinding Mill Operation	Bungu	Oct. 2010	20	10	50.0
8. Goat Raising for blind and old	Bungu	Oct. 2010	18	9	50.0
9. Bee Keeping	Bungu	Sep. 2010	12	0	0.0
10. Bee Keeping (traditional)	Kansuk	Oct. 2010	20	9	45.0
11. Small Shop	Kansuk	Oct. 2010	13	13	100.0
12. Fishing Group	Kansuk	Sep. 2010	24	0	0.0
Total	-	-	193	79	40.9



### **3) Training**

First of all, since the implementation of IGA was new for many CDO while some senior ones have were experiences, the introductory training was given two times in 2010 followed by the training on proposal writing. It was the CDO who prepared the IGA proposals to LIPS on behalf of their target communities.

Most communities took advantage of their existing resources and skills in implanting IGA. However, trainings were given to every IGA group as a package of the IGA activities. All the IGA technical training was conducted by the external resource persons specialized in a particular IGA skill.

### **4) Results**

As many activities started only last year and the rest started this year, some management problems have been observed. Most common one is the lack of cooperation among members. Level of cooperation and relationship varies from one IGA to another. When group work is required as is the case of fishing in Kansuk, internal bonding of members is strong. When, on the other hand, work is done individually as is the case of beekeeping, cooperation between members is rarely seen. However, it seems that cooperation and relationship in activities reflect that of community. That is, when cooperation and relationship in a community is strong, that of IGA is also strong.

The output, impacts and issues of each activity are summarised in the Appendix-2. Some of the key points are summarised below.

(Small Business/small shop, grinding mill, bakery)

One of the advantages for small business is that not only the members but the whole community will benefit from the activity. In Bungu, although the installation took almost a whole year due to the breakdown of the machine, community people could save both time and money for processing their grains after installation. They used to go to Juba paying SSP 10 one way to buy and grind cereals. The shop next to the grinding mill started to sell grain like dried maize, sorghum and cassava so that people buy and take them straight to the grinding mill shop.

In case of the bakery in Kworjik-Luri and the small shop in Kansuk, the project enabled local people to have access to breads or daily items. Members also divided their first share of profit. On the contrary, however, general price increase in Juba hit their activities. Bakery group decided to close the shop for a few months until the price of wheat will be settled, whereas Kansuk shop had to strive with limited consumer items. It was only towards the end of the project, the groups started to grasp the importance of diversifying activities and adjusting with price changes. Sustainability of their activities will depend on flexibility and careful analysis.

(Livestock /goat raising, poultry and fishery)

Livestock keeping is simpler than other IGA types but its impact on income is often not visible. In

Kansuk, it was difficult to monitor the fishing activity because of their mobility to other fishing sites. In Bungu, one she-goat was provided to every 18 members (blind and widows). In 9 months, 9 out of 18 goat gave birth, while 5 died or killed and 2 were stolen and remaining goats are pregnant. The group’s strategy is that all the members will have at least 2 goats for their social safety net.

Poultry in Kaprui and Nyamini were started in 2011 and the sales of their eggs or chickens were expected only around the end of the Project. While they have experiences in raising local chicken, their improved chicken is expected to have superior market in near future. As it is continuous supply of feeds is crucial to sustain this activity, the members started to plant the particular grasses for chicken around their compounds.

(Agro processing/bee keeping, lulu processing)

Lulu soap processing was started in 2011 with the installation of pressing machine. Although the harvest of lulu nuts was limited, the group managed to produce about 280 soaps and obtained income of SSP 1,000. Income will be used to purchase more lulu nuts and other materials like coconut oil and perfume. SIRRIMON is the nearest site from Juba for lulu processing and it has a high potential. Their sustainability will depend on the marketing and procurement of materials often from outside South Sudan.



Small Shop in Kansuk



Lulu soap processing in SIRRIMON



Grinding mill in Bungu



Poultry in Nyamini



Bee keeping in Kaprui



Bread baking in Kworjik-Luri

### **c) Education Component**

In area of education, LIPS had extended its support to 2 model communities, i.e., Nyamini and Bungu in 2010. Both communities had a high demand for the school building after being destroyed the existing one during the civil war.

#### **1) Objectives**

Educational Development in LIPS aimed to empower the model communities by providing better learning environment for the children to go to school and by strengthening community support for sustaining their school.

#### **2) Activities**

(Community Centre in Nyamini)

The building was completed in February 2011 and the opening ceremony was conducted in 5 April 2011. Management Committee of Nyamini Community Centre was formed with the support of CDO and they registered 114 pupils and selected 6 volunteer teachers. Two classes (primary 1 and primary 2) were started from April 2011.

(Primary School in Bungu)

Bungu BDC prepared a proposal on the Construction of the 4 Classroom Building for the primary School. On 25 September the Handing Ceremony was conducted with the presence Mr. Wada Ambassador to Sudan and H.E. Clement Wani, Minister of Education/ CES. Bungu Community led by BDC contributed about SSP 2,000 for this Ceremony. The classrooms have been in operation since the ceremony.

#### **3) Training**

Parents and Teachers Association (PTA) was organized in both Nyamini and Bungu. In Bungu, PTA training was conducted based on the PTA guideline by the State Ministry of Education in November 2010 and the follow-up was made in 2011. They now work closely with the BDC not only for school but for the community as a whole. In Nyamini, Management Committee selected PTA members in 2011 and conducted the workshop to discuss how to make the school more sustainable.

#### **4) Results**

Nyamini: School is in operation. However, the number of pupils were much less than the registered number unable to pay the registration fee of 30 SSP. Volunteer teachers were originally 6 but only 2 of them turn up constant due to the lack of incentives. Management Committee and the PTA will continue their efforts to raise more funds for school. In a meantime, LIPs supported the Women Group in Nyamini Centre on poultry partly IGA for school. (one first of the group profit goes to the school

teachers).

Bungu: On 25 September the Handing Ceremony was conducted with the presence Mr. Wada Ambassador to Sudan and H.E. Clement Wani, Minister of Education/ CES. Bungu Community led by BDC contributed about SSP 2,000 for this Ceremony. The classrooms have been in operation since the ceremony. BDC and PTA mobilized the Area Education Office and the State Ministry of Education assigned one Area Education Officer was deployed to the Bungu Community. This will allow community to have better access to educational services such as deployment of new government teachers, education materials and so on.



Volunteer teacher teaching pupils in Nyamini



PTA workshop in Bungu



Handing over ceremony of Bungu Primary School

#### **d) Water Component**

As a result of the community-based planning, access to safe drinking water was found to be one of the high priorities for the target communities as their basic livelihood needs. LIPS conducted the situation survey on existing boreholes of 23 sites in 6 model communities in early 2011 with the State Ministry of Rural Water. In October and November 2010, LIPS constructed 6 new boreholes and repaired 10 existing boreholes in 5 model communities except Kansuk.

##### **1) Objectives**

Objectives of these water components are

- To improve community people's access to save water.
- To train the community people on how to maintain their boreholes from a sustainable view point.

##### **2) Activities and Training**

In October to November 2010, the following boreholes were constructed and repaired.

Table 3-35: Number of boreholes repaired and constructed in LIPS Project

Model Community	Repaired	Newly constructed	Total
1. Kworjik-Luri	2	2	4
2. Kapuri	1	1	2
3. Nyamini			
(1) Nyamini Centre	2	0	2
(2) Wunliet	0	1	1
(3) Bongajur	1	0	1
4. Bungu	2	1	3
5. Sirrimon	2	1	3
6. Kansuk	0	0	0
(Total)	10	6	16

From 4 to 8 October 2011, the training on borehole repairs and hygiene was conducted. The objectives were 1) to train potential pump mechanics for borehole repairmen skills, 2) to promote the understanding of the community on the importance of hygiene around water points and home and 3) to transfer the knowledge and skills on the formation of water. 13 pump mechanics, 11 community members and 26 CDO received the training. After the above training, the maintenance kits for borehole was distributed all 6 model sites. While the BDCs are responsible for keeping the maintenance kits in a safe location, it will be the work of the trained pump mechanics to maintain the boreholes constructed or repaired by LIPS.



Repairin handpump



Assembling cylinder



Good and bad hygiene proractice

### 3) Results

All repaired or constructed boreholes are working well at the end of the project period. Since all the necessary training and materials were provided to the respective community, it is now the responsibility of the BDCs and the water technicians to maintain their boreholes. Some of the communities have already started to collect the water users' fee for maintenance and management. The

training also enables to make a link between the community and the State Ministry of Rural Water (CES) in case of major repairs. CDO in Juba County attended the training, it is also expected that they should play their part in mediating between communities and the State Ministry of Rural Water.

#### **e) Health Component**

CDO play an important health role in a community; they can communicate with both community people and health organizations, such as MOH, RC, UNICEF, available in urban area. Especially in the field of nutrition, hygiene control, and malaria prevention, they have a strong potential in reducing the burden of diseases for our community people. Therefore the capacity building on health is crucial both for the CDO and the Community.

##### **1) Objectives**

Objectives of health development was to equip CDO with skills and knowledge to identify and solve the health problems in the community and to provide community people with aids from health organizations through the coordination of CDO.

##### **2) Activities**

Activities are mostly training as explained in the next session. In case of Nyamini, a small health post was established inside the community centre. During the monitoring of the health post, CDO help the community to have better access to the health services both public and private. After the school, the centre was used by health organizations to conduct health training both for adults and children.

##### **3) Training**

In July 2011, two days training was held by the State Ministry of Health together with the CDO Health Team targeting CDO in Zonal Team. 29 CDO participated in this training on prevention of malaria, diarrhoea and malnutrition. This was the basic training for community health, and it was advised by the MoH that the CDO can now make a small training program on the subjects in their respective communities. In Sirrimon, Nyamini, Kansuk and Kapuri, the CDO have conducted the basic health training to the farmers groups and IGA group and distributed mosquito nets provided by the PSI.

##### **4) Results**

Throughout 2011, health has become recognized as one of the CDO main activities in the communities. CDO Health Team, especially the team leader, has been active, connecting themselves with existing health organization such as MOH, UNICEF, PSI and South Sudan Red Cross Society. Community like Nyamini was also exposed to the health organization and now obtain better public and private services in health.



Health Training for CDO



Hygiene and use of latrine training in Nyamini School

#### **D. Impact of Model Project on Building the Capacity of Communities**

Besides an increase in agriculture, cash income, job opportunities and social infrastructure, livelihood improvement in rural community requires an increase in capacity of communities that enables community and peoples to mobilise existing skills, reframe problems, work cooperatively and use community assets in new ways. External development project may bring quick impacts to the community, yet, without building the capacity of community, sustainable development is not expected.

The community builds motivation and capacity through participation and active involvement in decision-making process and implementation. In this sense, LIPS's Model project aims at not only increase of production and building of social facilities, but also building of the capacity of community through offering the chance to implement their own projects. Although the process of capacity building takes time, the Project found following positive sign in the Model communities;

(Relationship and Communication)

It is reported from all Model communities that community feels they are much more united than before, and relationship is stronger after completing many activities together. Especially, when group work is required as is the case of construction of schools, community centre, internal bonding of community members is strong. In case of Nyamini that consists of three communities i.e. Nyamini Centre, Wunliet, Bongajur, three community had more communication and relationship through the implementation of community centre that is their common goal.

Level of unity varies from one community to another and it seems that cooperation and relationship in group activities (Farmer group, IGA group) reflect that of community. Good group management occurs in united community. For another example, farmer teachers are spreading their knowledge and techniques to their group members. To what extent farmer teacher transmit their knowledge and skills to other farmers also seems be related to the level of cooperation and relationship in the community. Good relationship and cooperation have positive impact on the number of farmers adopting new skills

(even outside of group member), and the quality of cultivated area.

(Self-help actions and Rethinking)

In Bungu, community members are eager to construct a health centre. This is typical needs of the communities in Juba County, yet the most of community are simply waiting for external support. Against, Bungu people prepared stone and sand for construction (self-help actions). Furthermore, community people consider that, in case the construction of health centre is difficult due to financial reasons, the community tries to utilize a guest house, which has never been used before, as a health centre (rethinking). Community development fundamentally relies on creating new options by reconsidering issues and problems with new assumptions. Such changes in mindset shown by Bungu people form the foundation of community development.

(Women’s participation)

Social status of women has increased over the last three years. Examples are that active participation in community meeting. In case of Bungu, before the commencement of LIPS, women didn’t participate in community meeting. As the project proceeds, they became more active and now participate in and they have a say in a meeting. In case of Kapuri, before the commencement of LIPS, women were not allowed to move freely in the community, but they are moving freely from side to side. Community members in Sirrimon reported that weeding used to be women’s work, but nowadays it is also done by men.

The Following table summarise achievements of component 4 by output indicators set in LIPS PDM.

Table 3-36: Summary of achievement in Component 4 by evaluation indicators

Indicator	Level of achievement
1. Increases in production of food, incomes and assets of participating household, by at least 50% by the end of project implementation, compared to control groups and pre-project levels	According to group discussion of each model site, there are recognized that increased agricultural production and income. Community members reduced hunger, and paid schools fees, hospital fees, and other household necessities.
2. Number of households experiencing hunger is reduced by 59% by 2012	<ul style="list-style-type: none"> <li>● According to the socio-economic survey conducted by the Project in 2009, 61% of families in Juba County have only one meal a day, while the ratio is 36.4% for those supported by the Project.</li> <li>● According to group discussion, community members can now eat twice a day and can work more actively.</li> </ul>
3. Agricultural productivity of	Agricultural productivity of participating households in higher than



Indicator	Level of achievement
participating households increases by at least 10% by 2012	the national average. In case of g-nuts productivity (2010) of members was 1.27 t/ha against 0.79 t/ha of national average. Likely, maize productivity was 2.59 t/ha against 1.32 t/ha.
4. 80% of participating farmers adapt at least one basic field technique learnt from the Agricultural technology package	<ul style="list-style-type: none"> <li>● As a result of training, 11 basic field techniques/practices learnt from the agricultural technology package were introduced in farmers group. The number of trainings for farmers are; 31 trainings in 2010 and 17 trainings in 2011.</li> <li>● 72% of farmers started to grow new crops in 2010.</li> <li>● According to questionnaire to farmer teachers, 24 of out 29 farmer teachers adopted at least one basic field techniques (83%).</li> <li>● According to group discussion, farmer teachers actively transfer skills and knowledge to their group members.</li> </ul>
5. Community organization/groups are formed and actively involved in Model projects	<ul style="list-style-type: none"> <li>● Boma Development Committee was established at six model communities and Community Development Plan was prepared by the committee's initiative.</li> <li>● 32 farmers group, 14 IGA groups were established and 2 PTAs was also set up.</li> </ul>
6. 80% of women and IDPs feel that they have benefitted from the Model projects	<ul style="list-style-type: none"> <li>● 90% of women are satisfied with crop production and 93.3% of them are satisfied with the support by CDO, AEO and the Project.</li> <li>● 100% of IDP are satisfied with crop production and 96.3% of them are satisfied with support by CDO, AEO and the Project</li> <li>● According to the result of interview, Social status of women increased in the communities. Before the commencement of project, many communities do not allow women to participate in a community meeting, but currently women participate and have a say in meetings.</li> </ul>
7. Through the project period, the percentage of women participants in field training is more than 40%	Membership of women in farmer group and IGA group accounted for 48%. 22% of BDC members are also women (22%) and they actively participated in OJT with CDO in the field.
8. Leaders actively involving in community development are trained at each community	<ul style="list-style-type: none"> <li>● Each BDC implements project activity in collaboration with CDO at each community as part of OJT.</li> <li>● In addition to the above training, management body of BDC (total of 40 community leaders) participated in training courses (58%). The participants transfer acquired skills to other members of community.</li> </ul>
9. The number of people who participate in community development plan	Activities are carries out in the fields of education, health and drinking water based on CDP. The number of beneficiaries by the Project activities is approximately 3,000.
10. Ownership towards model projects	According to group discussion, members of all model projects are confident in continuing activity without the support of project.

## 2. MAJOR FACTORS AFFECTING IMPLEMENTATION AND OUTCOME

In the Project Design Matrix (PDM) of the LIPS Project, followings are set as precondition and important assumption for success of the Project;

- Peace and economic stability are maintained in Southern Sudan
- The counterparts do not frequently leave or change at the position in the attached organisation
- There are no large structural changes of the counterpart Ministries.
- Policy commitment and financial arrangement for this approach in Juba County are secured.
- There are no adverse weather conditions (draughts, floods, etc.)
- The supply and price of agricultural inputs (e.g. fertilizer, seedlings) in model sites are secured.

Nevertheless, most of conditions above mentioned were not fully secured; the Project could manage the issues. The factors that affected project operation, more or less, were following.

### A. Factors Outside the Control of Government

- According to the interview survey for members of farmer group, 82% of respondents indicated that shortage and/or irregular rainfall pattern is a limiting factor of agriculture. During the project period, the project faced the problem in delay of rainy season (2010) and shortage of rain in June-July period (2011). As a result, some farmers got a devastating damage, especially in Bungu.
- Pest and Diseases is a limiting factor of yield. Particularly, one of the group farms in Nyamini (Wunliet) got devastating damage by ground nuts mottle virus and leafy spot in 2009.
- Poor supply chains of farming inputs limited the farming activities. Procurement of seed and pesticide in regional countries burdened on the Project. Import and quarantine system of seed and agricultural inputs is unclear.
- Conflict between Mundari and Bari in 2009 restricted the access to the Model communities. This security related concerns also discourage farmers from being engaged in their farming activities, in particular where farmers have conflict with cattle keepers.
- Strong dependency, expectation for donation and quick money is the biggest constraints to implement the Model projects. For example, in Sirrimon, cash incentive paid by NGO disturbs their self-reliance. People are used to be paid for their work and they don't show the interest in community meeting without incentives. This is a big challenge for CDO.
- Illiteracy is also critical issue to business management (especially IGA group).

### B. Factors Generally Subject to Government and Project Control

- As a result of government reformation, MCRD was merged with MAF. In MCRD/GOSS the Ministers were also frequently replaced (5 times) during the project period. Changes and absence

of the top affected to develop ministry's rural development policy.

- Delay in salary payment (max 4 months) de-motivates counterparts to be diligent. It was observed when delay is prolonged, attendance to the office and training also get down. LIPS also often encounters issues of cash incentives for CDO and AEO in relation to implementation of field services. A complex legal and regulatory framework related to the allowance of government staff is still an issue.
- Lack of office facility and transportation means were limited factors for project operation at the beginning of the Project. These are essential condition to start activities.

### 3. LIPS REPORTS AND DELIVERABLES

During a three-year project period, LIPS prepared various types of reports as indicated in table below (refer also Appendix-10 for more details).

Table 3-37: Summary of LIPS reports and deliverables

Categories	Major contents
Project implementation report	<ul style="list-style-type: none"> <li>● LIPS three years operation plan.</li> <li>● 6 month progress reports including annual report and annual plan.</li> <li>● Project final report</li> </ul>
Technical reports	<ul style="list-style-type: none"> <li>● National survey on community development and agricultural development</li> <li>● Socio-economic survey report on rural community in Juba County</li> </ul>
Workshop and study your reports	Results of all workshops conducted by LIPS are summarised in workshop reports, such as project kick-off WS, policy planning WS, agricultural stakeholders WS, etc. For domestic and Kenya, Uganda study tours reports also prepared.
Training record	Various types of training provided by LIPS for CDO, AEO, officials and farmers are recorded every time using training record format.
Field visit record	Field visits conducted by CDO, AEO and LIPS staff are recorded every time using field visit record format.

