

MINISTRY OF RURAL DEVELOPMENT
THE DEMOCRATIC REPUBLIC OF THE CONGO

THE STUDY ON COMMUNITY DEVELOPMENT PLAN
IN CATARACTES DISTRICT,
BAS-CONGO PROVINCE
IN THE DEMOCRATIC REPUBLIC OF THE CONGO

FINAL REPORT

JANUARY 2010

JAPAN INTERNATIONAL COOPERATION AGENCY

NTC INTERNATIONAL CO., LTD.

PREFACE

In response to a request from the Government of the Democratic Republic of Congo, the Government of Japan decided to conduct a Study on Community Development Plan in Cataracts District, Bas-Congo Province and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA selected and dispatched a study team headed by Mr. Akira Iwamoto of NTC International Co., Ltd. between July 2008 and December 2009.

The team held discussions with the officials concerned of the Government of the Democratic Republic of Congo and conducted field surveys at the study area. Upon returning to Japan, the team conducted further studies and prepared this final report.

I hope that this report will contribute to the enhancement of friendly relationship between our two countries.

Finally, I wish to express my sincere appreciation to the officials concerned of the Government of the Democratic Republic of Congo for their close cooperation extended to the study.

January 2010

Kiyofumi Konishi,
Director General
Economic Infrastructure Department
Japan International Cooperation
Agency

January 2010

Mr. Kiyofumi Konishi
Director General
Economic Infrastructure Department
Japan International Cooperation Agency

Letter of Transmittal

Dear Sir,

We are pleased to submit to you the final report on “The Study on Community Development Plan in Cataractes District, Bas-Congo Province in the Democratic Republic of the Congo.” This report compiles the results of the study which was conducted both in Congo and Japan during the period of 18 months from July 2008 to December 2009.

In this development study, with the purpose of realizing “the preparation and implementation of community development plans led by local residents,” we have made efforts to propose a wide range of plans for “community road improvement,” “improvement in livelihood through higher agricultural production, etc.” and “improvement in people’s living conditions” as well as to “strengthen the capability of local residents and their organizations” to enable them to collectively lead the implementation of those plans. We have carried out pilot projects, etc. to examine in detail the feasibility and relevance of each of those plans and a system of collective management by local residents. In addition, since target areas are in a country which is under post-conflict situations, Congo, special attention has been paid to the characteristics of the areas through the PNA approach, so that this study would not contribute to the creation of any new conflict. And, based on the results of the study, this report is compiled specifically around the community development plans to be led by local residents collectively.

In submitting this report, we would like to express our heartiest appreciation for substantial cooperation and advice provided during the study period by officials of the Japan International Cooperation Agency and the Ministry of Foreign Affairs of Japan.

During the field study, we were also given thoughtful cooperation and support from diverse local administrative institutions including the Ministry of Agriculture and Rural Development of Congo, the Bas-Congo Province and the Kimpese sector. The JICA Office in Congo, the Embassy of Japan in Congo and other related institutions provided valuable advice and support, too. In writing this, we would send our sincere gratitude to them for the helpful advice, cooperation and support.