# INPUTS

## 1. JICA EXPERTS AND COUNTERPARTS

### A. JICA Expert

During the 36-month Project period, a total of 15 JICA Experts totalling 108.47 MM (man/month) was assigned in LIPS. The areas of expertise are shown in table below.

Table 4-1: List of JICA Experts assigned in LIPS

Title/Area	Name	Assignment period (Man Month)			
		PY 1	PY 2	PY 3	Total
1. Chief Advisor	(1) Sachio Yamamoto	6.00	4.50	3.00	13.50
2. Community Development	(2) Bernadette Kyanya	4.50	5.97	6.00	16.47
3. Community Development/ Gender Mainstreaming	(3) Mikiko Tsurui	4.00	6.00	7.50	17.50
4. Agricultural Training I	(4) Takayoshi Itoigawa (5) Junnosuke Harada	5.70	7.00	7.00	19.70
5. Agricultural Training II	(6) Eiri Kaku	1.30	9.00	8.50	18.80
6. Monitoring	(7) Yuki Nakazawa (8) Kikuo Oishi (9) Daigo Sano	5.00	5.50	3.00	13.50
7. Facility Planning	(10) Kentaro Nishiyama	0.00	1.00	0.00	1.00
8. Agricultural Extension	(11) Jun Tsurui	0.00	0.00	2.00	2.00
9. Project Coordinator	(12) Kentaro Nishiyama (13) Hirotaka Koizumi (14) Yui Matsuo (15) Rie Yamashita	2.00	2.00	2.00	6.00
(Total)		28.5	40.97	39.0	108.47

### B. Counterparts

A total of 50 full-time counterpart personnel (48 CDO, 2 AEO) have been assigned to the Project. In addition, over 30 officials, mainly senior staff of counterpart ministries, participated in the Project as members of committees (e.g. policy development, manual development), workshop organisers, trainers of training and project supervising. Major counterparts are shown in table below.

Table 4-2: List of major counterparts in LIPS

Name	Organisation/Title
Mr. Bortel Mori	LIPS Director, Advisor, MAF/RSS
Dr. Mathew Udo	Undersecretary, MAF/RSS
Rev. Oneil Yosia	Director General, Planning, MAF/RSS
Mr. John Pangech	Director, Planning, MAF/RSS
Mr. Alphonse Okot	Director General, Community Development, MAF/RSS
Mr. Aggrey M. Lueth	Director, Community Development, MAF/RSS
Mr. Victor Mabrouk	Principal, ARDI, MAF/RSS
Mr. Isaac Lado Samson	1 <sup>st</sup> Director General, MAF/ CES
Mr. Amose T. Benjamin	Director General, MCRD/CES
Mr. Theophilous Lado Monoja	Acting Director of Community Development, MCRD/CES
Mr. Kenyi Hillary Musa	Planning & Training, MCRD/CES
Mr. Kenyi Evans	Field Management, MCRD/CES
Ms. Susan Kabang Thomas	Sirrimon Team Leader, A / Inspector, CDO, MCRD/CES
Mr. Julius Taban	Kapuri Team Leader, A / Inspector /CDO, MCRD/CES
Mr. Santo Philip Ladu	Nyamini Team Leader, A / Inspector, CDO, MCRD/CES
Mr. Charles Manase Lubak	Kansuk Team Leader, A / Inspector, CDO, MCRD/CES
Mr. Patrick Lumumba Pio	Bungu Team Leader, A / Inspector, CDO, MCRD/CES
Ms. Ermin Helen	Kworjik Team Leader, A / Inspector, CDO, MCRD/CES
Ms. Mekelina Adong	Health Team Leader, A / Inspector, CDO, MCRD/CES

## 2. TRAINING IN JAPAN AND THE THIRD COUNTRIES

### A. Training of Counterparts in Japan

A total of 13 counterpart personnel visited and received training in Japan. There were two types of training in Japan. One was for senior officials (Undersecretary and Director General) and it aimed at understanding of the policy and system of rural development administration. The other type was for mainly extension officers and it aimed at learning practical knowledge related to community development and agricultural extension. Major contents of training in Japan are shown in table below.

Table 4-3: Outline of counterparts training in Japan

Course title	Date/period	Name	Title/Organisation
1. Rural Community Development by Livelihood Improvement Approach for Africa	13 Jan to 27 Feb, 2010	1. Mr. Kenyi Hillary 2. Ms. Susan Kabang	1. Planning & Training, MCRD/CES 2. Sirrimon Team Leader, A/Inspector, MCRD/CES

Course title	Date/period	Name	Title/Organisation
2. Support on Women's Entrepreneurship Development for African Countries	26 Jan to 28 Feb, 2010	Ms. Pitia Josephine	A/Inspector, MCRD/CES
3. Young Leaders African Countries Training Program	24 Oct to 10 Nov, 2010	Ms. Nancy Jeremiah	A/Inspector, MCRD/CES
4. Rural Community Development by Livelihood Improvement Approach for Africa	10 Jan to 26 Feb, 2011	1. Mr. Julius Taban 2. Mr. Justin Luate	1. A/Inspector, MCRD/CES 2. A/Inspector, ARDI/ RSS
5. Improvement of Income Generation in Villages by Processing of Agricultural Products/TICAD IV Follow-up	14 Jun to 30 Jul, 2011	Ms. Ermin Helen	A/Inspector, MCRD/CES
6. Rural Community Development by Livelihood Improvement Approach for Africa	24 Jul to 10 Sep, 2011	1. Mr. Patrick Lumuba 2. Mr. George Ladu	1. A/Inspector, MCRD/CES 2. A/Inspector, MAF/ RSS
7. Sustainable Rural Development and Poverty Alleviation for African Countries	10 May to 24 May, 2011	Mr. Frazer Andrea	Instructor, ARDI/RSS
8. Policy Planning of Rural Development in Japan	26 Nov to 10 Dec, 2010	1. Mr. Bortel Mori 2. Rev. Oneil Yosia 3. Mr. Theophilus Ladu	1. Advisor, MAF/RSS 2. Director General. Planning, MAF/RSS 3. Acting Director of Community Development, MCRD/CES

## B. Training of Counterparts in Third Countries

A total of 48 counterpart personnel received training in third countries (Uganda, Kenya). Major contents of training in third countries are shown in table below.

Regarding these counterpart trainings in Japan and third countries, further details are available in the study tour reports.

Table 4-4: Outline of counterpart trainings in the third countries

Course title	Date/period	Country	No. participants
1. Community development approaches	1-10 Oct, 2009	Kenya	8
2. Farming Practice	23-27 Nov, 2009	Uganda	8
3. Farming Practice	16-23 Nov, 2010	Uganda	20
4. Community development activities and agricultural extension processes	6-13 Nov, 2011	Kenya	12

### C. Outcome and Challenges of Counterpart Trainings

Since LIPS refers rural development in the post war period in Japan, the counterpart training in Japan was effective in understanding basic concepts and practices of said post war rural development and it contributed in change of mindsets among counterparts. Action plans made by CDO during their trainings were implemented as a part of model projects under the supervision of LIPS experts which strengthened CDO's capacities in both theories and practices. In doing so, LIPS experts and instructors of the counterpart trainings communicated closely for coordinating plans and their implementation which resulted in positive outcomes. On the other hand, current situation of rural villages in Japan and administrative supports are far different from the ones in South Sudan. It was difficult for counterparts to extend their thoughts to accomplish activities with limited financial supports after seeing the administrative supports provided in Japan. There is still a big challenge especially in the administrative side in South Sudan for counterparts to put into practice what they have learned during trainings.

As for the trainings in third countries, counterparts visited numbers of sites where agricultural and rural development activities are taken place. Knowledge acquired during these visits is effectively utilised as CDO and AEO conduct model projects back in South Sudan. Such knowledge includes methods on organising villagers, introducing new vegetable varieties and implementing IGA. It takes time to see results in rural development. CDO and AEO in South Sudan are currently implementing model projects without being able to envision their goals. One of the main objectives of trainings in third countries is to enable CDO and AEO to image model projects after 5 and 10 years and clarify their directions by seeing advanced cases. An advantage of having trainings in third countries is that they have similar natural as well as socio-economic environments compared to that of Japan. A challenge is that rural and agricultural development activities are carried out by agricultural extension officers (AEO equivalent) in both Kenya and Uganda and therefore there may be confusion in roles and job descriptions among CDO and AEO. In recent years, the role of agricultural extension officers is shifting from a mere technical transfer to a facilitation of participatory farmer-centred learning process. Because of this shift, the roles of AEO and CDO largely overlap. Administrative structures in South Sudan which divides rural development and agricultural extension need to be revised in near future. Understanding the situations in neighbouring countries is also useful for South Sudan to revise

its current administrative structures.

### 3. FACILITY AND EQUIPMENT

#### A. Facilities

Seven types of facilities indicated in the table below are provided by the Project during three years to enhance project management, training, and implementation of model projects.

Table 4-5: List of facilities constructed or rehabilitated under LIPS

Name of facility	Contents	Location	Year
LIPS Office	Pre-fabrication office (2 units), toilet, water tower	Juba town (MCRD/CES compound)	2009
CDO Office (MCRD/CES)	Electrical installation, generator house, office furniture, computers, etc.	Juba town (MCRD/CES compound)	2009
Kworjik Demonstration Farm	Farm (1 feddan), training hall, toilet, storage	Kworjik-Luri	2009
Kapuri Demonstration Farm	Farm (4.5 feddan), training hall, toilet, storage	Kapuri	2010
Boreholes	New boreholes: 7 Repaired boreholes: 12	Bungu, Kapuri, Nyamini Sirrimon, Kworjik-Luri	2010
Nyamini Community Centre	2 classrooms, 1 clinic, toilet	Nyamini	2010
Bungu Primary School*	4 classrooms, toilet, borehole	Bungu	2011

Remarks: \* Construction of Bungu primary school was financed by Embassy of Japan (grass-roots grand aid) in collaboration with LIPS.

#### B. Equipment

Equipment and materials which are necessary for implementing project activities have been procured. Those are machinery and equipment for agricultural production, transportation of CDO and AEO, computers, equipment for CDO's offices and others (for more details see Appendix-7).

#### C. Textbooks/Reference Books

To increase the knowledge of CDO and AEO, the Project procured over 200 titles of publications/documents and training DVD at MCRD/CES and project office. These cover the sectors



of community development, agriculture, livestock, peace building, administration, education, health and environment (Refer Appendix-8).

**4. LOCAL COSTS**

Local cost as operational expenditure for implementing activities in the Project from commencement of the Project to February 2012 is JPY 118,422,000 (USD 1,520,648 in current exchange rate) in total. The biggest portion of the cost was used for the implementation of model projects (Component 4) and it accounts for 32.8 % of total cost.

Table 4-6: LIPS local cost by project years and components

Unit: Japanese Yen

Categories	PY 1	PY 2	PY 3	Total
Component 1	0	1,507,809	1,596,283	3,104,092
Component 2	5,208,312	4,090,313	8,973,308	18,271,933
Component 3	3,035,859	3,133,816	5,663,578	11,833,253
Component 4	7,353,681	20,482,450	11,041,641	38,877,772
Others	8,260,148	16,800,612	21,274,190	46,334,950
Total	23,858,000	46,015,000	48,549,000	118,422,000

# CONCLUSION, LESSON LEARNED AND RECOMMENDATION

## 1. CONCLUSION

The Project purpose, ‘basic conditions for extension of livelihood improvement models suitable for various communities in and around Juba are established,’ has been achieved at a certain level as the Project accomplished in: summarising planning, implementation and approaches of model projects as ‘livelihood improvement models’ into a manual; enhancing pragmatical capacities among CDO and other stakeholders; establishing a rural development policy which promotes ‘livelihood improvement models’ besides other activities. Due to the civil war, the majority of extension officers were unable to visit fields. Despite such challenging situation, over 50 CDO participated in intensive trainings and conducted extension services at the organisational level. This is indeed a valuable anecdotal example in South Sudan.

Yet, it is still too early to say that extension officers have gained enough capacities. The capacities required for CDO and AEO are not simply to transfer knowledge and technologies to farmers. What they need is to support farmers to realise the necessity for improvement, decide and take action by themselves. Such facilitation capacities are only built as they discuss with rural communities over livelihood problems found in villages, work together and establish a trustworthy relationship. It requires time. The 3 year Project period is not enough for CDO who lacked opportunities to visit fields during the civil war to be a full-fledged extension officer. The majority of CDO who participated in trainings is thought to have equipped basics for community development. It is expected for them to further strengthen their facilitation capacities through the continuous visits to rural villages and tackling with challenges.

South Sudan now has a rural development policy and manuals. CDO and AEO have built capacities to make their use. Yet, there are still a range of obstructive factors for the government to continue extension services. In this regard, the Project still remains with a number of challenges as listed below.

- The fiscal revenues for conducting extension services are not secured at the central and state governments.
- The basic infrastructures necessary for providing extension services are not yet ready. Building extension offices and securing transportation means are the prerequisite for extension activities besides securing fiscal revenues, establishing extension systems and building human capacities.
- ARDI which has a role to train CDO is not functioning. The Project directly trained CDO which restricted the involvement of ARDI. As a result, ARDI instructors did not have opportunities to build their capacities.
- Due to limited functions of the Yei Crop Research Centre, information from the Centre is not well reflected to the extension activities. There is no data on crops/ vegetable species best suited to climates in and around Juba.

- Since local administrative systems are not fully established, there lacks coordination among administrative services at Boma and Payam levels. Even if rural communities and CDO develop a Boma Development Plan (BDP) through a bottom-up approach, the local government at County level does not have a structure to support the plan.

It is not easy for the counterpart Ministry alone to solve above noted challenges and conduct extension activities. For South Sudan to re-establish a new administrative system and build necessary human resources, collaboration with development partners is absolutely necessary. For future effort, it is strongly recommended for MAF/MCRD to carefully study experiences gained and lessons learned and actively utilise human resources who have been trained by this Project.

One of the principles of extension services is the empowerment. The empowerment is a process which farmers themselves to realise the problems, think through for solutions, and take action using available resources. Extension officers who facilitate farmers' empowerment need to possess capacities to empower themselves. Despite challenges noted above, it is still possible to conduct extension activities using limited resources. We strongly believe that extension officers who worked together with the Project know its importance and start to begin empowering themselves.

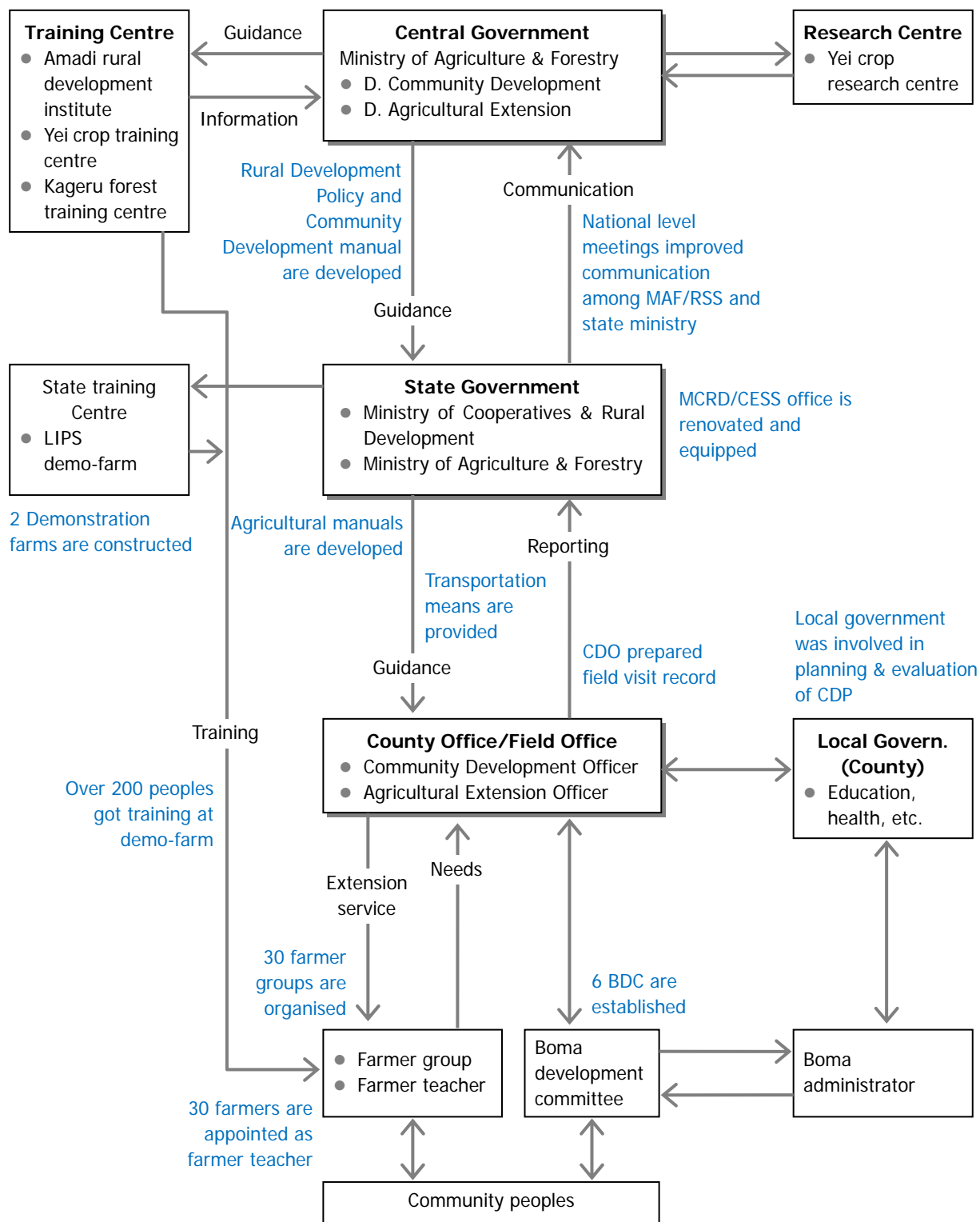


Fig. 5-1: Support to improvement of extension system by LIPS

## 2. LESSON LEARNED

### *Lesson-1. Collaboration between AEO and CDO*

This Project adopts rural development approaches which Japan had applied after the Second World War. In this method, AEO and CDO (they were then called 'Livelihood Improvement Officers') work hand in hand for contributing to livelihood improvements in rural villages. Similarly, this Project sent both AEO and CDO in one model project site of purpose. AEO took an initiative in agricultural extension services while CDO dealt with IGA and socio economic aspects. An involvement of both CDO and AEO in the model project aims to bring comprehensive development in rural villages and therefore enhance villagers' livelihoods in various sectors. It is expected that empowering villagers can further activate their productive activities. For example, when CDO decide to build a school, the ultimate goal is not an actual construction of a school but to empower villagers through a process of its construction. Empowerment requires time. Therefore, it is difficult to evaluate synergistic effects of CDO and AEO in the model activities during the limited project period. Yet, several signs of synergistic effects are already being observed. One is the strengthened solidarity among villagers. In project target villages, social relations among villagers are weak and it is difficult to organise a group and engage in group activities. At the initial stage of the Project, there were several occasions which we failed to organise a village meeting. Through a series of activities, communication among villagers got active and a foundation for cooperative works has been recognised. In such villages that began to build social capitals, facilitations of villagers' or/and farmers' groups tend to be easier. It is believed technology transfer among farmers can also be enhanced. This is an advantage when agricultural extension is considered. An approach involving both CDO and AEO can therefore be effective and it shall further be pursued for future.