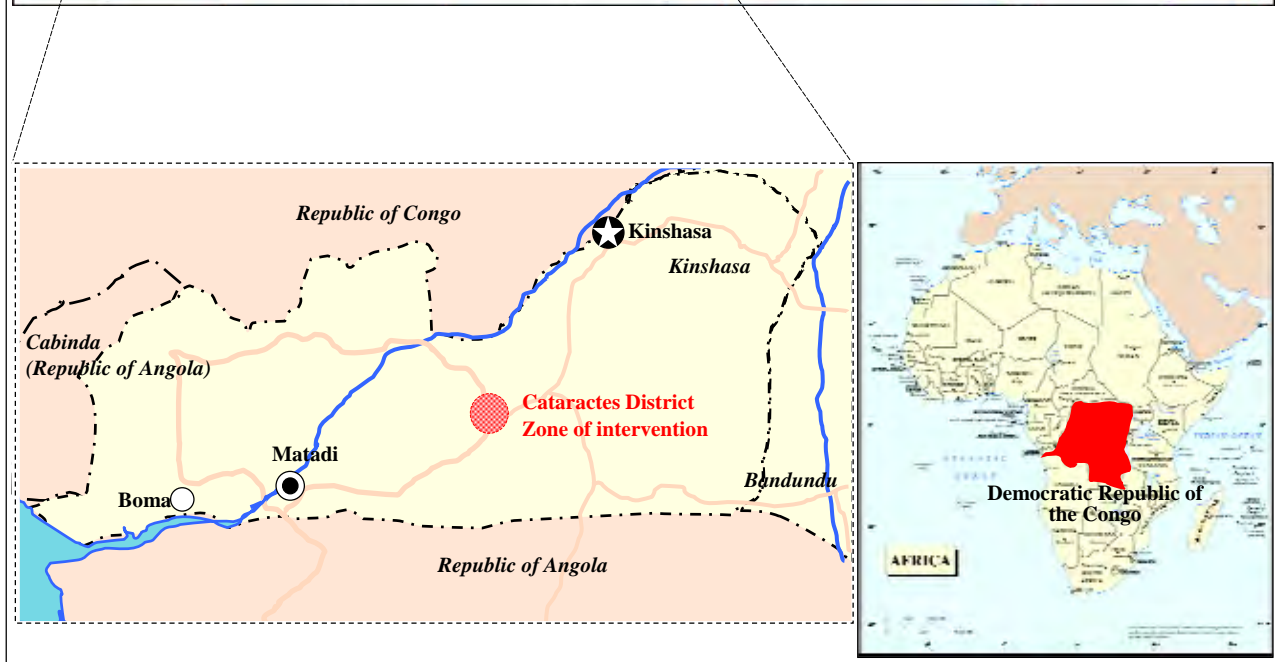
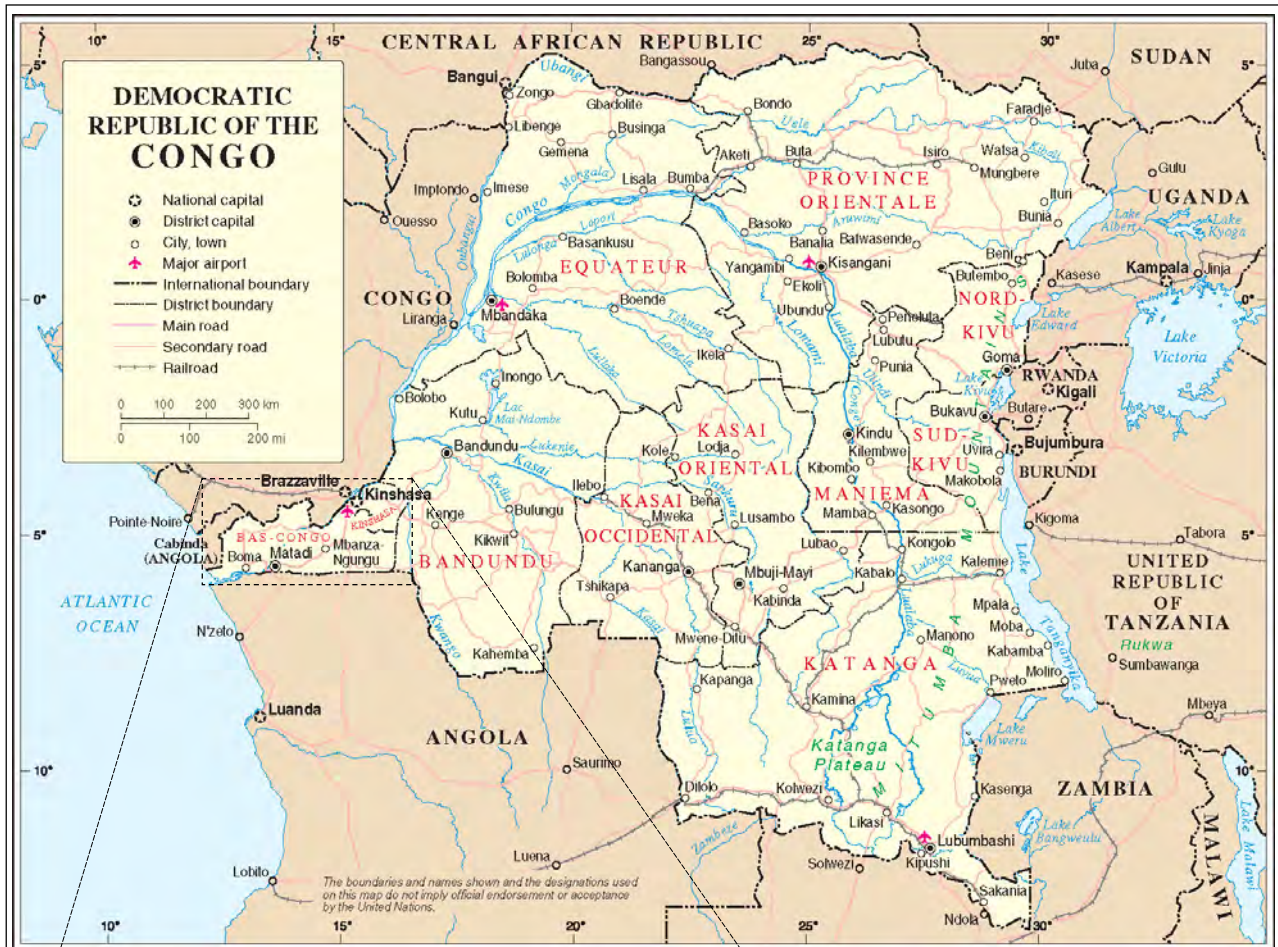
Finally, we hope that this report will contribute to an improvement in the local residents’ livelihood and basic living conditions and an improvement in the community-level capability to endure any conflict as well. Ultimately, we hope that people of the Democratic Republic of the Congo will be able to have fair dividend of peace.

Very truly yours,

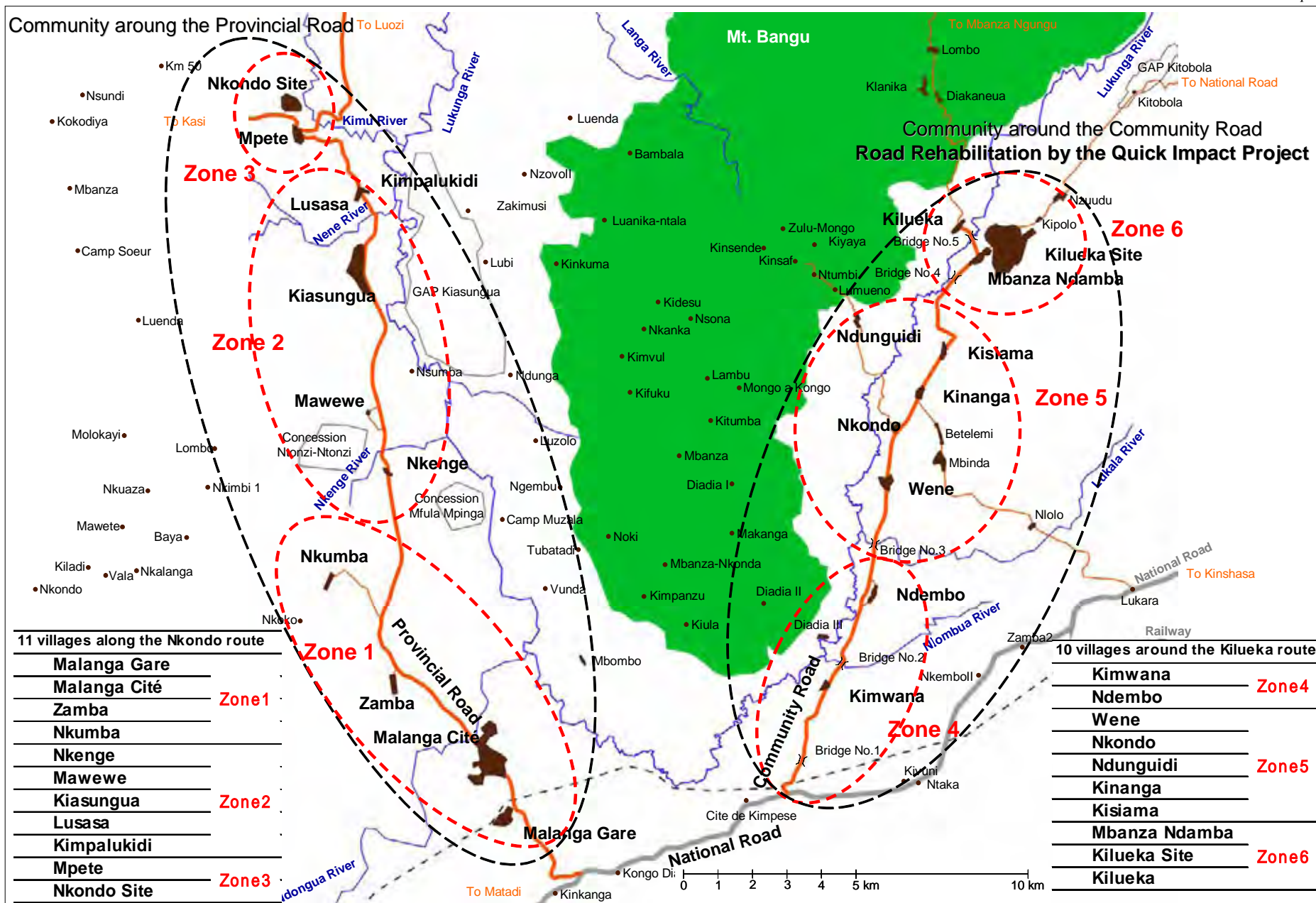
Akira Iwamoto
Team Leader
The Study on Community Development Plan
in Cataractes District, Bas-Congo Province
in the Democratic Republic of the Congo

The Study on Community Development plan in Cataractes District, Bas-Congo Province in the Democratic Republic of the Congo

Final Report



Location Map













Photographs of Rehabilitation work of Kilueka Route

(1) Condition on before and after rehabilitation of the road

Point	Before	After
280m : Beginning point		
500m : Kimpese city		
1,200m : No. 1 Bridge		

Point	Before	After
2,000m : Section of existing concrete pavement		
3,000m : Before Kimuana/ After rehabilita tion road closed barrier is installed		
4,000m : No.2 Bridge		
5,050m : Existing crossing drainage (New culvert is installed)		

Point	Before	After
7,500m : No.3 Bridge		
9,500m : After Wene, water stayed on the surface of existing road		
10,600m : Before Nkondo, water stayed on the surface of existing road		
12,000m : Kinanga		

Point	Before	After
14,300m : Part of steepest slope (concrete pavement is adopted)		
15,000m: Part of steep slope (Concrete pavement is adopted)		
16,000m: No. 4 Bridge		

Point	Before	After
17,200m : Mbanza- ndamba Kilueka (Embankment is set)		
18,000m : Kilueka (end point)		

Rehabilitaiton work



Topographic servey



Cutting and reclamation



Demolition of existing concrete pavement



Borrow pits (laterite)



Leveling



Extention of existing road



Distribution of laterite



Compaction test



Finishing of laterite pavement



Check of transverse slope



Finishing of laterite pavement (Kimpese city)



Excavation for side ditches by manpower



Demolition of existing canal by manpower



Seedling on slope of embankment

Bridge work



Temporary road at bridge



Demolition of a part of existing bridge



Paint of existing steel product (No.2 Bridge)



Placing of reinforcement bar (No.3 bridge)



Foot path (No.1 Bridge)



Cast of concrete (No.3 Bridge)

Crossing drainage work



Placing of crossing culvert



Cast of concrete for crossing canal (Kishima)

Concrete pavement



Concrete plant



Slump test



Setting of base course (using crusher run)



Casting and Finishing of concrete

Workshop on maintenance for road



Training of maintenance of road for supervisor(1)



Training of maintenance of road for supervisor(2)



Training for villagers (each village)



Explanation on equipment of road maintenance



Trainee who put what learnt at training into practice



Practice of maintenance of side ditches

Pilot Project Pictures

Animal traction PP



Ranch for oxen during the training



Familiarization of ox to the people



Oxen training



Training of oxen for the plowing



Field is cultivated by the ox-plough



Cart pulled by oxen

Soil preparation and improvement PP, Introduction of new varieties PP



Improved nursery for selling in off season



Introduction of natural insecticides with local materials



Introduction of composting to the group members



Big eggplants. The effects of mulching with straw were verified.



Quality peppers were produced after teaching



Harvest of tomatoes

Promotion of rice cultivation PP



Rice field in Kimpese



Nursery for promotion of rice cultivation PP in Kimwana



Rice transplantation in Kimwana



Rice harvest in Kimwana



Winnowing



Rice harvest festival

Treatment and processing for postharvest PP



Commercialized honey in agro-processing center in Kimpese



Orange jam



Tomato puree



Hot pepper paste

Transportation of farm products PP



Congolese typical cart. Two handles are attached in front and behind.



Japanese type of cart. It is more lighter than Congolese one.

Animal husbandry PP



Pig pen in Zamba



Mixing forage



Feed the local materials (cassava leaves)



Pig lets of improved variety



Schedule of the division of labor in Nkumba



Thinner pig caused by the neglect of the group members

Aquaculture and fish processing PP



Aquaculture pond in Kimpese



Preparation for aquaculture in Zamba

Moringa tree PP



Moringa is for multiple uses.
Rooted cutting of Moringa tree.



Moringa leaves can be used for cook

Beekeeping PP



A villager of Malanga Cité who has the experience of beekeeping



Forestry preservation and replantation PP, Roadside trees PP



After understanding the importance of forestry preservation, the members learned the method of raising seedlings



Filling the seedling pots with mixed soil with ash



Nursery making with commonly available



Transplanting seedling grown by themselves



Spontaneous seedling of Acacia in this area



Seedling of mango

Improvement of cooking stoves and housekeeping PP



Three stone stove (left) and improved stove (right)



Improved stove made by a participant of workshop. (The bottom of pot can be burned because of square hole)



Improved stove with a round hole



Improved stove with strengthened hole by use of metal basin



Improved stove is more used than the three stones stove in this household. Becoming a part of villagers life gradually.



Improved stove is safer for children than traditional one because of unexposed fire

Literacy education and book keeping PP



Training for teachers of literacy education PP



Participants getting good knowledge through the group discussion



Teachers hanging on the Lecturers



Certificate and materials for literacy education were presented at the end of training

Handicraft PP, Reuse of plastic bags



The villagers have had the conscious to throw plastic bags in a hole in the village.