### *Lesson-2. Training of CDO: Field work was the best teacher*

Capacity building of CDO has been a centre in every aspect of the Project for 3 years. A number of training, both in-house and external, was conducted by the Project in order to build their skills and knowledge for community development. It could be said that the best lesson for them, however, was not the trainings or workshops but the exposure to the rural community and to the people. The majority of CDO did not have opportunities to visit rural communities before LIPS started due to the long-lasting civil war and the lack of transport. These CDO, though they have knowledge acquired from schools and books, lacked technical skills which can directly used in villages. In a series of trainings, LIPS provided pragmatic knowledge and skills and CDO were given opportunities to practice such knowledge and skills in actual villages. To put what they learned into practice was not always easy. However, through trials and errors, CDO improved their approaches in rural development. Integrating with communities in villages is in fact a real OJT for CDO.

### *Lesson-3. Team Building of CDO*

In this Project, 4 to 8 CDO worked as a part of their zonal team (North, South, East and West) to visit

target villages. Later, CDO also formed “subject-based” teams such as gender, health and water. With the strong initiatives of the team leaders, zonal team members helped one another and developed their skills to pursue their goals of the model project. Formation of subject based teams was also effective to develop more subject matter specialists among CDO in future. When the extension structure is examined, there is also a system that allocates one CDO to several villages and asks him/her to give facilitation services to the villages he/she is in charge. This method can build a responsibility in each CDO and also utilise limited human resources. However, it requires each CDO to acquire a certain level of knowledge and experiences. At the same time, villages that CDO visits need to have some social capitals such as organisation capacities and networking skills among community members. In the case of South Sudan where many of CDO have lacked opportunities for training and practical experiences, knowledge and skills of an individual CDO alone are often not sufficient for providing appropriate advises to villages. In order to improve the situation, a team extension approach which team members share experiences and learn from each other is thought to be more effective for capacity building of CDO. The periodical CDO meeting was also useful as it provided a space for CDO to exchange ideas.

#### *Lesson-4. Formation of BDC and existence*

According to Juba County, every registered Boma is supposed to organise a “Boma Development Committee” as the lowest local body to pursue any development activities in communities. On the contrary to such policy, none of the model communities had existing BDC when LIPS started in 2009. LIPS therefore had to begin from the formation of BDC. During the implementation of the model project, BDC has always been at the centre of any activities, despite several changes in membership. Community members initially recognised BDC as the management committee exclusive to LIPS. However, as BDC began to act as a facilitator of communities through a series of leadership trainings and periodical mentoring by CDO, communities gradually understood the concept of BDC. By the end of the Project, some of BDC were directly communicating with local authorities. For example, a BDC negotiated with local authorities for deployment of an Area Education Officer in their village. Another BDC obtained permission to transfer an unused government facility into a health post. An ownership among community members is a key for rural development. In other words, rural development is an act to extract villagers’ ownership. Extracting the ownership requires a body which organises villagers and BDC gradually began to take an initiative to play such role. The presence of BDC is necessary for building a capacity among villagers. Continuation of BDC will be the key factor to sustain the development effects in the community brought by the Project.

#### *Lesson-5. BDC and Community Capacity*

Many villagers answered that relationship and cooperation among the community got better after the commencement of LIPS. Generally, good cooperation and relationship are observed when (A) activities (whether agricultural or IGA) are well implemented, and (B) BDC or equivalent organisation are well organised and active. Most probably this is because that shared experiences of activity

implementation united community members. Similarly, active BDC bring community members together to achieve something in the community (common history). Furthermore, if the good cooperation and relationship in the community is achieved, BDC management and other activities would most likely succeed. Therefore, cooperation and relationship among community have positive impact on the success of activity and BDC management, and vice versa. BDC seems to be more functional when (A) an area is geographically manageable, and (B) with an environment which its members can easily communicate when issue arises. Such factors are worth to be considered as selection criteria for target villagers when one conducts rural development activities.

#### *Lesson-6. Farmer Group and Farmer Teacher*

A line of activities of organising a farmers' group, building a collective farm and conducting trainings (farmer field school) is an efficient approach for the side of extension officers. On the other hand, if farmers do not see the merits of cultivating in a group, they will not come to the collective farm. Though trainings and provisions of seeds/farming tools are one of the incentives for organising a group, they are not enough to keep farmers continue farming at the collective farm. There were farmers who returned to their own farms once they received seeds/tools. Since the land is abundant in rural areas of South Sudan, the land itself cannot be a strong incentive. Therefore, a collective farm which is also used as a training field needs to seek for additional values. For example, construction of a shallow well can be a big incentive as securing accessibility to water directly links with an increase in agricultural production. A collective farm can be attractive for farmers' groups with limited access to the lands (e.g. IDP or/and women). As seen above, the land usage system among farmers in a target area needs to be studied carefully when a collective farm approach is to be introduced. On the other hand, extension officers need to visit individual farms for farmers cultivating their own land. This approach requires time and numbers of farmers one extension officer can visit will automatically be limited. In such cases, it is effective to select and intensively train innovative farmers, 'farmer teachers,' who are eager to increase agricultural production with innovative technologies. Under the Project, 5 farmer teachers were selected for each model village and supported. LIPS initially considered a role of farmer teachers to engage in good farming practices within the village. Yet, once farmers acquire advanced technologies, they began wishing to teach others. A certificate is issued by MAF/CES to farmer teachers. As a result, these trained farmer teachers began instructing other farmers and played an important role as voluntary extension workers in villages.

#### *Lesson-7. Cost Recovery in agricultural training*

A total land area of LIPS demonstration farms of Kapuri and Kworjik is 2.5 feddan (2 feddan excluding training facilities) which is more or less the same as an average farm land area in South Sudan. The Project sold vegetables produced in the demonstration farm at the market in Juba. The amount of sales was SSP 8,804 for 2010 and SSP 11,715 for 2011. The objective of the demonstration farm is trainings. If a production area of vegetables with high profitability (e.g. kale, lettuce and herbs) had been increased, the amount of sales would have been bigger. The amount of sales is used for the

training expenditures. Such cost recovery system can also be utilised for the public agricultural trainings. A system which enables: an introduction of a production plot in agricultural demonstration farms; cultivation of crops/vegetables with high profitability; and some percentages of sales being paid back to staff as incentives can recover the cost at a certain level.

#### *Lesson-8. Time Factors for Model Project*

In general, time was short in implementing the model projects. As it was reported, LIPS implemented 12 IGA projects in 6 model communities. Due to the slow progress on project preparation, some communities started their activities only in the final year of the Project. Differing from agriculture, IGA is a new experience for the most of community groups. Villagers with business experiences are limited and it was difficult for communities to understand the difference in activities they like and activities they can generate money. Same was said for CDO who facilitated model projects and therefore it required extra time for planning. Many of community members never went to school. It was another challenge for LIPS to train business for someone who are unable to calculate cost and benefit. Development of group dynamics, IGA skills, financial and administrative management takes considerable time and efforts. The reality was that the time was far too short to achieve the goal of the IGA when the profit generation is concerned. The population is scarce in target villages. Since the buying capacities of villagers are also limited, it is difficult to introduce IGA which requires high inputs for high profitability. A special attention needs to be paid for the selection of suitable IGA in such areas. LIPS conducted two types of IGA during its project period. One type of IGA requires cooperative works of a group which includes bakery and lulu soap making. Another type of IGA requires works by individuals. Such IGA includes bee keeping and goat rearing. The former type needs a certain level of organisational management skills. Therefore, without a continuous support from outside, it may be difficult for current villages in and around Juba to conduct these IGA. For time being, the latter IGA which can be conducted by limited cooperative commitment may be recommended in South Sudan.

#### *Lesson-9. Rural Development during the Reconstruction Period*

The civil war in Sudan began in 50's. Though there was an approximately 10 year interval of peace, the war lasted until 2005. Such long lasting civil war had following adverse effects especially in rural communities (in Juba County).

- **Weak administrative capacities.** South Sudan lacks: sound legal systems, policies, general plans, guidelines, etc. Officers lack in experiences. Without experiences, it is difficult one to understand the concept of rural development. Therefore, a rural development project needs to spend a lot of its effort to train its partners for them to understand rural development and roles of each stakeholder.
- **Low development due to limited public services.** The majority of rural communities has been forced to live without fulfilling basic human needs. Many of community members never went to



the primary school. Rural communities strongly wish for the dividends of long wished peace by the government. However, the reconstruction began taking place from urban areas and rural communities are strongly concerned with growing gaps between urban and rural areas. In such circumstances, a will for self initiated development among communities is weakened. For facilitating communities' self-reliant efforts, the government needs to provide certain inputs. As noted above, educational levels of communities in South Sudan is low and numbers who are exposed to other societies are limited. A rural development project therefore needs to spend some time for such communities to understand objectives, contents of activities and their roles in development.

- **Weak social relations among community members/ weakened traditional governing system.** The basic principle of rural development is participation of and ownership by community members. However, if the social relationship among communities is weak, it is difficult to hold a village assembly and transfer information among community members. There may be more emphasis on individual benefits rather than communal benefits. It may therefore be difficult to mobilise community members for communal activities.
- **Generation of returnees and IDP.** There are conflicts between constant residents and returnees. Some villages are forced to move due to land mines. A community in a village is basically a group of people composed of a same tribe. Therefore, IDP who are different tribes from constant residents are often subjected to discrimination. There are resistance among constant residents in accepting IDP in rural development.
- **Traditional livelihood methods with a combination of hunting/collecting natural resources and farming.** It was difficult for villagers to concentrate in agricultural production during the civil war. This is because agriculture requires some period of commitment with a specific land and people never knew what was going to happen on the following day during the war period. In addition, a traditional farming system largely depends on weather and it is too risky for one to be committed in high inputs. Villagers are therefore not willing to fully engage in agricultural production as of now. Agricultural production of a community member is just enough or less for his/her self consumption and one largely depends on hunting/collecting natural resources (e.g. firewood, stones, sands, etc.) for fulfilling shortfalls.

LIPS activities which are considered to be mitigating above mentioned adverse effects and effective in the reconstruction of the country are listed in the table below.

Table 5-1: LIPS activities against challenges in post war situation

Challenges	Effective activities
Weak administrative capacities	<p>In South Sudan, the concept and methods of rural development are not well understood among officers engaged in rural development activities. Under such circumstances, it is important to identify the organisational goal rather than working on policies or/and strategies. At the practical level, roles of CDO can be identified through preparation of the manuals. When the policy is formulated in a post war country, it is necessary to prepare a guideline for the swift implementation of said policy.</p> <p>One cannot engage in rural development activities by just learning its theories. OJT through a number of visits to the field is necessary. It is also effective for one to visit neighbouring countries to learn advanced cases.</p>
Weak social relations among communities	<p>Social relations among communities have been strengthened through its members` participation in village assemblies for planning, construction and management of schools and other social infrastructures. In Nyamini where its village members are composed of different tribes, villagers got closer by using one common community centre.</p>
Conflicts among tribes and groups	<p>In Kworjik, conflicts over the usage of one well among cattle keepers, farmers and soldiers were mitigated by building other wells. The Project allocated one well to each group. However, setting a system for all groups to share one well is more effective especially from the peace building aspect. The Project unfortunately did not have enough time to apply such measure.</p>
Food shortage	<p>An agricultural production increase cannot be achieved by just teaching basic technologies. Introduction of species such as cassava and sweet potatoes which grow in severe environmental conditions is effective for dealing with food shortage during the reconstruction period. Disease resistant species were widely welcomed in target villages.</p> <p>For the agricultural development during the reconstruction period, the biggest obstacle is a lack of farming tools/seeds. The issue is more serious among returnees and IDP. A provision of start-up kits is useful for the initial stage of the reconstruction period.</p>
Limited access to land among IDP and women	<p>The usage of land is often restricted for IDP and women (constant residents tend to dislike IDP to settle in their village). The land usage right is easier to be obtained when a group negotiates. Introduction of a collective farm and CDO acting as coordinators enabled IDP to cultivate. Friction between IDP and constant residents is mitigated by both groups working in a same collective farm.</p>
Weakened traditional governing system	<p>Especially in villages with weakened social relations, strong leadership of a village leader is important. Capacity building among traditional village leaders and BDC is useful for village unification. Various development partners visit villages during the reconstruction period. It is a role of CDO to facilitate fair development. In Bungu, leaders agreed to conduct IGA for blind people and elders.</p>

### 3. RECOMMENDATION

The Project was a groundbreaking initiative designed to impact South Sudan's high rate of poverty and low level of rural community development. Without doubt, the foundation laid by LIPS provides an excellent springboard for continued integrated community development initiatives in South Sudan. From the experiences of the Project, following recommendations can be made for developing programmes related to community development and agricultural extension in South Sudan.

#### *Recommendation-1. Community Development Fund*

Community Development Fund that offers chances for communities to implement their own small projects should be established by MAF/RSS in collaboration with development partners. Community development is realised in the process of "Doing & Learning" by community peoples. Such fund enables communities to tackle their own challenges. What is necessary for current South Sudan is its peoples to build capacities through these experiences.

#### *Recommendation-2. Joint work of CDO and AEO*

In 2011, the Directorate of Rural Development and the Directorate of Agricultural Extension came under the same jurisdiction of new MAF/RSS. This governmental reshuffle as an opportunity, joint work of CDO and AEO should further be promoted. For example, when CDO and AEO are to be deployed, they shall both be assigned to a same extension office in order to work at same villages. For doing so, coordination is necessary from its planning stage. Assurances from development partners currently concentrate in the agricultural sector. In order to dispatch CDO to these agricultural projects, the Directorate of Rural Development needs to engage in active negotiation with concerned parties. At the central level, the Directorate of Rural Development is merged to MAF/RSS. However, there are still independent State Ministries of Rural Development. Some of the Directorate of Rural Development are parts of Ministries other than MAF. MAF/RSS should consider reformation of current status of the Directorate of Community Development at State level as to promote cooperative works between CDO and AEO.

#### *Recommendation-3. BDC as a formal organisation*

As noted in the previous section of 'Lessons Learned,' BDC plays an important role in promoting rural development. BDC needs to be formed in all villages in future. As to do so, BDC organised under LIPS shall actively engage in propagation of their roles to outside societies. At the same time, supports from local government are essential for BDC to exert their abilities and engage in activities continuously. Decentralisation in South Sudan has just begun. Along the decentralisation process, the role of BDC and its supporting mechanisms need to be revised. CDO shall act as a coordinator between BDC and the administration, and continue providing supports to BDC especially for those organised under the Project.

*Recommendation-4. Extension of Community Development Manual from CES to all other States*

CDM is a compilation of all the community development activities undertaken by LIPS. The basic principles of rural development are commonly applied to all areas in South Sudan. CDM will be adopted as an official manual under MAF/RSS and distributed to all 10 states. CDM is an effective guiding tool for CDO. Yet, in order to maximise its effect, an appropriate guidance and trainings are necessary. Having gone through the OJT in model communities and the training on the use of CDM, CDO from MCRD/CES are now confident to undertake community based planning by their own initiatives. Two CDO and one ARDI staff have already given training on CDM to CDO from other Counties in CES as well as other States. To make CDM widely be used by CDO and other community workers throughout South Sudan, MAF/RSS should actively utilise such human resources with knowledge and abilities.

*Recommendation-5. Promotion of Vegetable Production*

Demands for vegetables have drastically grown in Juba as new hotels and restaurants being built and internationalisation of dietary habit among urban populations being promoted. A large economic impact is expected among farmers in and around Juba as they produce vegetables which are currently imported from outside of the country. LIPS conducted trainings on production of vegetables that are on high demands and summarised technical know-how and lessons learned into a manual. The Project also had a number of meetings on vegetable productions with various stakeholders. MAF/RSS is expected to continue collecting information on vegetable production and consumers' supports. The most influencing factors for vegetable productions are stable supplies of seeds/ fertilisers/ pesticides and acquisition of production technologies. Today, farmers in South Sudan depend on imported agricultural inputs. Due to the custom duties and its cumbersome procedures, farmers have to raise prices of their locally grown vegetables by necessity. From this aspect, the governmental support such as duty exemption on agricultural inputs is highly recommended for promoting production of locally grown vegetables. For the aspect of technical development, the identification of varieties that are suitable for the climate in and around Juba is urgently required. It is strongly suggested to cooperate with private seed companies which have abundant knowledge and experiences in neighbouring countries for technical development and its trainings. The Ministry in charge needs to further discuss possibilities for cooperation with private sectors on technical development/ trainings in exchange of possible tax exemption for their agricultural inputs. Aiming at the production of domestically grown vegetables, it is necessary to actively seek a way for cooperation which can bring benefits to both parties.

*Recommendation-6. CDO in Juba County*

From the beginning until the end of the Project, a lack of transportation means has been the bottle neck for the CDO's activities. This is a common challenge for CDO and AEO in all over the nation. Having gained the knowledge and experiences of communal work in model communities, they should continue their work as much as they could. One way is to focus on the communities around Juba City

so that the availability of transport will have minimum impacts on their activities. Involvement of CDO will certainly serve the developmental needs of those communities. Another way is to make the CDO office accessible to the community people as a focal point of community development. During the implementation, a number of useful resources were provided by LIPS including computers, books, training materials and stationeries. These resources shall be first made a full use by CDO and also be shared with the community people interested in the subject. Instead of CDO going to the field, they can also receive community people coming to them for information.

*Recommendation-7. Networking with other organisations for sustaining IGAs*

The most of IGA implemented as model projects still need supports from outside. IGA brought a positive impact on community members. Communities learned how to work together and therefore changed their mindset towards communal works. Through IGA such as lulu soap making, bee keeping, and bakery, community members including women acquired new skills. However, there are still numbers of challenges in order to manage and generate a stable income from the activity. It is therefore a continuous support from outside is necessary. CDO, together with BDC should continue their efforts to link the model projects with other development partners. The official network built during the implementation of LIPS will help CDO to find some good partners in near future.

*Recommendation-8. Rural Development during the Reconstruction Period*

Whether it is an agricultural or IGA project, village administrative capacities and a solidarity level of community members largely influence its outcome. When rural development is conducted in South Sudan, it is important to include measures to strengthen community's solidarity in its activities. Community's solidarity can be generated through working together, discussing, and sharing experiences under the same goal. The priority project shall be the one which maximum numbers of community members can participate in order to tackle common challenges. Providing opportunities that enable IDP and different tribes to participate together with constant residents is also significant from peace building aspects. For example, construction and management of schools, health posts, wells, and community centres are activities that a wide range of communities can participate. What is important is not only to foresee impacts of a facility itself, but also to pay attention on community's solidarity during a process of community's participation in its planning, construction and management. This is where CDO and BDC play their roles. Especially during an initial stage of the reconstruction period, types of assistance by the government and outside agencies tend to be emergency aids aiming at a short-term recovery of socio-economic functions. MAF/RSS needs to propagate the importance of building social capitals in rural development.

At the same time, the economic situation of each household need to be improved in order for them to participate and contribute in village development. For a short term measure, a payment for the labour such as 'food for work' shall be considered for above mentioned construction of facilities. Agriculture is a backbone for the development of rural economy in a medium to long term. However, it requires some time for developing agricultural technologies. During the reconstruction period, a measure which

is easy to adopt and has a big impact needs to be thought through. One is an introduction of improved varieties of cassava and sweet potatoes. In South Sudan, there was no inflow of new varieties of crops or/and vegetables from neighbouring countries due to the civil war. There are still vast fertile lands remained in rural areas in South Sudan. Identification of high yield varieties that suit to the climate in South Sudan is an urging agenda. Irrigation is an effective measure for the production increase. However, there are not many small rivers or/and streams in and around Juba which have enough water during dry season. Therefore suitable areas for small scale irrigation that villagers themselves can introduce are limited. The government should actively support construction of irrigation facilities.