The trial of making small handicrafts by using thrown plastic bags



Exchanging the idea for learning methods in group members



This handicraft was a great draw for Nkondo site.



The group members with their works



Bag, pot stand, hat, etc.

Leisure activities PP



The players warming up before the match



Every village leader and the leader of sector were enjoying the football match.



Players of both teams were thanked after the match.



The return match was played in another ground in another day later.



Introduction of jumping rope for the girls



The girls jumping better with a technique gradually.

Improvement of health facilities PP



Situation of health center in Kinanga before the repair



Health center after the repair. There is a nurses' accommodation next to the center.



Repaired health center of Malanga Cité



The training for health animators



The outcomes of discussions were shared



The health animators seemed satisfied to have received the certificate of training

Maintenance and management of drinking water facilities PP



Villagers of Mawewe used to use standing water



This source of water supply dried up in dry season



Completed well of Mawewe. A padlock was attached for the control

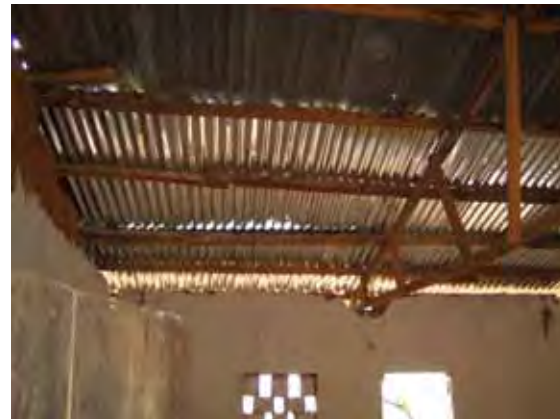


The well of Wene. The well of Wene. A well with pulley is easy to maintain.

Improvement of educational facilities PP



The exterior of the school before the repair The exterior of the school after the repair



There were some places without roofs before the repair Patching up with tin roof, rain is no longer a problem in the class



The concrete floors were repaired The students attending classes in the repaired classroom in new term

Rehabilitation of feeder roads PP



The bridge in danger to cross by the vehicle because of the holes



There were big holes before the repair



The bridge is repaired as a part of rehabilitation of feeder roads PP



The repaired bridge. Circulation of farm products or people between Ndunguidi and Kimpese was improved

List of Abbreviation

English		French		Japanese	Explanation
ACCO	Congo Drivers Association	ACCO	Association des Chauffeurs du Congo	コンゴ運転手協会	An association in which drivers of trucks and taxis register
ADECOM	Association of Community Development Mokili-Mwinda	ADECOM	Association de Developpement Communautaire Mokili-Mwinda	ADECOM (ローカルNGO)	A local NGO of community development which aims to improve the livelihoods of villagers by enhancing villagers' organizations.
ADFL	Alliance of Democratic Forces for the Liberation of Congo-Zaire	ADFL	Alliances des Forces Démocratiques pour la Libération du Congo-Zaire	コンゴ・ザイール解放民主勢力連合	Anti-Mobutu political alliance chaired by former president Laurent Kabila.
AfDB	African Development Bank	BAD	Banque Africaine de Développement	アフリカ開発銀行	A bank to operate loans to affiliate countries, state-run companies, private companies, African regional banks, and guarantee of investment loans by acquisition of stock (**)
AfDF	African Development Fund	FDA	Fonds de Développement de l'Africaine	アフリカ開発基金	A fund which gives loaner loans to complete AfDB, which contributes the social progress and governmental development work of African states (**).
Agrisud	Agrisud International	Agrisud	Agrisud Internationale	Agrisud (仏籍国際NGO)	An international NGO based on agricultural development towards achievement of MDGs
AIDS	Acquired Immunodeficiency Syndrome	SIDA	Syndrome Immuno-déficitaire Acquis	後天性免疫不全症候群(エイズ)	This is a disease when a person infected HIV (human immunodeficiency virus) is infected and he/she might be die due to opportunistic infections and malignancy following by the destruction of helper T, which functions as human immune cells. The virus is transmitted through the blood or the biological fluid (**)
ANAPECO	National Association of Parents of Students in Democratic Republic of the Congo	ANAPECO	Association Nationale des Parents d'Elèves et étudiants de la République Démocratique du Congo	コンゴ児童・生徒保護者協会	National association of parents of students in the Democratic Republic of the Congo
APM	Alliance of the Presidential Majority	AMP	Alliance pour la Majorité Présidentielle	与党連合	A pro-Kabila political alliance consist of many small political parties including PALU (Unified Lumumbist Party) led by Mr Gizenga, the third-ranked candidate of the presidential election in 2006.
AU	African Union	UA	Union Africaine	アフリカ連合	A supranational organization as a successor of OAU. It supranationally has a parliament, central bank, and judicial entity, and is aiming to realize the monetary union (**).
BDK	Bundu dia Kongo	BDK	Bundu dia Kongo	BDK	A politico-religious group active in Bas Congo province
BDM	Bundu dia Mayala	BDM	Bundu dia Mayala	BDM	A political party active in Bas Congo province
BTC	Belgian Technical Cooperation	CTB	Coopération Technique Belge	ベルギー技術協力公社	Belgian international technical cooperation agency
CAF	Country Assistance Framework	CAP	Cadre d'Assistance Pays	国別援助枠組み	An aid framework of donors
CAS	Country Assistance Strategy	SAP	Stratégie d'Aide au Pays	国別援助戦略	An aid strategy of each country by the World Bank. It is a mid-term business plan which includes analysis of current situation of beneficial country, future plan, and loan plan of the Bank.
CF	Congolese Francs	FC	Franc Congolais	コンゴ・フラン	The currency of Congo
CG	Consultative Group Meeting	GC	Groupe Consultatif	支援国会合	A consultative meeting where donors and international organizations share the information about beneficial countries through exchanging opinions and indication of aid intention in order to progress a dialogue between the donors and the state (**).
CIDA	Canadian International Development Agency	ACDI	Agence Canadienne de Développement International	カナダ国際開発庁	A governmental agency responsible for Canada's development assistance and functions. (**) It implements a study of good governance with CRAFOD.
CLER	Local Road Maintenance Committees	CLER	Comités Locaux d'Entretien et de Réhabilitation des Routes Rurales	道路維持管理委員会	An NPO which implements road maintenance with participation of local people

List of Abbreviation

English		French		Japanese	Explanation
CNDP	National Congress for the Defense of the People	CNDP	Congrès National pour la Défense du Peuple	人民防衛国民会議	Anti-governmental militia led by a Hutu leader active in the eastern part of Congo
CONADER	National Commission for Disarmament, Demobilisation and Reinsertion	CONADER	Commission Nationale de Désarmement, Démobilisation et Réinsertion	国立武装解除・更正委員会	A national commission established to implement DDR
COPA	Committee of Parents	COPA	Comité de Parents	保護者会	A parents association
CPMR	Congolese People's Movement for the Republic	MPCR	Mouvement du Peuple Congolais pour la République	共和制国民運動	A movement for the republic
CRAFOD	Regional Center of Support and Training for Development	CRAFOD	Centre Régional d'Appui et Formation pour le Développement	CRAFOD(ローカルNGO)	A local NGO supported by funds of a German protestant church
DAC	Development Assistance Committee	CAD	Comité d'Aide au Développement	開発援助委員会	One of the three committees of OECD. It holds plenary assembly as needed and it exchanges information, arranges policies, and evaluates annual aid performance and policies of the member countries.(**)
DDR	Disarmament, Demobilization and Reintegration	DDR	Désarmement, Démobilisation et de Réintégration	武装解除・動員解除・社会復帰	At the same time to eliminate the recurrence of the competition factors, this will be conducted during the reconstruction efforts when reconciliation between opposition groups is very important (**)
DDRRR	Disarmament, Demobilisation, Repatriation, Resettlement and Reintegration	DDRRR	Désarmement, Démobilisation, Rapatriement, Réinstallation et de la Réintégration	武装解除・動員解除・帰還・再定住・社会復帰	Repatriation and Resettlement are added to DDR. In the case of Democratic Republic of the Congo, ex-combatants have been required to return and resettle to neighboring countries because foreign troops from neighboring countries have engaged in a battle in the country.
DECO	Direction of Community Development	DECO	Direction de Développement Communautaire	農村開発省コミュニティ開発局	One of Ministries of Congo
DfID	Department for International Development	DfID	Département pour le Développement International	国際開発省	An organization of the United Kingdom which implement the Official Development Assistance. This has been upgraded to a ministry (**)
DFLR	Democratic Forces for the Liberation of Rwanda	FDLR	Forces Démocratiques de Libération du Rwanda	ルワンダ解放民主軍	An anti-ruwandan governmental Hutu militia based on eastern part of Congo
DPKO	Department of Peace-Keeping Operations	DOMP	Département des Opérations de Maintien de la Paix	国連平和維持活動局	An organization that indicates directions for peace keeping activities and helps management by giving advice.
DRC	Democratic Republic of the Congo	RDC	République Démocratique du Congo	コンゴ民主共和国	Former Belgian colony. Independent since 1960 (*)
DVDA	Directorate of Feeder Roads	DVDA	Direction des Voies de Desserte Agricole	農村開発省農道整備局	An organization under the authority of central manageal office of rural development. It mainly gives technical supports on rural roads.
DWB	Doctors Without Borders	MSF	Médecins Sans Frontières	国境なき医師団	A specialized NGO to medical support, established 1971 in France (**)
ECCAS	Economic Community of Central African States	CEEAC	Communauté Economique des Etats de l'Afrique Centrale	中部アフリカ諸国経済共同体	The economic community, established in 1983, which will promote the economic development of central Africa. 11 countries are the members of this
ECGLC	Economic Community of the Great Lakes Countries	CEPGL	Communauté Economique des Pays des Grands Lacs	大湖諸国経済共同体	An economic community consist of Democratic Republic of the Congo, Ruwanda and Brundi, established in 1976.
EITI	Extractive Industries Transparency Initiative	ITIE	Initiative pour la Transparence des Industries Extractives	採取産業透明性イニシアティブ	International initiative that prevents corruption and bribery in the trade of oil, gas, and mineral. It also aims to make transparent the cash flow and request government's accountability.
EMI	Evangelical Medical Institute	IME	Institut Médical Évangélique	福音派医療協会	An organization which has its office by the Evangelical Medical Institute at Kimpese. It implements projects of health sector in Kimpete with the Ministry of Health.

List of Abbreviation

English		French		Japanese	Explanation
EU	European Union	UE	Union Européenne	欧州連合	An organization which deepens and widens EC's economic integration in addition to progress the integration of foreign affairs, security and justice (*)
EUPOL	EU Police Mission	MPUE	Mission de Police de l'Union Européenne	欧州連合警察ミッション	A police mission set by EU to create a sustainable and effective system of civilian police
EUSEC	EU's Security Sector Reform Mission	EUSEC	l'Union Européenne en Matière de Réforme du Secteur de la Sécurité	欧州連合治安分野改革支援ミッション	A supportive mission set by EU for the reform of security sector of Congo.
FAO	Food and Agriculture Organisation of the United Nations	FAO	Organisation des Nations Unies pour l'Alimentation et l'Agriculture	国連食糧農業機関	A specialized organization of United Nations to seek a permanent solution of agricultural and dietary problems (*)
FARDC	Armed Forces of the Democratic Republic of the Congo	FARDC	Forces Armées de la République Démocratique du Congo	コンゴ民主共和国軍	Governmental army
FLNC	Front for the National Liberation of Congo	FLNC	Front de Libération Nationale du Congo	コンゴ解放民族戦線	An anti-Mobutu group which aims separation and independence of Katanga province. This has its base in Angola
FNL	Forces for National Liberation	FNL	Forces Nationales de Libération	国民解放戦線	Anti-governmental Hutu militia
GDM	General Directorate of Migration	DGM	Direction Générale de Migration	移民局	General Directorate of Migration
GDP	Gross Domestic Product	PIB	Produit Intérieur Brut	国内総生産	The total new value which is created by domestic products in a year (*)
GRDC	Government of the Democratic Republic of the Congo	GRDC	Gouvernement de la République Démocratique du Congo	コンゴ民主共和国政府	The government of Democratic Republic of the Congo
GIS	Geographical Information Systems	SIG	Système d'Information Géographique	地理情報システム	Together with GIS software, digitized several social information is input on a map to analyze the data visually with overlaying information. (**)
GOJ	Government of Japan	GJ	Gouvernement Japonais	日本国政府	The Government of Japan
GTZ	German Agency for Technical Cooperation (Deutsche Gesellschaft für Technische Zusammenarbeit)	GTZ	Coopération Technique Allemande	ドイツ技術協力公社	A business corporation with a 100 % of financial contribution from Germany government which provides consultant services and develops human resources by implementing commissions of technical cooperation projects from Germany Ministry of Economic Cooperation. (**)
HDI	Human Development Index	IDH	Indice de Développement Humain	人間開発指標	An index to measure a degree of human development with a special attention on multiple dimensions, particularly health and education.
HILM	High Labor-Intensive Methods	HIMO	Haute Intensité de Main-d'œuvre	高度労働集約手法	Labor intensive work on road work introduced by BTC. Particularly, this will be employed for small and medium scale road rehabilitation by labor.
HIPCs	Heavily Indebted Poor Countries	PPTe	Pays Pauvres Très Endettés	重債務貧困国	The countries which were assigned as this by IMF and the World Bank for redressal of debt (**)
HIV	Human Immunodeficiency Virus	VIH	Virus de l'Immunodéficience Humaine	ヒト免疫不全ウイルス	The pathogen of HIV. The blood and biological fluid transmit the virus. (*)
ICAT	International Committee for the Accompaniment of the Transition	CIAT	Comité International d'Accompagnement de la Transition	移行行政権国際支援委員会	An international committee to support the regime transition of Congo
IDPs	Internally Displaced Persons	PDI	Personnes Déplacées Internes	国内避難民	People who have escaped from their home and have to endure a life as evacuees within their own country fleeing from conflicts or events equivalent to this (**)