As noted above, it is important to think not only economic reconstruction but also reconstruction of social relations for rural development during the post war period. MAF/RSS shall endeavour in coordination among the government and development partners for them to provide comprehensive rural development services.

## ***APPENDIX***

1. LIPS Project Design Matrix
2. LIPS Implementation Schedule 2009 to 2012
3. List Of Workshops, Training and Study Tours Conducted in the Project
4. Summary of Farming Trial at Demo-farm and Group Farm
5. Summary of IGA in 6 Model Communities
6. List of Counterparts (CDO)
7. List of Equipment Procured
8. List of Textbooks and Reference Books Procured
9. Record of Discussion
10. List of LIPS Reports
11. LIPS Chronicle
12. Project Site Map
13. Location of LIPS Model Communities
14. Map of South Sudan





## Appendix-1

### LIPS PROJECT DESIGN MATRIX (PDM)

Ver. No: 1.2

4<sup>th</sup> November 2010

<u>Name of the project:</u>	<u>The Project for Livelihood Improvement in and around Juba for Sustainable Peace and Development</u>	<u>Project period:</u>	<u>3 years (March 2009~February 2012)</u>
<u>Target area:</u>	<u>Juba County, Central Equatoria State</u>	<u>Direct target group:</u>	<u>CDOs, AEOs and participants of Model projects, part of staff in MCRD/GOSS/CES, and MAF/CES</u>
<u>Responsible agency:</u>	<u>Ministry of Cooperative and Rural Development (MCRD)/GOSS</u>		
<u>Implementing agency:</u>	<u>State Ministry of Cooperatives and Rural Development (MCRD/CES) State Ministry of Agriculture and Forestry (MAF/CES)</u>	<u>Indirect target group:</u>	<u>Residents in model villages</u>
<u>Collaborating agencies:</u>	<u>MAF/GOSS</u>		

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p><b>Overall Goal</b> Livelihood of the community people will be widely improved through the adaptation of “Livelihood improvement models” in and out of Juba County.</p>	<p>1. Numbers of villages benefitting through practising livelihood improvement models is increased.</p>	<p>1. Report of CDO and AEO 2. CES’s annual report and strategic plan 3. Follow-up survey</p>	
<p><b>Project Purpose</b> Basic conditions for extension of livelihood improvement models<sup>1</sup> suitable for various communities in and around Juba are established</p>	<p>1. Livelihood improvement approaches<sup>2</sup> of Juba County are established by CES.</p>	<p>1. Project report and final report 2. Socio-economic survey</p>	<ul style="list-style-type: none"> <li>Policy commitment and financial arrangement for the livelihood improvement model for CES in relevant fields is secured.</li> </ul>

<sup>1</sup> “Livelihood Improvement Model is a mechanism for CES to promote community development services. This mechanism primarily based on two processes; i) a wide range of communication, facilitation and learning activities organized and ii) agricultural technological packages which provide improvement and innovation in agricultural production.

<sup>2</sup> Livelihood improvement approaches consists of Output 1,2,3 and 4.

<b>Outputs</b>			
<p>1. Basic Tools for Community Development Services are developed</p> <p>(1) Community development manuals are developed</p> <p>(2) Agricultural technology packages are developed</p>	<p>1.1 Community development manuals are developed in participatory manner</p> <p>1.2 The developed manuals are positively evaluated by relevant stakeholders including CDO (satisfactory rate/usage rate)</p> <p>1.3 Agricultural technology packages are developed in participatory manner</p> <p>1.4 The developed packages are positively evaluated by relevant stakeholders including AEO (satisfactory rate/usage rate)</p> <p>1.5 Number of farmers who adapt agricultural technical packages is increased</p>	<p>1.1 Project report and annual report</p> <p>1.2 Questionnaire about manuals</p> <p>1.3 Socio-economic survey</p> <p>1.4 Report of CDO and AEO</p>	<ul style="list-style-type: none"> <li>• The counterparts do not frequently leave or change at the position in the attached organisation</li> </ul>
<p>2. Capacity of the relevant government staff and community leaders in extension of Livelihood Improvement Models is strengthened</p>	<p>2.1 Through participation in the training and study tour, CDOs and AEOs acquire new skills and knowledge</p> <p>2.2 80% of CDOs and AEOs involved the LIPS receive a series of training</p> <p>2.3 In more than 80% of training courses, more than 80% of training participants rank A or Bin questionnaire. (Evaluation will be done by 5-graded form (A:Excellent, B:Very Good, C:Good, D:Fair or Satisfactory, E:Poor)</p> <p>2.4 80% of participants utilise acquired knowledge and skills at their working place</p> <p>2.5 CDOs/AEOs have a clear sense of purpose and systematically and independently visit communities.</p> <p>2.6 More than 80% of CDOs recognize the improvement in terms of commitment, motivation and cooperation towards their job.</p>	<p>2.1 Project report and annual report</p> <p>2.2 Training record</p> <p>2.3 Follow-up survey</p>	<ul style="list-style-type: none"> <li>• There are no large structural changes of the counterpart Ministries.</li> <li>• Policy commitment and financial arrangement for this approach in Juba County are secured.</li> <li>• There are no adverse weather conditions (draughts, floods, etc.)</li> </ul>
<p>3. Institutional Capacity of MCRD/GOS/CES, and MAF/CES in effective operation of Livelihood Improvement Models is strengthened</p>	<p>3.1 "Rural Development Policy Framework and Strategy" is established and approved by GOSS and CES</p> <p>3.2 Clear job description including tasks, qualification and required training for CDO is established and approved</p> <p>3.3 Through introduction of improved information systems, every CDO and other stakeholders are</p>	<p>3.1 Project report and annual report</p> <p>3.2 CES's annual report and strategic plan</p> <p>3.3 Report of CDO and AEO</p>	<ul style="list-style-type: none"> <li>• The supply and price of agricultural inputs (e.g. fertilizer, seedlings) in model sites are secured.</li> </ul>

<p>4. The Model project adapting Livelihood Improvement Models are implemented</p>	<p>able to access necessary information</p> <p>3.4 Rural Development Forum is regularly held and information is shared among stakeholders</p> <p>4.1 Increases in production of food, incomes and assets of participating household, by at least 50% by the end of project implementation, compared to control groups and pre-project levels</p> <p>4.2 Number of households experiencing hunger is reduced by 59% by 2012</p> <p>4.3 Agricultural productivity of participating households increases by at least 10% by 2012</p> <p>4.4 80% of participating farmers adopt at least one basic field technique learnt from the Agricultural Technology package.</p> <p>4.5 Community organisation/groups are formed and actively involved in Model projects.</p> <p>4.6 80% of women and IDPs feel that they have benefitted from the Model projects.</p> <p>4.7 Through the project period, the percentage of women participants in field training is more than 40%.</p> <p>4.8 Leaders actively involving in community development are trained at each community.</p> <p>4.9 The number of people who participate in community development plan.</p> <p>4.10 Ownership towards model projects</p>	<p>3.1 Result of achievement tests</p>	
<p><b>Activities</b> (Community Development Manual)</p> <p>1.1 Assess the needs of CDO on the community development manuals</p> <p>1.2 Review existing manuals, guidebook, materials available</p> <p>1.3 Identify the contents to be included and style of the Manual.</p> <p>1.4 Collect information for database.</p> <p>1.5 Organize study workshop with participation of public and private organizations working in the</p>	<p><b>Input</b></p> <p><u>Japanese Side</u></p> <p>1. JICA Experts</p> <p>2. International/local consultants</p> <p>3. Project evaluation team (mid-term &amp; final)</p> <p>4. Training - Study tours (in and out of country) - In-house training -OJT</p> <p>5. Equipment supply</p>	<p><u>Southern Sudan Side</u></p> <p>1. Human Resources -Counterpart and administrative personnel</p> <p>2. Building, office spaces and necessary facilities for the Project activities</p> <p>3. Local cost (Operational cost for the Project Implementation)</p>	

<p>same field</p> <p>1.6 Submit 1st version of the Manual by end of 2009.</p> <p>1.7 Practically adopt the Manual at extension areas of CDOs and feedback the results for further improvement.</p> <p>1.8 The Manual to be officially approved by the MSDGRA/CES and MCRD/GOSS (Agricultural Technology Packages)</p> <p>1.9 Strengthen working relationships with other Ministries, UN agencies, research &amp; academic institutes, and NGOs to coordinate activities related to development of new manuals</p> <p>1.10 Conduct situation analysis on farming practice:</p> <p>1.11 Produce agricultural production handbooks and their education/training materials</p> <p>1.12 Produce agricultural extension manual</p> <p>2.1 Establish "Capacity Building Working Team (CBWT)"</p> <p>2.2 Redefine the job description of the staff involved in this Project and training needs assessment</p> <p>2.3 Review existing training programme and materials</p> <p>2.4 Plan and conduct training programme</p> <p>2.5 Building demonstration farm and provision of training equipment and materials</p> <p>3.1 Develop formal guideline for the community development service</p> <p>3.2 Develop credible processes and systems to collect, record, analyze, and report information</p> <p>3.3 Develop formal partnerships with public, private, donors and NGOs</p>	<p>- Vehicle (s), -Motorbike (s) - Agricultural equipment -Office equipment, etc.</p>	
<p>4.1 Selection of target communities</p> <p>4.2 Establish Community Project Committee (CPC)</p> <p>4.3 Form Facilitation Team</p> <p>4.4 Awareness, sensitization and planning of the Model Project</p> <p>4.5 Implementation arrangement</p>		<p><b>Pre-conditions</b></p> <ul style="list-style-type: none"> <li>• Peace and economic stability are maintained in Southern Sudan</li> </ul>

4.6 Implementation		
4.7 Saving profit		
4.8 Monitoring and Evaluation of the Model project		



### Appendix-3

#### LIST OF WORKSHOPS, TRAINING AND STUDY TOURS CONDUCTED IN THE PROJECT

##### (Workshops)

2009							
	Date	Title of WS	Venue	Participants	(Total)	Major contents	
1	28-Apr	Kick-off Workshop	Beijing Hotel, Juba	6 MCRD/GoSS 37 MCRD/CES 6 ARDI 2 MAF/CES 44 Others	95	The LIPS kick-off Workshop	
2	30-Jun	Kick-off Workshop with MAF/CES	MAF/CES	20 MAF/CES 5 Others	25	Half-Day Workshop on Brainstorming/planning with MAF/CES	
3	20-Aug	Follow-up Workshop on the result of socio-economic baseline survey	MAF/CES	7 AEOs 17 CDOs	24	Follow-up workshop on the result of socio-economic baseline survey was conducted together with CDO and AEO	
4	21-Aug	Workshop for the selection of LIPS Model Sites	CDO Office	28 CDOs	28	The selection of LIPS Model Sites together with CDOs	
5	15-Oct	Managerial Staff Meeting	Beijing Hotel, Juba	7 MCRD/GoSS 3 MCRD/CES 1 ARDI 5 Others	16	Managerial Staff Meeting for LIPS	
2010							
6	25-26-Feb	Workshop for leadership and community development planning	CDO Office and Beijing Hotel, Juba	32 BDC Representatives	32	How to design community development plan	
7	16-Mar	Variety Selection Meeting	MAF/CES	4 AEOs 16 CDOs	20	Variety Selection Meeting	
8	26-Jul	NGO Forum	Millennium Hotel, Juba	5 MCRD/GoSS 10 MCRD/CES 5 ARDI 40 Others	60	NGO Forum	

9	17-Sep	Activity review workshop	Millennium Hotel, Juba	29 CDOs 29 BDC members	58	Identification of problems/challenges, as well as the strengths of the LIPS project	
<b>2011</b>							
10	9-10-Mar	Stakeholder Consultative Meeting on Agriculture Input	Millennium Hotel, Juba	18 MAF/GoSS 8 MAF/CES 4 MCRD/CES 35 Others	65	Stakeholder WS	
11	13-May	Vegetable Working Group WS	Nile Beach Hotel	4 MAF/GoSS 1 MCRD/GoSS 7 Others	12	To discuss approaches for the replacement of vegetable	
12	27-May	Vegetable Working Group WS	Nile Beach Hotel	4 MAF/GoSS 1 MCRD/GoSS 1 MAF/CES 7 Others	13	To discuss approaches for the replacement of vegetable	
13	16-17-Jun	State survey WS	Nile Beach Hotel	18 MAF/GoSS 18 MCRD/GoSS 1 MAF/CES 2 MCRD/CES 24 State Ministries 10 Others	73	Result sharing and exchange of opinion among MAF, MCRD, line ministries and donors	
14	2-3-Aug	Policy Development WS	Nile Beach Hotel	5 MCRD/RSS 2 MCRD/CES 18 State Ministries 2 Others	27	WS on policy development for line ministries of Community Development and Cooperative	
15	1-2-Sep	Vegetable Working Group WS	Nile Beach Hotel	3 MAF/RSS 4 MAF/CES 3 MCRD/CES 12 Others	22	To discuss approaches for the replacement of vegetable	
16	26-Sep	Policy Development WS (Stakeholder Meeting)	Home and Away	10 MCRD/RSS	10	WS on policy development among stakeholders	



**(In-house Training)**

<b>2009</b>							
No	Date	Title of training course	Venue	Participants	(Total)	Major contents	Partners
1	30 March 3, 6, 9, 14, 15 April	Introductory Course for Community Development	CDO Office, Juba	30 CDOs 5 ARDI	35	-Definition of community development worker (e.g. Task of CDW/CDO, team building, concept of empowerment and participation)	N/A
2	Apr to Jun (1st) Aug to Nov (2nd)	Computer Literacy Training	CDO Office, Juba	11 CDOs 4 AEOs 4 ARDI 1 MCRD/GoSS	20	How to use MS software (e.g. Word, Excel, Power-point, Internet)	JICA SAVOT Project
3	23 Apr 7 May	Introduction of gender mainstreaming "What and why gender?"	CDO Office, Juba	25 CDOs	25	Basic concept of gender mainstreaming and how to adopt it (e.g. difference b/w sex and gender, problems and actions on gender concerns in communities)	N/A
4	4 - 16 Apr	Community-based planning methodology	CDO Office, Juba	31 CDOs	31	PRA tools (e.g. community profiling, problem analysis, visioning, participatory planning and action planning)	N/A
5	11-19 May 24 Aug	Training on Gender Profiling in Communities	CDO Office, Juba	8 CDOs	8	Methodology of gender analysis and profiling Conduct of gender profiling survey in Nyamini	N/A
6	19 June 27 July	Socio-economic survey method and implementation	CDO Office, Juba	30 CDOs 5 ARDI	35	How to plan and implement socio-economic survey. Training and practice (field work - implementation around 800 sample survey)	N/A
7	1, 8, 15, 22 Sep	Agricultural Extension basic Course	CDO Office, Juba	10 AEOs 10 CDOs 11 Others	31	Review of the concept of agricultural extension in terms of policy, extension methods, farm management techniques, community mobilization, etc.	N/A
8	7, 11 Sep	Gender Awareness Training Method and Implementation	Nyamini	29 CDOs 60 Community members	89	What is gender: Addressing Gender Issues in Community Development Group Exercise "Gender Cycles" "Experiences of Gender Awareness in Rural Communities"	N/A

						Implementation of gender awareness training for community	
9	15,17, 22 Sep	GFG training on Gender in Project Planning	CDO Office, Juba	7 CDOs	7	Team building of GFG Formation of group and selection of leaders Problem Analysis & Problem/objective tree	N/A
10	25 Sep. 2 Oct	How to make Improved Cooking Stove (Practice)	CDO Office, Juba	20 CDOs	20	How to make improved cooking stoves with practice	N/A
11	26 - 27 Nov	Leadership Training for Leaders of LIPS Model Communities	CDO Office, Juba	23 BDC members	23	Improvement of knowledge on community development in terms of responsibility and ownership (e.g. role of BDC and style of leadership) Learning of community development approaches such as participatory method and planning	N/A
<b>2010</b>							
12	27-Feb	Farm excursion	Gumbo Farm	27 CDOs	27	Excursion in commercial farm in Juba	N/A
13	15-16 Jun	Leadership training for community leaders	CDO Office, Juba	25 BDC members 22 CDOs	47	What is the role of community leaders in Community Development Plan administration?	N/A
14	24-25 Jun	Leadership training on self reliance, group management and implementation of CDP	CDO Office, Juba	30 BDC Representatives	30	How to manage community groups What is self-reliance society and implementation of CDP	N/A
15	20-21 July	Training on IGA (Part 1)	CDO Office, Juba	28 CDOs	28	What is IGA How to select profitable IGAs	CHF
16	27-Aug	Exposure visit to Bakery	Women Self Help Development Organization (WSHDO)	4 CDOs 9 Community members	13	Observation of existing bread making activity	WSHDO
17	3-Sep	Training on IGA (Part 2)	CDO Office, Juba	32 CDOs	32	GA Lessons from other orgs Economic Analysis on IGAs	CHF
18	6-Oct	Training on malaria prevention	Wunliet, Nyamini	3 CDOs 40 Community members	43	Introduction of how people can prevent from malaria by clean environment and mosquito nets	MoH/CES
19	13-15 Oct	Training for tricycle riding	Kapuri	3 CDOs 3 Communit	6	How to operate tricycle	MTC

				farmers			
20	28, 29-Oct 1,2,5,6-Nov	Bakery training	Kworijik	3 CDOs 9 Community members	12	Hygienic environment for baking, How to make breads Business Management	N/A
21	26-27 Oct	Bee Keeping Training	Kapuri	3 CDOs 3 Community members	9	Consultation (existing beekeeping equipment)	Kagelu Forestry Center
22	27-28 Oct	Goat raising training	Bungu	3 CDOs 18 Community members	21	Hygienic environment for goats Treatment when the goats are in trouble System of rotation	MoF/CES PSI
23	18-19 Nov	Bee Keeping Training	Kansuk	3 CDOs 22 Community members	25	- How to use/maintain modern technologies of bee keeping	Kagelu Forestry Center
24	20-22 Nov	Bee Keeping Training	Kapuri	2 CDOs 10 Community members	12	How to use/maintain modern technologies of bee keeping	Kagelu Forestry Center
25	3,6-Dec	Training on Grinding mill operation	Bungu	3 CDOs 20 Community members	23	O&M of grinding mill Business management Book Keeping	CHF
26	9,10-Dec	Training on fishing	Kansuk	1 CDOs 10 Community members	11	How to make fish trap Sales management	FAO
27	11-Dec	Apiray planning	Kworijik	4 CDOs	4	Planning and consultation	Kagelu Forestry Center
<b>2011</b>							
28	14-15 Apr	Training on improved cooking stove	Kapuri	16 CDOs	16	Lecture on Improved Stove and stove making.	Kagelu Forestry Center
29	April (10days)	Training for CDO (Team building, motivation and communication)	CDO Office, Juba	30 CDOs	30	Team effectiveness/ strategy/ leadership Keeping community interest high through generative themes How to set up and analyse generative themes Clarifying goals and dealing with opposition. Planning and evaluation	N/A