List of Abbreviation

English		French		Japanese	Explanation
IMF	International Monetary Fund	FMI	Fonds Monétaire International	国際通貨基金	This is a measure to promote the interchange of relatively short-term funds needed for other normal trade and financial transactions through stabilization of exchange rate, prevention of competitive devaluation, and abolition of limitation and currency exchange. (**)
IRC	International Rescue Committee	CIS	Comité International de Secours	国際救済委員会(NGO)	An international NGO of relief for victims of violent conflict and oppression, rehabilitation, protection of human rights, post-conflict development, and resettlement assistant. In the Democratic Republic of Congo, the NGO worked with UNHCR
JICA	Japan International Cooperation Agency	JICA	Agence Japonaise de Coopération Internationale	国際協力機構	An independent administrative agency for implementation of official development aid such as technical cooperation, grant aid loans and loans. (**)
MDGs	Millennium Development Goals	OMDs	Objectifs du Millénaire pour le Développement	ミレニアム開発目標	The international development goals, set by UN, OECD, the World Bank, and IMF, expanded and adopted at the UN General Assembly in 2000. (**)
MDR	Ministry of Rural Development	MDR	Ministère du Développement Rural	農村開発省	One of Congo's Ministries
MDRP	Multi-Country Demobilisation and Reintegration Programme	PMDR	Programme Multi-Pays de Démobilisation et de Réinsertion	大湖地域における動員解除と社会復帰プログラム	A support program in the great lake region for demobilization, repatriation, and reintegration of ex-militia
MINREST	Ministry of the Scientific and Technical Research	MINREST	Ministère de la Recherche Scientifique et Technique	科学技術研究省	Ministry of the Scientific and Technical Research
MLC	Movement for the Liberation of Congo	MLC	Mouvement de la Liberation du Congo	コンゴ解放運動(与党第一党)	Movement for the liberation of Congo (The first ruling party)
MNC	Congolese National Movement	MNC	Mouvement National Congolais	コンゴ国民運動	A political party who aimed to integrate the country and continent at the time of independence.
MONUC	United Nations Organization Mission in the Democratic Republic of the Congo	MONUC	Mission de l'Organisation des Nations Unies en République Démocratique du Congo	国連コンゴ民主共和国ミッション	A peace keeping force established to supervise the cease fire of the second Congo conflict
MPLA	Popular Movement for the Liberation of Angola Party of Labor	MPLA	Mouvement Populaire de Libération de l'Angola	アンゴラ解放人民運動	One of Angola's political parties
NASS	National Agricultural Statistics Service	SNSA	Service National des Statistiques Agricoles	全米農業統計局	The department of agricultural statistics run by the Department of Agriculture of America.
NCR	National Commission for Refugees	CNR	Commission Nationale pour les Réfugiés	国家難民委員会(内務省)	National commission for Refugees (Ministry of Interior)
NEPAD	New Partnership for African's Development	NPDA	Nouveau Partenariat pour le Développement de l'Afrique	アフリカ開発のための新パートナーシップ	The objective of this is to declare the spirit of shared responsibility and mutual benefit towards revival of African continent in order to eliminate poverty in the Africa, and integrate sustainable development and global economy by the leadership of the African continent
NFLA	National Front for the Liberation of Angola	FNLA	Front National de Libération de l'Angola	アンゴラ民族解放戦線	One of Angolan political parties. It is an armed organization to achieve independence from Portugal
NGO	Non-Governmental Organizations	ONG	Organisation Non Gouvernementale	非政府組織	An organization from the position of non-governmental and non-profit working for the benefit of others for public or socially disadvantaged. (**)
NIASR	National Institute of Agronomic Studies and Research	INERA	Institut National pour l'Etude et la Recherche Agronomique	国立農業調査研究所(高等教育省)	National Institute of Agronomic Studies and Research (Ministry of High education)
NTA	National Transport Agency	ONATRA	Office National des Transports	運輸公社(運輸省)	A state-run for transportation (Ministry of Transportation)
ODA	Official Development Assistance	APD	Aide Publique au Développement	政府開発援助	The government-based economic cooperation for other countries for the purpose of economic and social development of developing countries. (**)

List of Abbreviation

English		French		Japanese	Explanation
PARSAR	Agricultural and Rural Sector Rehabilitation Support Project	PARSAR	Projet d'Appui à la Réhabilitation du Secteur Agricole et Rural	農業・農村セクター復興支援プロジェクト	A project to support reconstruction of agricultural and rural sectors
PIRD	Provincial Inspectorate for Rural Development	IPDR	Inspection Provinciale du Développement Rural	農村開発省州監督官	An inspector who supervises activities of rural development at provincial level
PKO	Peace-Keeping Operations	OMP	Operation de maintien de la paix	国連平和維持活動	After reaching a cease-fire agreement, this aims to prevent recurrence of the conflict itself and to support resolving disputes through dialogue between warring parties by monitoring cease-fire and withdrawal of troops by the United Nations. (**)
PP	Pilot Project	PP	Projet Pilote	パイロット・プロジェクト	An abbreviation used in this report
PPRD	People's Party for Reconstruction and Democracy	PPRD	Parti du Peuple Pour la Reconstruction et la Démocratie	再建民主人民党(大統領与党)	Current president's party
PRGF	Poverty Reduction and Growth Facility	FRPC	Facilité pour la Réduction de la Pauvreté et la Croissance	貧困削減成長ファシリティ	One of IMF's loan institution based on a special financial fund. A developing country receives a support for international balance in exchange implementing the macro-economic adjustment policies and structural adjustment policies.
PRSP	Poverty Reduction Strategy Paper	CSLP	Document Stratégique de réduction de la pauvreté	貧困削減戦略文書	A three-year implementation plan to reduce poverty based on "Comprehensive Development Framework" (**)
RCD	Rally for Congolese Democracy	RCD	Rassemblement Congolais pour la Démocratie	コンゴ民主連合	An alliance of anti-president's parties
REGIDESO	Public Corporation of Water Distribution	REGIDESO	Régie de Distribution d'Eau	水供給公社(エネルギー省下部組織)	Managing and maintaining water and sewerage
RTNC	Congolese National Radio and Television	RTNC	Radio Télévision Nationale Congolaise	コンゴ国营テレビ・ラジオ局	The state own TV and radio station
SENATEC	National Service for Appropriate Technology in Rural Areas	SENATEC	Service National des Technologies appropriées en milieu rural	国家農村適正技術局	National Service for Appropriate Technology in Rural Areas
SENHARU	National Service for Rural Habitat	SENHARU	Service National pour l'Habitat Rural	国家農村居住局	National Service for Rural Habitat
SMP	Staff Monitored Program	PSP	Programme de Surveillance Personnel	スタッフ・モニター・プログラム	A temporary program run by IMF in order to control its aids to beneficiary countries.
SNCOOP	National Service for Cooperatives and Producer Organizations	SNCOOP	Service National des Coopératives et Organisation des Producteurs	国家住民組織局	National Service for Cooperatives and Producer Organizations
SNEL	National Electrical Service	SNEL	Société Nationale d'Electricité	国家電気局	National Electrical Service
SNHR	National Service for Rural Hydrology	SNHR	Service National de l'Hydraulique Rural	国家水理局(農村開発省)	The department of national (Ministry of Rural Development)
SNIR	National Service for Rural Information	SNIR	Service National d'Informations Rurales	国家農村情報局(農村開発省)	National Service for Rural Information (Ministry of Rural Development)
SNV	National Extension Service	SNV	Service National de Vulgarisation	国家普及局	National Extension Service
SSR	Security Sector Reform	RSS	Réforme du secteur de la sécurité	安全保障部門改革	To promote the reform of the national institutions which have a formal mandate to ensure the safety of citizens and state from violence from military, police, and judiciary, etc in order to improve security and political stability in developing countries. (**)
SW	Scope of Work	ET	Etendue des Travaux	スコープ・オブ・ワーク	An agreement document based on preliminary study to determine the scope of works, scheduling, and undertakings of the beneficial government (**)
TICAD	Tokyo International Conference on African Development	CITDA	Conférence Internationale de Tokyo sur le Développement de l'Afrique	アフリカ開発会議	An international conference organized and held in Japan with participation from OSACAL(Office of the Special Coordinator for Africa and the Least Development Countries), UNDP and GCA (Global Coalition for Africa) (**)
UDEMO	Union of Mobutist Democrats	UDEMO	Union des Démocrates Mobutistes	モブツ派民主連合(与党)	A political party led by the son of Mobutu former president
UNDP	United Nations Development Programme	PNUD	Programme des Nations Unies pour le Développement	国連開発計画	A financing organization of the largest scale in the world in the system of the United Nations which plays the core role to promote technical cooperation (**)

List of Abbreviation

English		French		Japanese	Explanation
UNFPA	United Nations Population Fund	FNUAP	Fonds des Nations Unies pour la Population	国連人口活動基金	An organization to provide technical assistance on population in order to monitor the promotion of world population action plan, improve educational opportunities and empower for women. (**)
UNHCR	United Nations High Commissioner for Refugees	HCNUR	Haut Commissariat des Nations Unies pour les Réfugiés	国連難民高等弁務官事務所	An organization which provides international protection to refugees in the world, promoting voluntary return, and supporting assimilation of them to the new society to achieve a persistent resolution of the refugee problems. (**)
UNICEF	United Nations Children's Fund	UNICEF	Fonds des Nations Unies pour l'Enfance	国連児童基金	A fund for emergency aid during natural disasters and general assistance to children through education, improvement of nutrition, supplying drinking water, promoting welfare of children and mothers in the health sector of developing countries (**)
UNIDO	United Nations Industrial Development Organization	ONUDI	Organisation des Nations Unies pour le Développement Industrie	国連工業開発機関	A permanent organization of the General Assembly of the United Nations which promotes industrialization of developing
UNITA	National Union for the Total Independence of Angola	UNITA	Union nationale pour l'Indépendance Totale de l'Angola	アンゴラ全面独立民族同盟	An armed group to achieve independence from Portugal
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs	BCAH	Bureau de la Coordination des Affaires Humanitaires	国連人道問題調整官事務所	One of the United Nations' offices with its objective to propose, coordinate and progress the humanitarian aids at the emergency of disasters e.g. famine, earthquakes, floods, and internal conflicts. (**)
UNOPS	United Nations Office for Project Services	BNUSAP	Bureau des Nations Unies pour les Services d'Appui aux Projets	国連プロジェクト・サービス機関	An organization which aims to support achieving objectives of multilateral aids and beneficial countries cooperating with UNHCR, ILO, and WHO etc. (**)
USAID	United States Agency for International Development	AEUDI	Agence des États-Unis pour le Développement International	米国政府国際開発庁	One of affiliated agencies of the Department of State and integrated department which deals with nonmilitary assistance in integrated fashion (**)
WFP	United Nations World Food Programme	PAM	Programme Alimentaire Mondial	国連世界食糧計画	This organization started as a cooperative plan for multilateral food aid between the United Nations and FAO, and plans a distribution plan based on a request (**)
WHO	World Health Organization	OMS	Organisation Mondiale de la Santé	世界保健機関	An organization of the United Nations for prevention of pandemic diseases, enhancement of health and nutrition, and promotion of research through international cooperation (**)

(*) : A Japanese dictionary

(**) : A lexicon of international cooperation

ABSTRACT

Chapter 1 Introduction

The objectives of this Study are given as the following 3 components;

To define measures to implement and extend resident-led community development;

To mitigate the burden on the areas concerned created by the settlement of Angolan refugees, by attempting to strengthen the functions of communities through the process of the formulation of community development plans;

To ensure access, to promote exchange between communities and to increase the volume of physical distribution with a quick impact project (road rehabilitation).