	10-14 May	Farmer Teacher Training	Kworjik Demonstration Farm	6 AEOs 2 CDOs 29 Farmer Teachers	37	To acquire basic/advanced farming knowledge and skills To be applied in local farming To learn roles of Farmer teachers and develop capacity as community leaders	N/A
30	24-15 June	Monitoring of Income Generation Activities	CDO Office, Juba	34 CDOs	34	Revision of the current IGAs in LIPS What is monitoring Monitoring indicators Action Planning	N/A
31	5-6 July	Community Health	CDO Office, Juba	29 CDOs	29	Roles of CDOs in Community Health Basic Knowledge of Health on (1) Malaria, (2) Malnutrition, (3) Diarrhea Group Work (understanding on the basic health issues) Action Plan and Evaluation	Ministry of Health, CES
32	21-22 Jul	Community sensitization, health and sanitation, and lulu training	Sirrimon	10 BDC members 12 Community members	22	Lecture on personal hygiene, household hygiene and environmental cleanliness, Lulu nuts sorting Development of action plans	N/A
33	26-28 Jul	BDC leadership training: roles review, communication / cooperation and development	CDO Office, Juba	13 CDOs 24 BDC members	37	Review of BDC roles and activity Review of BDC participation and support of IGA etc. Photo language to understand development	N/A
34	8-Sep	Grinding Mill Operation and Maintenance.	Bungu	3 CDOs 9 Community members	12	Expose to the grinding mill parts and their uses. Expose to process of maintaining the mill and keep it in good working condition. Ensure that the operators understand the operation and risk.	Grinding Mill technician
35	6-9 Sep	Lulu processing (oil and soap)	Sirrimon	5 CDOs 16 Community members	21	Learn how to process oil and soap by using local lulu nuts Learn importance of cleanliness while processing	Lulu Work
	8-9 Sep	Farmer Teacher Training	Kapuri Demonstration Farm	3 AEOs 10 CDOs 31 Farmer Teachers	44	To learn tomato pruning To learn timing of removing grass shade from a nursery To review transplanting methods	N/A

						To be exposed to newly introduced vegetables and get information on the comparison tests in Kapuri demofarm. To learn sales record keeping	
36	14-15 Sep	Training on the use of community development manual	CDO Office	41 CDOs	41	To train CDOs on how to use this manual. To review the steps taken during the LIPS operation on the basis of CDM and To reflect the necessary changes for the future operation	N/A
37	27-28 Sep	Training on Poultry	Nyamini Center	3 CDOs 10 BDC members	13	Acquire knowledge on poultry Understand better knowhow to keep chicken Agree on type of chicken and the possible diseases	N/A
38	29-30 Sep	BDC leadership training: roles review, review of action plan, monitoring and evaluation	CDO Office, Juba	13 CDOs 24 BDC members	37	Review of BDC roles and activity Review of BDC participation monitoring and evaluation Sustainability of BDC	N/A
39	4-8 Oct	Borehole repairs, water management and hygiene	CDO Office, Juba	37 CDOs 24 Community members	61	To train the pump mechanics in trouble shootings, and skills in repair of bore holes To highlight the water management committees the importance of hygiene To train the committee in water management and mobilization skill	Min of Rural Water, CES
40	19-Oct	Demonstration on Mango Jam Making (follow-up of training in Sapporo/Japan)	CDO Office, Juba	6 CDOs	6	To learn how to make mango jam To learn the methods of sterilization and preservation of processed food	N/A
41	20-Oct	Demonstration on the Improved Cooking Stove	CDO Office, Juba	11 CDOs	11	To revise what we learn at the training on the improved stove in March To demonstrate how to make an improved cooking to CDOs	N/A
41	1-5, 7-12, 13-16 Nov.	Introduction to basic modern beekeeping practices	Kwor Luri, Bungu, Kapuri, Sirmimon, Kansuk	7 CDOs 68 Community members	7	To revise what we learn at the training on the improved stove in March To demonstrate how to make an improved cooking to CDOs	N/A

## Appendix-4

### SUMMARY OF FARMING TRIAL AT DEMO-FARM AND GROUP FARM

#### 1. Sorghum

There is no serious problem in sorghum production so far despite slight or sometime very severe occurrence of beetles and bird attack at the maturity stage. Selection of appropriate varieties is important issue to be done.

Major problem and measures to be taken: Sorghum

Problems	Proposed measures to be taken
1. Poor productivities	<ul style="list-style-type: none"><li>● Selection of appropriate varieties</li><li>● Acquisition of proper farm management</li></ul>
2. Occurrences of beetles at the initial stage	Spraying adequate insecticide at proper time
3. Bird attack at the maturity stage	Human scaring or pitching thread on top



Mismanaged farm observed in Nyamini (no weeding). Acquisition of basic management skills is precondition, to introduce improved varieties and modern farm inputs.

Striga is commonly observed in the area, but doesn't give serious damage, so far. Rotation (and intercropping) which include crops other than maize and millet help to prevent an excessive Striga population, but not complete control. Otherwise, hand pulling is the best method, so far.

## 2. Maize

Situation is the same as sorghum. During 2010, farmers show interest in sweet corn. Farmers in the communities where have good access to Juba town have a potential to sale green maize (e.g. LIPS target area). Because of its higher value of green maize, farmers will be able to introduce sweet corn with use of some fertilizer to increase productivities.

### Major problem and measures to be taken: Maize

Problems	Proposed measures to be taken
1. Low productivity	<ul style="list-style-type: none"> <li>● Selection of appropriate varieties</li> <li>● Acquisition of proper farm management</li> </ul>
2. Occurrences of beetles at the initial stage	Spraying adequate insecticide at proper time
3. Poor growth	Studying effects of fertilizer application
4. Bird attack at the maturity stage	Human scaring or pitching thread on top

## 3. Groundnut

Groundnut is the most popular crops in this area. Although no serious problem was observed in 2010, damage by leaf spot and termites are commonly observed in farmers' gardens. Productivities and size of nuts are varied in villages.



Leaf spot is commonly observed in the area and in 2009 it gave serious damage to some of the group farms. Small spots with light centers appear on plant leaves, eventually causing the leaves to turn yellow and drop off. To control leaf spot, rotate crops, plant certified disease-free seeds, remove and burn damaged leaves, and stay away from plants when they're wet.



In 2009, it was observed termites are serious groundnut pests in Nyamini. Termite damage is generally most serious towards the end of the growing season just prior to harvesting. There is no effective solution against termites. Removing residues of previous cereal crops is the one. Otherwise, the complete destruction of mounds and removal of queen termites are effective control measures.

## 4. Upland Rice

Upland rice (NERICA variety) was experimentally introduced at LIPS demo-farm in 2010. But, the result was not satisfactory, due to damage by flooding in Kworjik Luri and late planting in Kapuri, last trials on rice were not satisfactory. More data is required to extend rice.

Major problem and measures to be taken: Upland Rice

Problems	Proposed measures to be taken
1. Improper heading	Planting earlier before July at latest
2. Bird attack at the maturity stage	Human scaring or pitching thread on top

**5. Tomato, eggplant and green pepper (Solanaceae crops)**

Tomato as one of the most important vegetable and other Solanaceae crops like eggplant and green pepper had almost same problems in last demonstration trial. Especially tomato encountered a lot of constrains throughout the planting period.

At the seedling stage, cricket cut off spindle of seedling to complete damage. They also damage young plant even after transplanting. Early Blight is the most destructive pest on tomato starting with small brown spots on leaves. The spots expand gradually to whole leaves and finally almost all the lower leaves on tomato plant get wilted before harvesting fruits. Virus infection is also serious issue in tomato production, which was observed on tomato plants all year round.

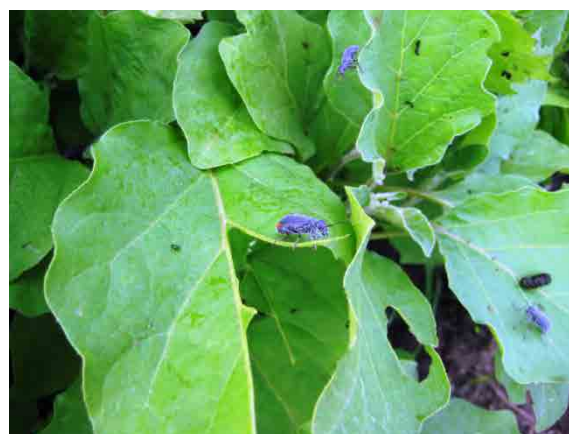
Pruning methods has not been established in Southern Sudan. It is well known that pruning effects very much on fruit set rate and yield. Adequate pruning method should be identified in the trial.

Major problem and measures to be taken: Solanaceae Crops

Problems	Proposed measures to be taken
1. Selection of appropriate varieties in terms of disease tolerance	Making variety trial for field selection
2. Occurrences of cricket at the seedling stage	Nursery should be covered with shading net all or otherwise spread poisonous feed on the nursery
3. Disease attack especially by Early Blight and Virus (TMV)	Use of tolerant varieties and spraying effective fungicide
4. Effect of Pruning and mulching on the yield	The following methods of pruning are tested and verified.



Tomato early bright diseases



Beetles are eating eggplant leaves.



## 6. Watermelon, pumpkin and cucumber (cucurbit crops)

As well as solanaceae crops, production of cucurbit crops are also have a big business chance in Juba County. For effective and intensive management, seedlings are to be prepared despite weak root system for transplanting. Seedling pot is used to mitigate transplanting shock.

Pruning is also a big issue to be discussed how vines are trained for efficient fruit production. This will be investigated in the demonstration trial.

As technical constrain, damages by beetle and melon fly are the most serious problems in cucurbit crop production. Effective ways of chemical application will be also investigated.

Major problem and measures to be taken: Cucurbit Crops

Problems	Proposed measures to be taken
1. Selection of appropriate varieties in terms of disease tolerance	Making variety trial for field selection
2. Occurrence of beetle	Spraying insecticide properly
3. Occurrence of melon fly	Spread insecticide properly on fruits
4. Pruning and training	The following methods of pruning are tested and verified.

## 7. Okra

Okura is one of the most popular vegetable in this area. LIPS had trials to examine several varieties, yet, no major problems including local varieties besides slight damage by beetle.

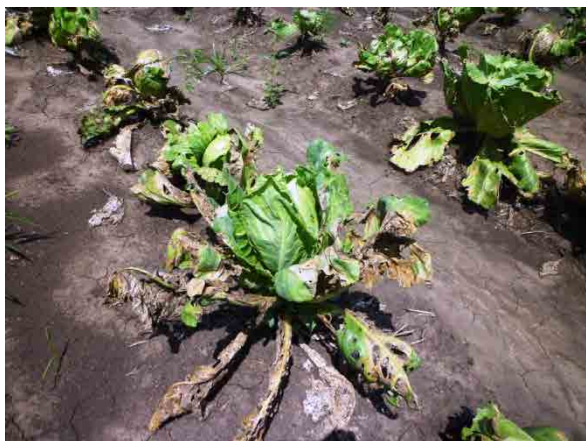
## 8. Cabbage and skuma-wiki (Kale)

These two leaf vegetables are commonly consumed at hotels and restaurants in Juba. The biggest issue of these vegetable is pest insects. Worms and some other larva of moth and butterfly always attack the leaves. Effective control methods, e.g. appropriate use of pesticide technologies, are required to be studied in the production.

In case of cabbage, some disease like Black Rot and Soft Rot are also serious obstacles. In the last trial, the introduced variety from Japan was verified to be tolerant against these diseases. This should be repeatedly investigated in the demonstration trial.

Major problem and measures to be taken: Cabbage and skuma-wiki (Kale)

Problems	Proposed measures to be taken
1. Severe occurrence of worms	Spraying insecticide properly
2. Damage by disease Black Rot and Soft Rot	Introduction of tolerant varieties



Cabbage affected pest insects



Kale has less damage comparing to cabbage and is expected higher profits.

### 9. Onion

Onion is characterized that it must be planted at right time in a year. According to the last trial, it was verified that right planting time for onion was October, and it causes improper growth of bulb if it was planted in wrong season.

As for seed production, mother bulb was planted too late last year. This should be investigated to determine the optimum time for planting.

During the last trial, no major pest and disease are observed on the onion plants.

#### Major problem and measures to be taken: Onion

Problems	Proposed measures to be taken
1. Optimum time for planting in bulb production	Shifting planting time at weekly interval for month
2. Optimum time for bulb planting for seed production	Planting earlier

### 10. Cassava and Sweet potato

Virus tolerant cassava and sweet potato were introduced from Uganda to LIPS model communities. These crops had no major problem during 2010.

## Appendix-5

### SUMMARY OF IGA IN 6 MODEL COMMUNITIES

No	Community	Activity	Started	No of members	Inputs (by LIPS)		Output (by Group)		Impact observed	Issues/ way forward for sustainability
					Inputs items	Input (SSP)	Output items as of Oct 2011	Income (SSP)		
1	Kworijik Luri	Bread Baking	Oct. 2010	9	Training Baking items Shop building Start-up set	8,100	Bread:	1,540 SSP as of Jun 2011	Community people have access to bread locally.	Group needs diversify activities due to increase price of bread
2	Kapuri	Bee Keeping	Jun.2010	23	Bee hives (langtroth, KTBHs), hive tools, smokers, bee suits, transport etc	4,549	Honey 55 kg	19*10*20=3800	24 more hives were added by the members at their own expence after the 1st harvest	
3	Kapuri	Poultry	Apr.2011	16	6 improved chicken, 3 iron sheets, 1 wire roll per member	7,500	Chicks and eggs (expected)	not yet		
4	Nyamini	Poultry for multipurpose center	Aug. 2011	10	70 chickens for group, fencing wires, blocks for gate	9,543	Chicks and eggs (expected)	not yet	Community help women's group for rearing as the communal work.	Feeding of chickens planting of grass
5	Sirrimon	Lulu processing	Mar. 2011	18	Processing machine Utensils Soap molds Caustic soda	11,570	Processed 280 soaps from 13 L oil	approx 1000 250-500 SSP per 100 soaps (4litter oil)	Community understood the value of lulu and is ready to collect more next year.	Market and procurement of items
6	Sirrimon	Bee Keeping	Oct. 2010	10	Bee hives (langtroth, KTBHs), hive tools, smokers, bee suits, transport etc	1,978	Honey			
7	Bungu	Grinding Mill Operation	Oct. 2010 (Sep 2011)	20	Grinding mill machine Mill house Diesel for start up	17,398	Cash Grinding grains	5 bucket/ day @5SSP/bucket month income aprx. 625SSP	Community started to sell grains so that people buy and grind same time	Maintenance of machine

No	Community	Activity	Started	No of members	Inputs (by LIPS)		Output (by Group)		Impact observed	Issues/ way forward for sustainability
					Inputs items	Input (SSP)	Output items as of Oct 2011	Income (SSP)		
8	Bungu	Goat Raising for blind and old	Oct. 2010	18	Training, 1 goat/member, transport, vet.kit	4,900	9kids born 5 died 2 stolen	Total no. of goat =18		Security
9	Bungu	Bee Keeping	Sep. 2010	12	Bee hives (langtroth, KTBHs), hive tools, smokers, bee suits, transport etc	2,374	Honey			
10	Kansuk	Bee Keeping (traditional)	Oct. 2010	20	Bamboo		Honey			
11	Kansuk	Small Shop	Oct. 2010	13	Shop building Start up items	2,800	Cash	Total income was SSP1,570	Community people have access to daily items locally.	Transportation of goods
12	Kansuk	Fishing Group	Sep. 2010	24	Fishing nets,	7,200	Fish			License

## Appendix-6

### LIST OF COUNTERPART (CDO)

No.	Name	Title	Position in the Zone Team
<b>Administration</b>			
1	Theophilous Lado Monoja	Acting Director	
2	Soura Lokuji Lado	Acting Dup Director, Adm	
3	Rose Idemi	Field Manager	
4	Jane Kiden Jakson	Project Officer	
5	Kenyi Hillary Musa	Planning & Training	
6	Kenyi Evan	Field Management	
7	Beda Surut Jada	D/D C.F.M	
<b>West (Sirrimon)</b>			
8	Anna Juru Daniel	A / Inspector	
9	Charles Gali Elli	C.D.O	
10	Peter Tombe	C.D.O	
11	Patrick Lotigo Bullen	C.D.O	Secretary
12	Susan Kabang Thomas	A / Inspector, C.D.O	Team Leader
13	Joseph Masakari	A / Inspector, C.D.O	
47	Jackline Raphael Laku	A / Inspector, C.D.O	
<b>North (Kapuri)</b>			
14	Alice Umjuma	C.D.O	Deputy Secretary
15	Julius Taban	P/CDO	Team Leader
16	Christine Ayany Wilson	C.D.O	
17	Mary Apoloi Andrew	A / Inspector, C.D.O	
18	Emmanuel Yokwe	C.D.O	
19	Mary Noel	A / Inspector, C.D.O	
<b>North (Nyamini)</b>			
20	Pasquale Jada Kungo	A / Inspector, C.D.O	
21	Josephine paulino	A / Inspector, C.D.O	
22	Santo Philip Ladu	A / Inspector, C.D.O	Team Leader
23	Rejoice Poni Francis	A / Inspector, C.D.O	
24	Margaret Poni wani	A / Inspector, C.D.O	
25	Lucia Damiano Bambu	A / Inspector, C.D.O	
26	Sarah Daniel	A / Inspector, C.D.O	
<b>North (Kworjik)</b>			
27	Edward Dante Mario	A / Inspector, C.D.O	Team Leader
28	Silvia Scopas Kenyi	A / Inspector, C.D.O	
29	James Maring Jada	A / Inspector, C.D.O	
30	Ermin Hellen	D / C.D.O	
31	Betty Konyo	A / Inspector, C.D.O	
32	Alfred Taban Peter	P/CDO	Secretary
33	Ruta Matayo Lobojo	S/Inspector	

East (Kansuk)			
34	Lona Elia Morgan	A / Inspector, C.D.O	
35	Charles Manasseh Lubak	A / Inspector, C.D.O	Secretary
36	Loise Basha	A / Inspector, C.D.O	
37	Mary Juliano	A / Inspector, C.D.O	
38	Simon Yona Pitia	A / Inspector, C.D.O	
39	Thomas Tombe Oonato	A / Inspector, C.D.O	Deputy Secretary
40	Rose Woro Louis	C.D.O	
South (Bungu)			
41	Mary Geoge Nyarsuk	A / Inspector, C.D.O	Deputy Secretary
42	Patrick Lumumba Pio	A / Inspector, C.D.O	Team Leader
43	Lodiang Charles Moses	D / C.D.O	Secretary
44	Joice Henry Ali	D / C.D.O	
45	Siamia Samuel	A / Inspector, C.D.O	
46	Thomas Nyarji	C.D.O	
Gender			
	Josephine Paulino	A / Inspector, C.D.O	
	Margaret Poni wani	A / Inspector, C.D.O	
	Silvia Scopas Kenyi	A / Inspector, C.D.O	
	Rose Woro Louis	C.D.O	
Education			
	Kenya Hillary Musa	Planning & Training	
	Jane Kiden Jakson	Adm	
Health			
48	Mikelina Adong	A / Inspector, C.D.O	Team Leader
	Santo Philip Ladu	A / Inspector, C.D.O	
	Rose Woro Louis	C.D.O	
	Patrick Lotigo Bullen	C.D.O	
	Betty Konyo	A / Inspector, C.D.O	
Water			
	Kenya Evan	Adm	
Others			
49	Charles Lado	Inspector	
50	Charles Loku	A / Inspector	
51	Rapheal Lako		
52	Emmanuel Jeremiah		
53	Joice Marccellina Sebur	C.D.O	
54	Joice Maka	Inspector, C.D.O	

**Appendix-7****LIST OF EQUIPMENT PROCURED**

No.	Name of equipment and specification	Number
1	Digital Camera (OMC-FX40)	8
2	Video Camera (GZ-MG840)	1
3	Projector (VPL-EW5)	1
4	Level with distance meter (Poco Ray-25)	1
5	Tripod (No.33)	1
6	Target	1
7	Surveying Tape	2
8	Pocket Refracto meter (PAL-J)	2
9	Rice Moisture Meter (m401)	1
10	Stereo Microscope, 100V (SSR-EML)	1
11	Shoulder Auto Spray (MHC11)	2
12	pruning shears	3
13	Portable Weather Measurement System (CR800-4M)	1
14	12V Power module (PS100)	1
15	10W Solar Panel (SP-10)	1
16	Case (ENC12-SN)	1
17	Tripod for Weather Censor	1
18	Cross Arm (019ALU)	1
19	Earth Kit (UTGND)	1
20	Software for Downloading Data (PC400/SS)	1
21	Rain Gage (TE525-L25)	1
22	Hygrometer (CS215-L6)	1
23	Sunshine Shield (41003-5A)	1
24	Young Anemoscope (030002-L11)	1
25	Programming	1
26	Grass Electrode PH meter (HM-20P)	1
27	Electric Conductivity Meter (CM-21P)	1
28	Tension Meter (DIK-3162)	1
29	Soil Durometer	1
30	Hands Microphone (ATP-SP303)	1
31	USB Cable	1
32	Amp for Sound System (WA-1812)	1
33	Microphone (WM1220)	1
34	Projector Screen	1
35	Digital Meter	1
36	Refrigerator (GRG242)	1
37	Desktop PC (HPDX2390)	3
38	Printer (P2014)	2
39	UPS (APC-650V)	4

No.	Name of equipment and specification	Number
40	Desktop PC (HDPX2400)	4
41	Laptop PC (Dell 525)	1
42	Scanner (Q2710)	1
43	Stabilizer (SVS0222-500w)	4
44	Coping Machine (AR-5316s)	1
45	Wireless Adaptor	1
46	Portable Power Generator (2.2kav)	1
47	Air Conditioner (18000BTU A/C)	1
48	Motor Cycle (for CDOs)	4
49	Motor Cycle (for Women CDO)	1
50	Try Motor cycle	2
51	Block Making Machine	1
52	Motor Cycle (for AEO)	1
53	Oven	1
54	Pump for Demo Farm	2
55	Grinding Mill	1
56	Try Motor Cycle	1
57	Grass Cutter	1
58	Container	2
59	Chair (1)	33
60	Chari (2)	1
61	Cabinet (1)	4
62	Cabinet (2)	3
63	Safe Box	1
64	Bookshelf	1
65	Desk (1)	2
66	Desk (2)	31
67	Table for Printer	2
68	Table for Meeting	6
69	Meeting Chair	60
70	Bench	2



## Appendix-8

### LIST OF TEXTBOOKS AND REFERENCE BOOKS PREPARED

S. No.	Title	Author
1. General Community Development/ Livelihood improvement		
1.1	Who changes? Institutionalizing participation in development	James Blackburn with Jeremy Holland
1.2	Rights-based Approaches/Learning Project	Jude Rand with Gabrielle Watson
1.3	Demystifying participatory community development	Francis. W. Mulwa
1.4	Voices of the poor/Can Anyone hear Us?	Raj patel, kai Schafft Anne Rademacher, Sarah Koch-Schulte
1.5	From poverty to power	Duncan Green
1.6	Pathways to participation/ Reflections on PRA	Andrea Cornwall and Garett Pratt
1.7	The Bottom Billion/Why the poorest countries are failing and what can be done about it	Paul Collier
1.8	Understanding poverty	Pete Alcock
1.9	Rural resources and local Livelihood in Africa	James Curry
1.10	Participatory Learning and Action (PLA)	Enoch Harun Opuka
1.11	The community Based Project Planning hand book	John Chikati
1.12	Community counseling/ Empowerment strategies for a Diverse Society	Judith A.Lewis, Michael D.Lewis ,Judy ,A Daniels, Michael .J.D" Andrea
1.13	Community Assessment/ Guidelines for developing counties Douglas Stockman	Dr.E.F.Schumacher
1.14	Challenging the professions/ frontiers for rural development	Robert Chambers
1.15	How to run successful / Akibo na Mkopo Group	Rick de Satge
1.16	Learning about livelihood / Insights form Southern Africa	Rick de Satge
1.17	Participatory Monitoring and evaluation of community project	Francis. W. Mulwa
1.18	The Rules of Community Mobilisation	John Chikati
1.19	Training For Transformation Handbook for Community Workers Volume 1	Anne Hope and Sally Timmel
1.20	Training For Transformation Handbook for Community Workers Volume 2	Anne Hope and Sally Timmel
1.21	Training For Transformation Hand book for Community Workers Volume 3	Anne Hope and Sally Timmel
1.22	Training For Transformation Hand book for Community Workers Volume 4	Anne Hope and Sally Timmel
1.23	Urban Migrations and Rural Development in Kenya	J.O.Oucho
1.24	People`s Participation in Development	
1.25	Corporate Social Responsibility in Africa	John Chikati
1.26	Resource Mobilization for Sustainability (proceedings of the International conference on resource mobilization)	John Chikati
1.27	Participatory Project Identification and Planning	John Chikati
1.28	The report Writing handbook(For community Development Workers)	John Chikati
1.29	Case Studies in Social Work Practice	Craig Winston LeCroy

S. No.	Title	Author
1.30	The Concept paper Writing HandBook	John Chikati
1.31	The project proposal Writing Handbook	John Chikati
1.32	The project Management Hand book	John Chikati
1.33	How to write Research and term paper	Joseph M. Kavulya
1.34	The NGOs Governance Hand book(Rules for Self Regulation)	John Chikati
1.35	The Good Research Guide (for small-scale social research project)	Martyn Denscombe
<b>2. Gender</b>		
2.1	The Oxfam Gender Training Manual	Suzannen Williams with Janet seed and Adelina mwau
2.2	The Gender Dimension/ Development in Conflict	Judy El Bushra
2.3	Gender Equality and sexual Exploitation	Andrew Baker
2.4	Violence against Women	Caroline sweetman
2.5	Gender, peace building, and Reconstruction	Caroline sweetman
2.6	Politics of the Possible/ Gender mainstreaming and organisational change:	Maitrayee mukhopadhyay, Gender steehouwer and Franz wong
2.7	Local Action Global change / A Handbook on women's Human rights	Julie Mertus And Nancy Flowers
2.8	Gender, society and development / Natural Resources Management and Gender	Piet Wijn
2.9	Livelihood and Gender	Sumi Krishna
2.10	Half the world, Half the Chance/ An introduction to Gender and Development.	Julia Cleves Mosse
2.11	Gender -Based violence	Geraldine Terry / Joanna Hoare
2.12	Violence against Women Training Manual	Eastern and central Africa Woman in Development
2.13	Women and Justice Training Manual	Eastern and central Africa Woman in Development
2.14	Urban Girls(Empowerment in especially difficult circumstances)	Gary Barker,Felicia Knaul with Neide Cassaniga and Anita Schrader
<b>3. AGRICULTURE</b>		
3.1	Small Holder Farming Hand Book/ For self- Employment	(IRACC)
3.2	Controlling Weeds without using chemicals	Jo Readman
3.3	Longhorn Secondary Agriculture form 1	Daniel cheruiyot Joseph Gachagua
3.4	Longhorn Secondary Agriculture form 2	
3.5	Longhorn Secondary agriculture form 3	Julius Mailu,peter sigei,Daniel Cheruiyot
3.6	Longhorn Secondary agriculture form 4	David Mwangi,Julius Mailu
3.7	Secondary Agriculture	Form one
3.8	Secondary Agriculture	Form two
3.9	Secondary Agriculture	Form three
3.10	Secondary Agriculture	Form four
3.11	Diseases of Vegetable Crops	Alfred steferud
3.12	Farm Manures	Charles E.Thorne

S. No.	Title	Author
3.13	Hand book for fertilizers	A.F. Gustafson
3.14	Soil Water conservation and Dry Farming	S.C.Panda
3.15	Biofertilizers/For sustainable Agriculture	Arun K. Sharma
3.16	Field Hydrology in Tropical countries	Henry Gunston
3.17	Modern mushroom Cultivation	Reeti singh and U.C. Singh
3.18	KCSE Revision Agriculture	Ann Wachira ,Daniel Cheruiyot ,Daniel Njagi, Jol Sitienei
3.19	Farm Equipment, Machinery, Structures and Buildings	L.Anyanzo
3.20	Macmillan Secondary Agriculture 1	Ann Wachira, Charles R.Muggah, Albert Munane
3.21	Macmillan Secondary Agriculture 2	Ann Wachira, Charles R.Muggah, Albert Munane
3.22	Macmillan Secondary Agriculture 3	Ann Wachira, Charles R.Muggah, Albert Munane
3.23	Macmillan Secondary Agriculture 4	Ann Wachira, Charles R.Muggah, Albert Munane
3.24	Discover how to make millions success in Agriculture Vol.1	James Mwangi Ndiritu
3.25	Discover how to make millions success in Agriculture Vol.2	James Mwangi Ndiritu
3.26	Discover how to make millions success in Agriculture Vol.3	James Mwangi Ndiritu
3.27	Discover how to make millions success in Agriculture Vol.4	James Mwangi Ndiritu
3.28	Wayside flowers of east Africa	Teresa Sapieha
3.29	mushroom processing Technology	pathak Yadav Gour
3.31	Asset Building and community Development	Gary Paul and Anna Haines
3.32	Success in Agriculture	James Mwangi Ndiritu
3.33	Growing Potatoes and Tomatoes	Dr.Eunice W. Mutitu
3.34	How to Grow Soya Beans	Pius B. Ngeze
3.35	Growing Kale and Carrots	Dr. W.W Prof Chewya University of Nairobi
3.36	Growing Onions	Professor Chewya and G .N.Karuku U.of N.
3.37	Growing of Coffee,Tea and Neem tree	Mr. Kabuthia, J.K Mutuma and Mary Ngechu
3.38	Learn how to grow Yams	Pius B. Ngeze
3.39	Growing Grains Millet,Sorghum,Greengrams,Wheat,P	Radio Listening Groups
3.4	Neem for Organ Farming and Healt	Shyam Sunder
3.41	Growing Beans and Maize	Dr.E.W.Mutitu and Mr.P.K. Kabuthia
3.42	Weed, Weedicide and Weed control	R.C.Mandal
3.43	The economics of tropical farming system	Martin Upton
3.44	Azotobacter in sustainable Agriculture	Dr.Neeru Narula
3.45	Manuring for Higher Crop Production	E.J.Russell
3.46	Bio-fertiliers Technology	Dr.Tanuja and Dr.S.S.Purohit
3.47	Soil Engineering(Testing, Design and Remediation	R.N.Reddy
3.48	Grain Sorghum Processing	U.D.Chavan and J.V.Patil
3.49	Fertilizers and Crop Production	Lucius L. Van Slyke

S. No.	Title	Author
3.50	Modern Concepts in Agriculture	Dilip Kumar Dasgupta
3.51	Organic Vegetable Production	S.K. Gupta
3.52	Insect Pest of Stored Grain and Grain Products(Identification, Habits and Methods of Control)	Richard T. Cotton
3.53	Agriculture Pollution	S.G Misra and Dr. Dinesh Mani
3.54	Fruit and Vegetable Preservation Techniques	R.K. Narang
3.55	Learn how to grow Yams	Richard M. Mahungu and James E. Otiende
3.56	The waste Products of Agriculture (Their Utilization as Humus)	Albert Howard and Yeshewant D. Wad
3.57	Diseases of Fruit crops	Harry Warren Anderson
3.58	Dry Land Agriculture (Traditional wisdom of Farmers for Sustainable Agriculture)	C. Karthikeyan,D. Veeraragavathatham,D. Karpagam,S.Ayisha
3.59	Fruit Growing in Pots	S.C.Dey
3.6	Friut Production	Gardner/Bardford/Hooker, Jr.
3.61	Organic Farming (Bio-control and Bio-pesticide Technology)	Bhattacharyya and Purohit
3.62	Cultivation and Uses of Aromatic Plants	Ramesh Kumar Srivastava, Shati Vinay Shukla,Sanjeet Singh Dagar
3.63	Agronomy	S.C. Panda
3.64	Research Methods for the Behavioral Sciences	Charles Stangor
<b>4. FORESTRY/ LIVESTOCK KEEPING/ POULTRY/ APICULTURE</b>		
4.1	A beginner's Guide to Bee keeping in Kenya	Thomas Carroll
4.2	Where there is no development Agency/ A manual for pastoralist and their promoters	Dr. Chris R. Field
4.3	Beekeeping /for profit and pleasure	Addison Webb
4.4	A hand book of poultry practice	Keith Wilson
4.5	Bee keeping	Johnson Ndolo
4.6	Basic Bee keeping Manual 1	Pam Gregory
4.7	Keeping Chickens	Victoria Roberts
4.8	Sustainable Dairy Farming: An Overview	TP Sethumadhavan
4.9	Goats and their Profitable management	H.S.H. PEGLER
4.1	Bees are Wealth	Dr.I Mann
4.11	Poultry Meat and Egg Product	Carmen R. Parkhurst and George J. Mountney
4.12	Crops and Livestock Farming	Bibek Ghosh
<b>5. PEACE BUILDING</b>		
5.1	Working for peace/ New thinking for peace building	Machira Apollos
5.2	Counseling (in Conflict)	Dr. Mutheu Talitwala
5.3	Practical (counseling and helping Skills)	Richard Nelson-Jones
5.4	Justice in the Risk Society	Barbara Hudson
5.5	Training Counseling Supervisors	Elizabeth Holloway and Michael Carroll
<b>6. LEADERSHIP/ ATTITUDE</b>		
6.1	Letting go/ Your key to positive Thinking and Success	Muneeza Khimji

S. No.	Title	Author
6.2	Leaders for Today Hope for Tomorrow	Anthony .A.D"souza
6.3	Leadership Jazz	Max Depree
6.4	The of Heart of a Leader	Ken Blanchard
6.5	The Tools of Leadership	Max Landsberg
6.6	Strategic Leadership and Educational Improvement	Preey, Glatter and Wise
6.7	Imitation is Limitation	John Mason
6.8	The Impossible Is possible	John Mason
6.9	Leadership and Economic Crisis in Africa	Samuel Agonda Ochola
6.1	Rulers, Leaders and People	Mathew Adams Karauri
6.11	Mastering Leadership	Micheal Williams
6.12	Leadership (Trilogy on Leadership and Effective Management)	Anthony .A.D"souza
<b>7. ADMINISTRATION/ BUSINESS</b>		
7.1	Starting a small Food processing enterprise	Peter Fellows, Ernesto Franco and Walter Rios
7.2	School Administration And management	Geoffrey Wango
7.3	The project proposal writing Hand book	John Chikati
7.4	The Corporate Fundraising Handbook	John Chikati
7.5	Career Guidance and Counseling	George A. Lutomina
7.6	Kenya careers information Guide	Prof. john C. Maviri
7.7	The concept Paper writing handbook	John Chikati
7.8	Strategic planning for Nonprofit Organization	John Chikati
7.9	An Enemy called Average	John L.Mason
7.10	Business Plan writing hand book	John Chikati
7.11	The economic of tropical farming systems	Martin Upton
7.12	An Introduction to statistical science in Agriculture	D.J.Finney
7.13	Purchasing and supplies management simplified	N.A. SALEEMI
7.14	The Green Guide for Business(the ultimate environment handbook for businesses of all sizes)	Chris Goodall
7.15	Smart Marketing (The hands-on guide for your small business)	Linda Echentille
7.16	Your Money or Your Life	Eric Toussaint
7.17	Fundraising Letters	John Chikati
7.18	Quantitative Techniques	Terry Lucey
7.19	Elements of Costing	M.E.Thukaram Rao
7.2	Book-Keeping And Accounts	Frank Wood Sheila Robinson
7.21	Basics of Qualitative Research 3e	Juliet Corbin Anselm Strauss
<b>8. HEALTH</b>		
8.1	Primary Health Education	Beverly Young and susan Durston
8.2	Healing Trauma	Solomon N. Njenga ,Ma
8.3	Applied Ethics and HIV/ADIS In Africa	Cletus N. Chukwu
8.4	Community Nutrition for Eastern Africa	Ann Burgess
8.5	Community Health	Chris Wood
8.6	Africa against AIDS	Dr Ruku oyaku Bhileni
8.7	Community Health Worker' Manual	Elizbeth Wood
8.8	Human Nutrition	Mary E. Barasi

S. No.	Title	Author
8.9	Principles of food Beverage and Labor cost controls	Paul R. Dittmer and J.Desmond Keefe111
8.1	Malaria and Poverty	Germano Mwabu
8.11	Advanecd Nutrition and Human Metabolism	Sareen S. Gropper,Jack L. Smith, James L. Groff
8.12	Food Process Engineering(Theory and Laboratory Experiments)	Dr.Kavita Marwaha
8.13	Africa Future, Africa`s challenge(Early Childhood care and Development in Sub-Saharan Africa)	Marito Garcia, Alan Pence, and Judith L.Evans,
8.14	Food Hygiene	Dr. Kavita Marwaha
8.15	Think Critically and Creatively	Tom N. Namwambah
<b>9. EDUCATION</b>		
9.1	Education Trends in Kenya A vocational perspective	P.C. Tum
9.2	School management Guide	W . K. Kimalat, Mgh
9.3	Essentials of Curriculum Development	G.p. Oluoch
9.4	Republic of Kenya ministry of Education Early childhood Development and syllabus	
9.5	Guidance and Councelling	
9.6	Interviewing (Principles and Practices)	Charles J. Stewart and William B. Cash, JR
9.7	Power Speak	Dorothy Leeds
<b>10. ENVIRONMENT</b>		
10.1	poisoned Well/ The Dirty of politics of African Oil	Nicholas Shaxson
10.2	The Wretched of the Earth	Frantz Fanon
10.3	Environmental Health for East Africa	Gerald K. Rukunga,
10.4	Birds of Prey of southern, central and East Africa	David Allan
10.5	Snakes other and Amphibians of EAST Africa	Bill Branch
10.6	Environmental Services of Agro-forestry Systems	Florencia Montagnini
10.7	Soil Pollution and Soil Protection	F.A.M.de Haan and Visser-Reyneveld
<b>11. DICTIONARY/ DIRECTORY</b>		
11.1	Oxford Advanced Learner's Dictionary	A.s. Hornby
11.2	The international Donor Directory For Africa	John Chikati
11.3	Dictionary of Pesticides	Prateek Mittal
11.4	Agro`s colour Atlas Medicinal Plants	Narayan Das Prajapati and S.S Purohit
11.5	Acolour Atlas of Poultry Diseases	J.L.Vegad
11.6	Dictionary of Plant Science	Dr.R.P. Chandola
<b>12. SUDAN</b>		
12.1	I am a Nuba	Renato Kizito Sesana
<b>13. DVD (Training Materials)</b>		
1A	One village one product movement in Africa (NTSC)	JICA
1B	One village one product movement in Africa (PAL)	JICA
2	Animal yoke brings better life to Sudan	AAHI
3	Lips kick-off WS	LIPS
4	community mobilization June/2009	LIPS

S. No.	Title	Author
5	Beekeepers of South Sudan	AAHI
7	bee keeping by AAIH	AAHI
8	Oxen plowing by AAIH	LIPS
9	Making irrigation to be part of our culture	JICA
10	The lesson from Livelihood Improvement experiences in postwar Japan	JICA
11	Compost and BOKASHI Making and Application	JICA
12	Extension of organic farming to small farmer (JICA-NET)	JICA
13	A good practice of gender mainstreaming for project management	JICA
14	Seed production	JICA
15	Vegetable grafting techniques	JICA
16	Low-risk community-based development model	JICA
17	System and mechanism you should know to prevent animal infectious diseases	JICA
18	Learning about livelihoods insights from South Sudan	2002 DiMP and Pemba production
19	Standard Diagnostic Manual for livestock diseases in Thailand	JICA
20	Prosperity through local product adding value	JICA
21	Livelihood Improvement approach in Africa	JICA
22	Recycling kitchen garbage at local bio-gas plant	Ministry of Agriculture Japan
23	Gender and women in Agriculture and rural Development in Asia	FAO
24	Gender Awareness Training in Nyamini 11 Sep 2009	LIPS
25	30 minutes Introductory Course For Gender and Development	JICA
26	Low-risk community-based Rural development model	JICA

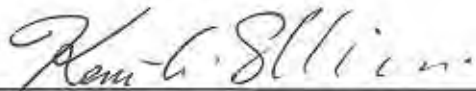
**RECORD OF DISCUSSIONS  
BETWEEN  
JAPAN INTERNATIONAL COOPERATION AGENCY  
AND  
THE AUTHORITIES CONCERNED OF  
THE GOVERNMENT OF SOUTHERN SUDAN  
ON**

**THE PROJECT FOR LIVELIHOOD IMPROVEMENT IN AND AROUND JUBA  
FOR SUSTAINABLE PEACE AND DEVELOPMENT**

With regard to the Minutes of Meetings between the Preliminary Study Team organized by Japan International Cooperation Agency (hereinafter referred to as "JICA") and the authorities concerned of the Government of Southern Sudan (hereinafter referred to as "GOSS") dated on 5th, August 2008, JICA had a series of discussions with the Southern Sudan authorities concerned with regard to desirable measures to be taken by JICA and the GOSS for the successful implementation of the Project for Livelihood Improvement in and around Juba for Sustainable Peace and Development (hereinafter referred to as "the Project").

As a result of the discussions, JICA and the Southern Sudan authorities concerned agreed on the matters referred to in the document attached hereto.

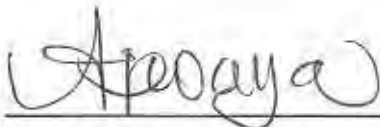
Juba, 10<sup>th</sup> December, 2008



Mr. Kenichi Shishido  
Resident Representative  
JICA Sudan Office  
Japan International Cooperation Agency



H.E. Prof. Philip Yona Jambi  
Minister  
Ministry of Cooperatives and Rural Development  
Government of Southern Sudan



H.E. Mr. Manase Lomole  
Minister  
Ministry of Agriculture, Forestry, Animal  
Resources and Fisheries  
Central Equatoria State



H.E. Ms. Hellen Mursali Boro  
Minister  
Ministry of Social Development, Gender and  
Religious Affairs  
Central Equatoria State



Witnessed by:  
H.E. Mr. Kuol Athian Mawein  
Minister  
Ministry of Finance and Economic Planning  
Government of Southern Sudan



Witnessed by:  
H.E. Dr. Barnaba Marial Benjamin  
Minister  
Ministry of Regional Cooperation  
Government of Southern Sudan



## THE ATTACHED DOCUMENT

### I. COOPERATION BETWEEN JICA AND THE GOVERNMENT OF SOUTHERN SUDAN

1. The GOSS<sup>1</sup> will implement the Project in cooperation with JICA.
2. The Project will be implemented in accordance with the Master Plan which is given in Annex I.

### II. MEASURES TO BE TAKEN BY JICA

In accordance with the laws and regulations in force in Japan, JICA will take, at its own expense, the following measures according to the normal procedures under the Technical Cooperation Scheme of Japan.

#### 1. DISPATCH OF EXPERTS

JICA will provide the services of the experts as listed in Annex II.

#### 2. PROVISION OF MACHINERY AND EQUIPMENT

JICA will provide such machinery, equipment and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project as listed in Annex III. The Equipment will become the property of the Government of Southern Sudan upon being delivered C.I.F. (cost, insurance and freight) to the Southern Sudan authorities concerned at the ports and/or airports of disembarkation.

#### 3. TRAINING OF SOUTHERN SUDANESE PERSONNEL IN JAPAN AND/OR IN THIRD COUNTRIES

JICA will provide training for the Southern Sudan personnel connected with the Project in Japan and/or in third countries.

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<sup>1</sup> The term "GOSS" is used to refer to one entire entity that includes both the central level and state level of Governments.

### III. MEASURES TO BE TAKEN BY THE GOVERNMENT OF SOUTHERN SUDAN

1. The GOSS will take necessary measures to ensure that the self-reliant operation of the Project will be sustained during and after the period of Japanese technical cooperation, through full and active involvement in the Project by all related authorities, beneficiary groups and institutions.
2. The GOSS will ensure that the technologies and knowledge acquired by the Southern Sudan nationals as a result of Japanese technical cooperation will contribute to the economic and social development of the Southern Sudan.
3. The GOSS will grant in the Southern Sudan privileges, exemptions and benefits as listed in Annex IV and will grant privileges, exemptions and benefits no less favorable than those granted to experts of third countries or international organizations performing similar missions to the Japanese experts referred to in II-1 above and their families.
4. The GOSS will ensure that the Equipment referred to in II-2 above will be utilized effectively for the implementation of the Project in consultation with the Japanese experts referred to in Annex II.
5. The GOSS will take necessary measures to ensure that the knowledge and experience acquired by the Southern Sudan personnel from technical training in Japan and/or in third countries will be utilized effectively in the implementation of the Project.
6. In accordance with the laws and regulations in force in the Southern Sudan, the GOSS will take necessary measures to provide at its own expense:
  - (1) Services of the Southern Sudan counterpart personnel and administrative personnel as listed in Annex V;
  - (2) Land, buildings and facilities as listed in Annex VI;
  - (3) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the Equipment provided by JICA under II-2 above;

7. In accordance with the laws and regulations in force in Southern Sudan, the GOSS will take necessary measures to meet:

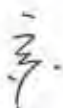
(1) Expenses necessary for transportation within Southern Sudan of the Equipment referred to in II-2 above as well as for the installation, operation and maintenance thereof;

(2) Customs duties, internal taxes and any other charges, imposed in Southern Sudan on the Equipment referred to in II-2 above; and

(3) Running expenses necessary for the implementation of the Project.

#### IV. ADMINISTRATION OF THE PROJECT

1. The Undersecretary of Ministry of Cooperatives and Rural Development of the Government of South Sudan (hereinafter referred to as "MCRD/GOSS"), as the Project Director, will bear overall responsibility for the administration and the implementation of the Project.
2. The Director General of Ministry of Social Development, Gender, and Religious Affairs of Central Equatoria State (hereinafter referred to as "MSDGR/CES"), as the Project Manager, will be responsible for the managerial and technical matters of the Project.
3. The First Director General of Ministry of Agriculture, Forestry, Animal Resources and Fisheries, Central Equatoria State (hereinafter referred to as "MAFAF/CES"), as the Co-Project Manager, will be responsible for managerial and technical matters of the Project especially in the area of developing agricultural technical packages.
4. The Japanese Chief Advisor will provide necessary recommendations and advice to the Project Director and the Project Manager on any matters pertaining to the



implementation of the Project.

5. The Japanese experts will give necessary technical guidance and advice to the Southern Sudan counterpart personnel on technical matters pertaining to the implementation of the Project.
6. For the effective and successful implementation of technical cooperation for the Project, a Joint Coordinating Committee will be established whose functions and composition are described in Annex VII.

#### V. JOINT EVALUATION

Evaluation of the Project will be conducted jointly by JICA and the Southern Sudan authorities concerned, at the middle and during the last six months of the cooperation term in order to examine the level of achievement.

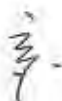
#### VI. CLAIMS AGAINST JAPANESE EXPERTS

The GOSS undertakes to bear claims, if any arises, against the Japanese experts engaged in technical cooperation for the Project resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in Southern Sudan except for those arising from the willful misconduct or gross negligence of the Japanese experts.

#### VII. MUTUAL CONSULTATION

There will be mutual consultation between JICA and GOSS on any major issues arising from, or in connection with this Attached Document.

#### VIII. MEASURES TO PROMOTE UNDERSTANDING OF AND SUPPORT FOR THE PROJECT

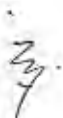


For the purpose of promoting support for the Project among the people of Southern Sudan, the GOSS will take appropriate measures to make the Project widely known to the people of Southern Sudan.

#### IX. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be three (3) years from the date of the first Japanese expert's arrival in Southern Sudan.

ANNEX I	MASTER PLAN
ANNEX II	LIST OF EXPERTS
ANNEX III	LIST OF MACHINERY AND EQUIPMENT
ANNEX IV	PRIVILEGES, EXEMPTIONS AND BENEFITS FOR JAPANESE EXPERTS
ANNEX V	LIST OF SOUTHERN SUDAN COUNTERPART AND ADMINISTRATIVE PERSONNEL
ANNEX VI	LIST OF LAND, BUILDINGS AND FACILITIES
ANNEX VII	JOINT COORDINATING COMMITTEE



## ANNEX I MASTER PLAN

### 1. Overall Goal

Livelihood improvement models suitable for various communities in and around Juba are widely utilized in Juba County.

### 2. Project Purpose :

Basic conditions for extension of livelihood improvement models suitable for various communities in and around Juba are established.

### 3. Outputs

- (1) Suitable approaches for Communication and facilitation of CDOs are developed.
- (2) Suitable agricultural technical packages for communities in and around Juba are developed.
- (3) Skills of CDOs and Agricultural Extension Officers (AEOs) are improved for extension of livelihood improvement models

### 4. Activities

- 1-1. Conduct socio-economic survey as baseline in model sites
- 1-2. Review existing communication systems of CDOs
- 1-3. Review existing material for communication and facilitation for CDOs
- 1-4. Design and improve communication systems of CDOs
- 1-5. Facilitate community to articulate their needs and potential
- 1-6. Develop manual(s) of communication and facilitation skills of CDOs
- 2-1. Survey farming systems and practices (techniques) in model sites
- 2-2. Review agricultural marketing
- 2-3. Implement pilot activities in model sites based on farmers' needs, production potential and market needs
- 2-4. Develop agricultural technical packages based on lessons learnt from model sites
- 3-1. Review existing curricula and textbooks for CDOs and AEOs
- 3-2. Develop training curricula and materials for extension of agricultural technical packages
- 3-3. Develop training curricula and materials for communication and facilitation skills using developed manual(s)
- 3-4. Conduct training of agricultural technical packages and communication and facilitation skills

## ANNEX II LIST OF EXPERTS

Experts with the following assignment titles will be assigned to the TC. Any assignment title may be held concurrently by one expert.

- Chief Advisor
- Project Coordinator
- Community Development
- Agricultural Development
- Training
- Gender Mainstreaming
- Experts in other fields may be dispatched, if necessity occurs

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ANNEX III LIST OF MACHINERY AND EQUIPMENT

Part of machinery and equipment necessary for the effective implementation of the Project will be provided by the Japanese side in consideration of the progress of the Project and budgets.

- Vehicle(s)
- Motorbike(s)
- Office equipment
- Other necessary equipments





ANNEX IV PRIVILEGES, EXEMPTIONS AND BENEFITS FOR JAPANESE EXPERTS

1. Exemption from income tax and other charges of any kind imposed on or in connection with the living allowances remitted from abroad for the experts.
2. Exemption from import and export duties and any other charges imposed on personal and household effects of the experts and their families.
3. Use of all of its available resources to provide medical and other necessary assistance to the experts and their families.
4. Issue of visas for the experts and their families free of charge upon application.
5. Issue of identification cards to the experts and their families to secure the cooperation of all government organizations necessary for the performance of the duties of the experts.
6. Exemption from customs duties for import and export of machinery and equipment by the experts in connection with the Project activities.

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ANNEX V LIST OF SOUTHERN SUDAN COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. Counterpart personnel

(1) Project Director

Undersecretary of MCRD/GOSS

(2) Project Manager

Director General, MSDGRA/CES

(3) Co-Project Manager

First Director General, MAFAF/CES

(4) Counterpart personnel in the following fields

1) Director of Community Development, MSDGRA/CES

2) Relevant Official(s) to be appointed from MAFAF/CES

3) Assistant Commissioner for Community Development

4) Assistant Commissioner for Agriculture, Horticulture, Plant Protection, and Animal Resources

5) CDOs (at minimum one for each model site)

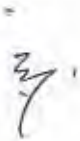
6) AEOs in the areas of agriculture, horticulture, plant protection, and animal resources

7) Officials for amending textbooks and materials for CDOs and AEOs

8) Others if necessary

ANNEX VI LIST OF LAND, BUILDINGS AND FACILITIES

1. Land for the office for implementation of the Project
2. Rooms and space necessary for installation and storage of the Equipment
3. Other facilities mutually agreed upon as necessary



## ANNEX VII JOINT COORDINATING COMMITTEE

### 1. Function

The Joint Coordination Committee (JCC) will be established to oversee the Project. The JCC will meet at least once a year and whenever necessity arises. The main functions of JCC are:

- (1) To examine and approve the Annual Plan of Operation (APO) to be formulated by the Project in accordance with the Record of Discussions;
- (2) To review the overall progress of the Project and activities carried out under the above-mentioned APO in particular;
- (3) To review and exchange views on major issues arising from or in connection with the Project and recommend corrective measures;
- (4) To review and approve the PDM if necessity arises; and
- (5) To facilitate coordination with other relevant authorities.

### 2. Composition

#### (1) Chairperson:

Undersecretary of MCRD/GOSS

#### (2) Southern Sudanese Side:

- 1) Director General of Planning, MCRD/GOSS
- 2) Director General of Community Development, MCRD/GOSS
- 3) Director General of Field Management, MCRD/GOSS
- 4) Director General for Multilateral Relations, Ministry of Regional Cooperation
- 5) Director General of MSDGRA/CES
- 6) Director of Community Development, MSDGRA/CES
- 7) Director of Gender, MSDGRA/CES
- 8) Director General of Agriculture, MAFAF/CES
- 9) Director of Horticulture, MAFAF/CES
- 10) Director of Plant Protection, MAFAF/CES
- 11) Director of Livestock, MAFAF/CES

#### (3) Japanese side:

- 1) Chief Advisor (JICA Expert)
- 2) Expert(s) designated by the Chief Advisor
- 4) Resident Representative of JICA Sudan Office

#### Note:

- Official(s) of the Embassy of Japan may attend the JCC as an observer(s).
- Chairperson can request and admit attendance to other relevant personnel as observers.

## Appendix-10

### LIST OF LIPS REPORTS

Annual and Progress Reports	
1. LIPS 3 Years Work Plan (Inception Report)	Feb 2009
2. Progress Report (1)	Jul 2009
3. Progress Report (2)	Dec 2009
4. Progress Report (3)	Jun 2010
5. Progress Report (4)	Jan 2011
6. Final Report	Feb 2012
Survey Reports and manuals	
7. Baseline Survey Implementation Plan and Report	-
8. Community Development Manual	-
9. Agriculture Extension Manual	-
10. Agriculture Techniques Manual	-
11. Report on Policy Training in Japan	Dec 2010
12. State Survey Report	Jul 2011
Other Reports	
PY 1	
13. Project Summary Description (LIPS brochure)	Mar 2009
14. Proceedings of LIPS Kick-off Workshop	Apr 2009
15. Rapid Training Needs Assessment for CDO	Apr 2009
16. Summary Report on Half-Day Workshop on Brainstorming/ planning with State Ministry of Agriculture, Forestry, Animal Resources and Fisheries/ CES	Jun 2009
17. Gender Profiling in Nyamini	Jul 2009
18. LIPS Socio-economic Survey on Community Development in Juba County	Aug 2009
19. Concept Paper on LIPS Demonstration Farm	Aug 2009
20. Uganda Tour Report	Sept 2009
21. LIPS Newsletter No.1	Oct 2009
22. Kenya Study Tour Report	Nov 2009
23. LIPS Project Operation Manual (POM)	Nov 2009
24. Operation Plan of LIPS Demonstration farm	Nov 2009
25. Boma/Village Development Plan under LIPS	Nov 2009
26. Gender Strategy and Planned Action in LIPS	Nov 2009
31. MCRD Community Development Manual (version 1)	Nov 2009
32. Situation Report on farming Practice in Juba County	Nov 2009
33. Agricultural extension manual (version 1)	Nov 2009
34. Vegetable growing manual (version 1)	Nov 2009
35. LIPS Training Plan 2010	Nov 2009
36. LIPS Model Project Menu 2010	Nov 2009

37. Report on Leadership Training for Zonal BDC Leaders	Nov 2009
PY 2	
54. LIPS Annual plan 2010	Jan 2010
55. Agricultural Assessment in Juba County	Feb 2010
56. Workshop for Leadership and Community Development Planning (Proceedings)	Feb 2010
57. LIPS Demonstration Farm: Operation Plan 2010	Feb 2010
58. Result Of Interview Survey on LIPS Project In 2009, Nyamini Centre, Wunliet, Lukubuyu, Bonga Jur, Nyamini Boma, Northern Bari Payam, Juba County	Feb 2010
59. The Guideline for Developing Farmer Group Rules under LIPS	Feb 2010
60. Community Development Plan (CDP) 2010-2012 in LIPS 6 Model Boma	Mar 2010
61. Opening Ceremony for LIPS Demonstration Farm; Summary Report	May 2010
62. Workshop report on Leadership and CDP Training for payam Directors, Boma Administrators, Chief, Headman and BDC Members	Jun 2010
63. Workshop report on Self Reliance and Group management Skills for BDC, Women and Youth leaders	Jun 2010
64. LIPS brochure (version 2)	Jan 2010
65. LIPS Demo-farm brochure	May 2010
66. Field Visit Record and Training record	Various
67. Minute of Meeting of JCC	Mar 2010
68. LIPS Monthly Progress Sheet	Jan & Jun 2010
69. Plan of plan for MCRD's new policy and strategy	May 2010
PY 3	
70. Annual plan	Feb 2011
71. Proceedings of Vegetable Growing Workshop (1)	Mar 2011
72. Report on Study Tour to Mundri and Amadi	Apr 2011
73. Proceedings of State Survey Workshop	Jun 2011
74. Proceedings of Integrated Rural Development Policy Development	Aug 2011
75. Nyamini Opening Ceremony Summary Report	Aug 2011
76. Proceedings of Vegetable Growing Workshop (2)	Sep 2011
77. Report on Mid-term Review Workshop	Sep 2011
78. BDC Training Report	Sep 2011
79. Beekeeping report/ Beekeeping guide by Mr. Drama Patrick	Nov 2011
80. Yei Study Tour Report	Nov 2011
81. Kenya Study Tour Report	Nov 2011
82. Rural Development Policy Draft	Dec 2011
83. Improved Stove Guide	-
84. Lulu processing guide	-
85. Field Visit Record and Training Record	Various

## Appendix-11

### LIPS CHRONICLE

<b>Year 2008</b>	
April	JICA Pilot Project conducted
10 December	Record of Discussion (R/D) signed
<b>Year 2009</b>	
23 February	Contract on implementation of LIPS between JICA and SSC became effective
05 March	Arrival of JICA Expert Team at Southern Sudan
20 March	JICA Pilot Projects were handed over to LIPS Team (Gondokoro, Kapuri, and Nyamini)
23 March	The LIPS project office was set up
03 April	In-house CDOs training started by LIPS experts
28 April	Kick-off workshop at Juba Beijing Hotel
11 May	The Manual Team was established among CDOs
11 May	The gender focal group was established within CDOs
19 June	Four zonal Teams were established among CDOs
19 June - 27 July	Socio-economic Baseline Survey and the training was implemented
30 June	Half-Day Workshop on Brainstorming/planning with MAFARF/ CES
31 July	JICA Mission from Uganda (Agricultural experts: Dr. Nishimaki & Mr. Tsuboi) and Tokyo (Mr. Miyoshi) visited LIPS office and Kapuri
19 – 20 August	Follow-up workshop on the result of socio-economic baseline survey
21 August	Workshop for the selection of LIPS Model Sites together with CDOs
21 August	Mr. Ikegami, free reporter, visited LIPS office and Kapuri
September	Agricultural Extension Training Course was conducted to AEO, MAFARF/CES
September	4 Model Project Sites were selected
15 October	The Management Staff Meeting was conducted at Juba Beijing Hotel. The 1st LIPS Progress Report was shared with its counterparts.
20 October	Handover Ceremony of CDO office at the Directorate of Community Development.
24 October	The location of the Demonstration Farm was officially agreed to be at Kwerijik Luri.
29, 30 October	Training on Basic Health Care was conducted at Nyamini in collaboration with Ministry of Health/ GoSS and JICA HEARTS Project.
01-08 November	Kenya Study tour was conducted for 5 CDOs, 2 AMADI staff and 1 MCRD/GoSS staff.
23 - 27 November	Uganda Study tour was conducted for 2 CDOs, 1 AMADI staff and 5 AEO from MAFARF/CES.
23, 24 November	The Team Building WS for CDOs was conducted
26, 27 November	The 1st Leadership Training WS was conducted for 23 farmers from 7 LIPS Model Project Sites at Juba.
<b>Year 2010</b>	
13 January to 27 February	3 CDOs participated at Group training in Japan on “Rural Community Development by Livelihood Improvement Approach for Africa” and “Gender” course for 45 days
22 January	Approval of the Budget for the year 2010. JICA expert came back to Juba at 27 January
29 January	UK press and JICA UK mission visited Nyamini
27 February	Farmers participated in the Gumbo farm excursion
25-26 February	Community leader training workshop on community planning. Community Development Plans of 6 Model sites were drafted.
09 March	Director General of Africa Department of JICA visited Nyamini

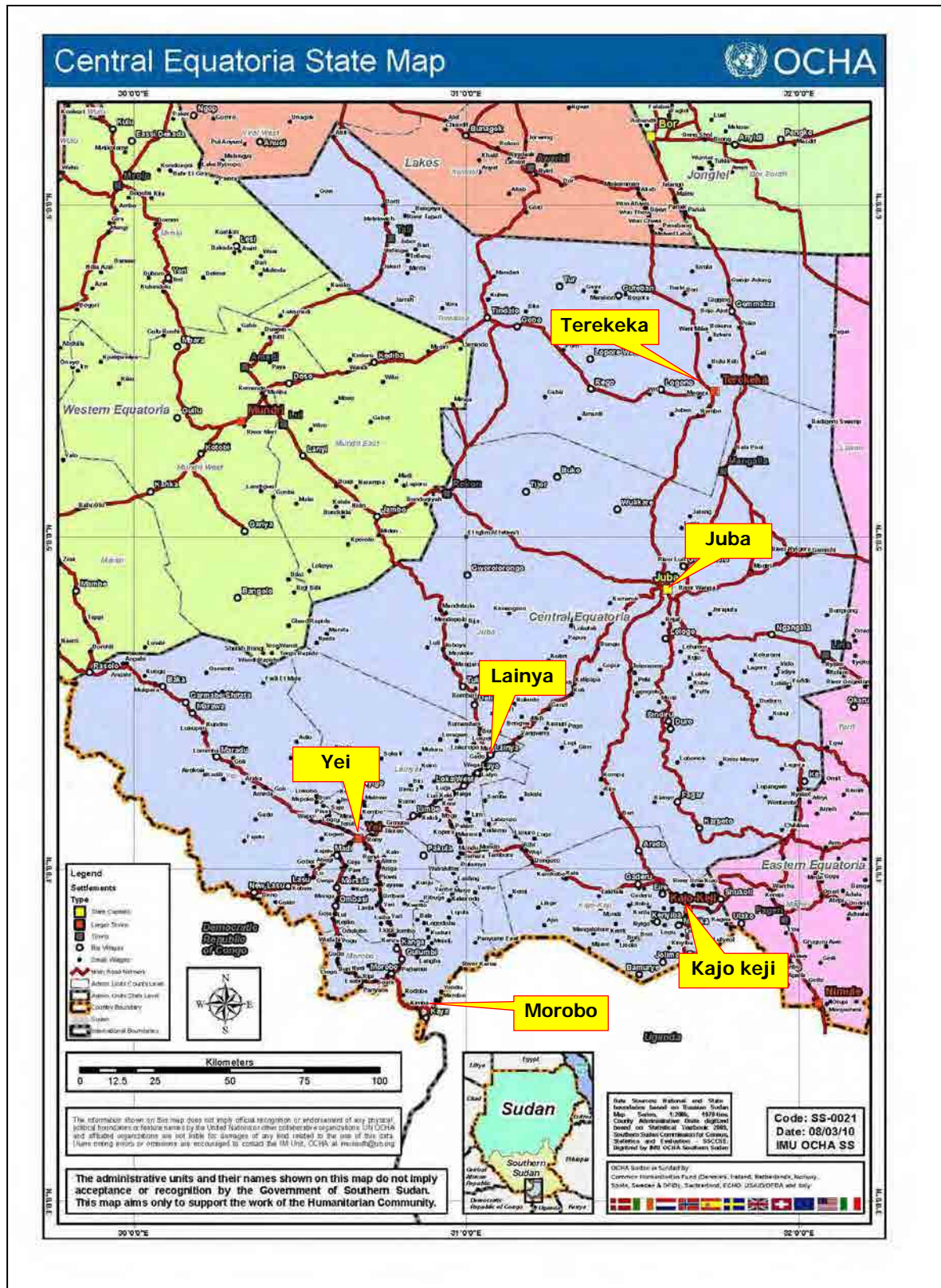
16 March	Variety Selection Meeting at MAF/CES
17 March	Construction of Kworjik Demonstration Farm was completed
22 March	Japanese Ambassador for Sudan visited Kapuri
27 March	Joint Coordination Committee (JCC) was conducted at MCRD.
02-8 April	Easter holiday
11 April	National election; Activities in April was minimum because of Easter holiday and election.
25 May	Opening ceremony of Kworjik Demo-farm. 182 people attended.
May	Delivering of Start-up package (seed & tools) for 567 households was completed.
09 June	MCRD Managerial staff meeting on “Plan of plan for Ministries new policy and strategy”
15-16 June	Leadership training for administrators and traditional chiefs from 6 model sits was conducted at CDOs office in Juba
22-23 June	Training on Lulu processing was conducted at SIRRIMON. Japanese TV crew covered its training.
24-25 June	Training workshop for Boma Development Committee on IGA planning was held at CDO office
29-30 June	Training on Lulu processing was conducted at Nyamini.
30 June, 01 July	Beekeeping training workshop at Kapuri
20-21 July	IGA Training of planning for CDOs at CDO office
26 July	NGO Forum at Millennium Hotel
27-August	Exposure visit to Bakery
3 September	IGA Training of planning and implementation for CDOs at CDO office
15-16 September	Bee Keeping Training
17 September	CDP Review/ Evaluation Workshop at Millennium Hotel
06 October	Training on malaria prevention at Wunliet and Nyamini
13-15 October	Training for tricycle riding at Kapuri
26-27 October	Consultation (existing beekeeping equipment)
26-27 October	Bee Keeping Training at Kapuri
27-28 October	Goat raising training at Bungu
28-29 October 1-2, 5-6 Nov	Bakery training at Kworjik
10-11 November	Training on small shop business for community
18-19 November	Bee Keeping Training at Kansuk
20-22 November	Bee Keeping Training at Kapuri
29- November	Training on malaria prevention for community
16-23 November	Uganda study tour. 16 in total from MCRD/CES, MAF/CES and ARDI participated.
26 November – 10 December	Training on Policy Planning of Rural Development in Japan and Bortel Mori, Advisor (MCRD/GoSS), Oneil Yosia, Director of Planning, MCRD/GoSS, Theophilus Ladu, Acting Director of Community Development visited Yamaguchi, Hiroshima, Tochigi and Tokyo.
7-10 December	Yei study tour as farmer to farmer visit.
3-6 December	Training on Grinding mill operation
9-10 December	Training on fishing at Kansuk
11-December	Apiray planning consultation at Kworjik
December	First honey harvest at Kapuri
<b>Year 2011</b>	
10 January - 26 February, 211	Group training in Japan “Rural Community Development by Livelihood Improvement Approach for Africa



14 January	Approval of the Budget for the year 2011. JICA expert came back to Juba at 16 January
9-10 March	Stakeholder Consultative Meeting on Agriculture Input
18 March	Nursery preparation training for Vegetable group at Kworjik group farm
28 March	Rice sowing training for Vegetable group at Kworjik group farm
29 March	Maize sowing training for Vegetable group at Kworjik group farm
4 April	Tomato transplanting training for Vegetable group at Kworjik group farm
5 April	Opening Ceremony of Nyamini Multi-purpose Centre
7 April	Okra sowing training for Vegetable group at Kworjik group farm
8 April	Tomato/eggplants transplanting training for Vegetable group at Kworjik group farm
14-15 April	Training on improved cooking stove
April (10days)	Training for CDO (Team building, motivation and communication)
26-30 April	Field survey in Malakal for the “Survey on the Situation of Rural Development and Agricultural Extension in Ten States of Southern Sudan”
3-7 May	Field survey in Rumbek (Lakes State) for the “Survey on the Situation of Rural Development and Agricultural Extension in Ten States of Southern Sudan”
9-13 May	Field survey in Wau for the “Survey on the Situation of Rural Development and Agricultural Extension in Ten States of Southern Sudan”
10-14 May	Farmer Teacher Training at Kworjik Demo Farm
10 May -24 May, 2011	The Third Country Training in Malaysia. “Sustainable Rural Development and Poverty Alleviation for African Countries”
11-13 May	Field survey in WAU for the “Survey on the Situation of Rural Development and Agricultural Extension in Ten States of Southern Sudan”
11 May	A person from JICA South Sudan’s public relations visited Kworjik Demo Farm
13 May	Vegetable Working Group WS
17-21 May	Field survey in Yambio and Bentiu for the “Survey on the Situation of Rural Development and Agricultural Extension in Ten States of Southern Sudan”
24 May	Sowing and fertilization training for group farmers at Kapuri Demofarm
24-27 May	Field survey in Aweil and Kuajok for the “Survey on the Situation of Rural Development and Agricultural Extension in Ten States of Southern Sudan”
27 May	Vegetable Working Group WS
27 May	Volunteer Coordinator from JICA Khartoum office visited Kworjik Demo Farm
1-3 June	Field survey in Torit (Eastern Equatoria State) for the “Survey on the Situation of Rural Development and Agricultural Extension in Ten States of Southern Sudan”
1-2 June	Field survey in Morobo and Yei (Central Equatoria State) for the “Survey on the Situation of Rural Development and Agricultural Extension in Ten States of Southern Sudan”
6-10 June	Field survey in Bor (Jonglei State) for the “Survey on the Situation of Rural Development and Agricultural Extension in Ten States of Southern Sudan”
7 June	Field survey in Terekeka (Central Equatoria State) for the “Survey on the Situation of Rural Development and Agricultural Extension in Ten States of Southern Sudan”
9 June	Field survey in Lainya (Central Equatoria State) for the “Survey on the Situation of Rural Development and Agricultural Extension in Ten States of Southern Sudan”
10 June	Kworjik Demo Farm tour for students and professors from the Juba University
13 June	Public Relations Advisor from JICA headquarters visited the project sites and conducted interviews with LIPS members, CDOs and famers
15 June	Kworjik Demo Farm tour for the workshop participants from the States, which was covered by the South Sudan TV
16-17 June	The Workshop for sharing the findings of the “Survey on the Situation of Rural Development and Agricultural Extension in Ten States of Southern Sudan”

24-15 June	Training on monitoring of Income Generation Activities
14 June - 30 July, 2011	Improvement of Income Generation in Villages by Processing of Agricultural Products/TICAD IV Follow-up
5-6 July	Community Health training
24 July - 10 September, 2011	Group training in Japan "Rural Community Development by Livelihood Improvement Approach for Africa"
21-22 July	Community sensitization, health and sanitation, and lulu training
26-28 July	BDC leadership training: roles review, communication / cooperation and development
2-3 August	Policy Development WS
11 August	Group discussion for the evaluation at Bungu
12 August	Group discussion for the evaluation at Sirrimon
12 August	Kale transplanting training for Red cross/HIV group at Kapuri Demo Farm
16 August	Kale transplanting training for CDOs at Kapuri Demo Farm
19 August	Group discussion for the evaluation at Kansuk
20 August	Group discussion for the evaluation at Kapuri
23 August	Group discussion for the evaluation at Kworjik
24 August	Group discussion for the evaluation at Nyamini
31 August	Training on transplanting, line sowing of local vegetables, pruning and staking of tomato for group farmers and Farmer Teachers
1 September	Farm tour and training on nursery preparation and sowing local vegetable seeds for Ethiopian refugees (UNHCR)
1-2 September	Workshop on Vegetable Production
1 September	Gumbo farm tour for the Workshop participants
8 September	Grinding Mill Operation and Maintenance.
6-9 September	Lulu processing (oil and soap)
8-9 September	Farmer Teacher Training Japanese TV crew
14 September	Meeting with the JICA Evaluation Team at JICA SS office
14-15 September	Training on the use of Community Development Manual
16 September	Visit of the JICA Evaluation Team to the LIPS office, Kapuri Demo Farm and Nyamini
16 September	The JCC at Millennium Hotel
19 September	Dinner Meeting with the Japanese Ambassador to Sudan
20 September	Signing of the minute of the JCC
26 September	Policy Development meeting at Home and Away
27-28 September	Training on Poultry
29-30 September	BDC leadership training: roles review, review of action plan, monitoring and evaluation
4-8 October	Borehole repairs, water management and hygiene
12 October	Visit of the Deputy Director General of JICA Africa Department
12 October	Excursion and training on lettuce transplanting for Sirimon general members at Kapuri Demo Farm
13 October	Excursion for and discussion with Nyamini general members at Kapuri Demo Farm
14 October	Security officers from JICA headquarter visited the LIPS office
19 October	Demonstration on Mango Jam Making (follow-up of training in Sapporo/Japan)
20 October	Demonstration on the Improved Cooking Stove
25 October	Bungu Primary School Opening Ceremony
1-5, 7-12, 13-16 Nov	Introduction to basic modern beekeeping practices

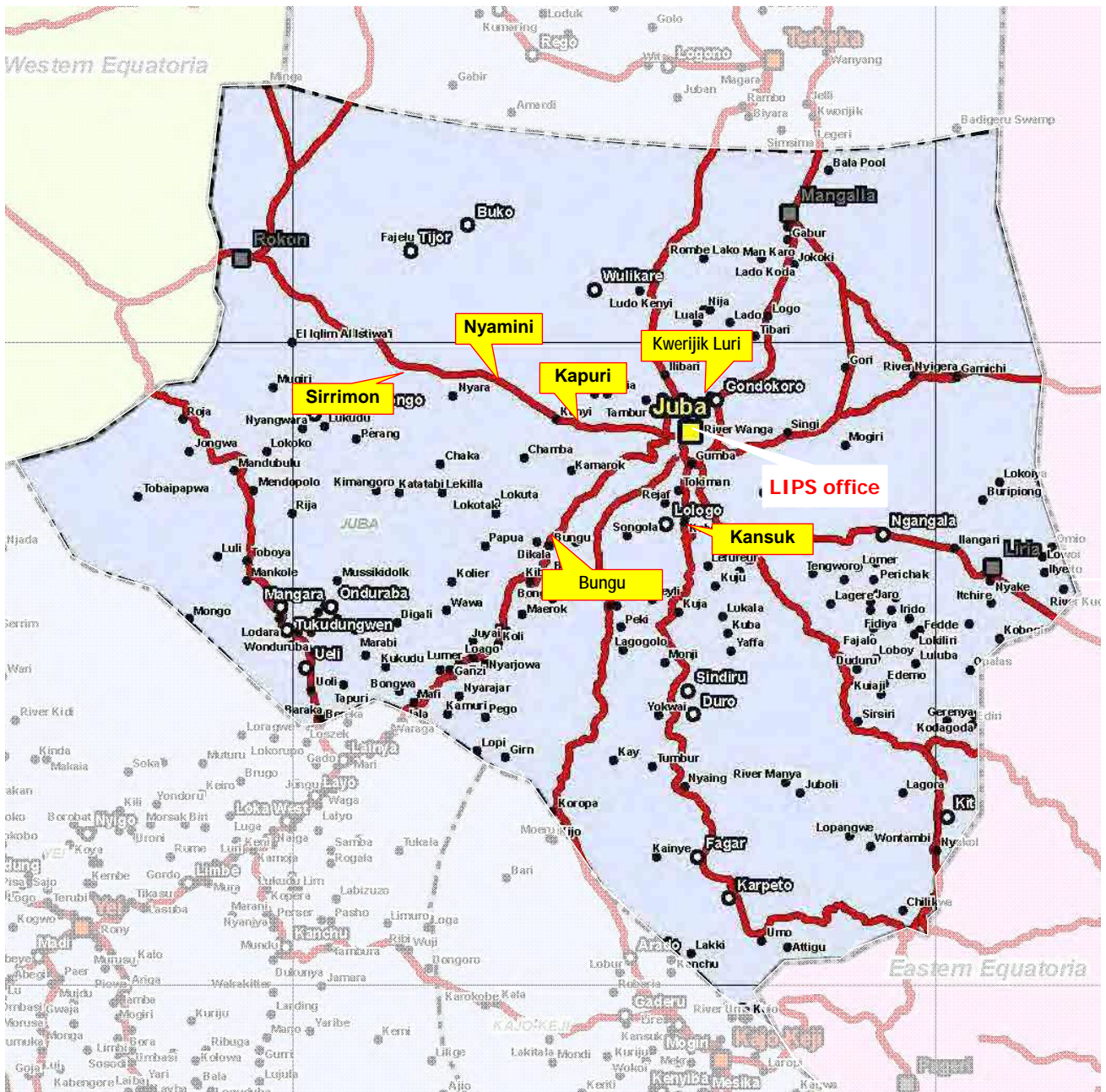
PROJECT SITE MAP



Original Map : UNOCHA 2010

Appendix-13

LOCATION OF LIPS MODEL COMMUNITY



Model community	County	Payam	Boma	Community	Population
1. Kapuri	Juba	Northern Bari	Kapuri	Kapuri	
2. Nyamini	Juba	Northern Bari	Nyamini	Nyamini Centre Wunliet Bongajur	
3. Kworijik-Luri	Juba	Northern Bari			
4. Bungu	Juba	Bungu			
5. Sirrimon	Juba	Dolo	Sirrimon		
6. Kansuk	Juba				

Appendix-14

MAP OF SOUTH SUDAN