The Study was based at Kimpese, a city of Cataractes district in Bas-Congo Province, about 220km southwest from Kinshasa, the capital city of the Democratic Republic of the Congo (DRC). The targeting area of the Study stretched out up to Nkondo site, 20km northwest direction from Kimpese including 11 villages, and Kilueka site, 18km northeast including 10 villages; therefore, there are 21 villages in which was conducted the Study. The Study was conducted during 18 months from July 2008 to December 2009. The counter part of the Study is the Ministry of Rural Development.

Chapter 2 Overview of the Democratic Republic of the Congo and the Study Area

2.1 Country Overview

The DRC is gradually recovering from intense conflict (1997 - 2007), which led to over 350 million fatalities. In 2006, a democratic election was held in 40 years, and "Poverty Reduction Strategy Papers" (1st edition) was adopted in July. According to the conflict, the socio- economic situation of the DRC has been worsened and listed at 168th rank in 177 countries in the Human Development Indicators. The disparities between rural and urban areas have been a problem.

After the conclusion of the Pretoria Agreement in 2002, the situation of the DRC seemed to have improved, but instability has not resolved due to the conflict over the presidential election, and sporadic conflicts involving neighboring countries.

2.2 Overview of the Bas-Congo Province and the Cataractes District

In the Bas-Congo province, with an area of 53,000 km² of the territory with total population of 2,833,168, and population density 53 people / km², 64.0 % of population live in rural areas. The province has 3 districts, 10 territories, 17 cities, 55 sectors, 366 blocks, and 6 local governments (3 in Boma, 3 in Matadi).

Chapter 3 Existing Conditions of the Study Area

3.1 Socio-economic Conditions

The Study Area is located in Kimpese sector, and more than 90% of the population of Kimpese Sector lives based on activities related to agriculture and animal husbandry. In addition, there are 2 sites of ex-refugee camps, Kilueka and Nkondo sites, where Angolans live, and they also live in Congolese villages.

The DRC's basic land ownership system is based on Bakajika Act of 1967 and the law of land tenure in 1973. In the former, the land ownership belongs to the state while the traditional customs are recognized in the latter.

3.2 Natural Conditions

The altitude around Kimpese is about 250 m to 400 m and there is the Bangu plateau with 700 ~ 800 m of altitude, and there are Lukunga river which has 6 tributaries of river at the foot of the mountain. The average annual precipitation is 1,614.2 mm (Mvuazi, INERA), average annual temperature is 24.5 °C, annual average relative humidity is 77.9 %, and 94-99 % of annual rainfall is concentrated in the rainy season.

The main soil type of the Study Area is Ferralsols orthotypes, and the vegetation of the Study Area is divided into savannah grassland, savannah shrub, and open forest.

Chapter 4 Existing Conditions of the Communities of the Study Area

4.1 Actors Involved in Community Development in the Study Area

The actors are Directorate of Community Development of Ministry of Rural Development, Directorate of Feeder Roads, the minister of Ministry of Agriculture, Rural Development, Fisheries, Animal Husbandry and Small and Medium Enterprise Promotion of Bas-Congo Province, inspectors of the Bas-Congo province, Cataractes district, and each inspector of Songololo territories, Kimpese sector as the smallest administration unit, international NGO operating with EU funds, Agrisud, local NGO called CRAFOD operating with funds from Germany's Protestant Christian missions, and CLERs carrying out road maintenance programs with participation of villages.

4.2 Characteristics of the Target Communities

The population of the villages subject to this Study is 9,869 in total with the average population per village of about 500. The major industry in the study area is agriculture and during the rainy season, cassava and maize are mainly grown, while during the dry season vegetables such as onions and tomatoes are mainly grown.

In the Study Area, under the customary law, the ownership of land belongs to clans¹. In principle, land is not offered for sale and clan members called *Mfumu a nsanda* inherit the land from generation to generation by the matrilineal line. And there also are child villages or grandchild villages derived from their parent villages.

Public facilities such as schools or health facilities are commonly used by several villages. In this Study, it was proposed to divide the Study Area into 6 zones in view of the flow of people and access to public services, etc.

4.3 Study Area's Issues and Needs

The villagers of many villages mentioned that the fertile soil is their strength in the area of agriculture, fruits trees and livestock. As for the living environment, most of the villages understand the fact that roads are in place is one of the strengths, and the public services including healthcare and education are within their village or within accessible distance. While, the issues listed include lack of seeds, tools and limited cultivation area in the agricultural area. In addition, poorly developed public facilities such as schools and health centers are issues commonly recognized by the villagers.

4.4 Analysis of Developmental Potential

There is room for improvement of agricultural productivity by the repair of the community roads. Villagers living along the community roads directly connected to the national highway or provincial roads have a strong need for the repair of the community roads, which are directly connected to their life and livelihood. In the Study Area, it is easy to access to Kimpese where the main market of the sector. And, livestock and fruit trees are grown in villages not only for self-consumption but also as a valuable income source other than farm products.

It is verified that there are high demands for ensuring village water supply, maintenance of community roads, installation of the mill, and improvement of roofing through workshops conducted in the villages. Although administrative services are insufficient in the region, the public facilities such as schools and health centers are installed for several villages.

4.5 Developmental Constraints

As impediments to development, land ownership issues pertaining to community road maintenance, the delay of road construction work in the rainy season, and a shortage of budget for maintenance after the work are identified. In addition, non-mechanization of farming and means of transportation of products, a shortage of improved varieties of livestock, unused land which would be able to be used for paddy fields, and difficulties of operation for public facilities such as schools and health facilities due to lack of funding are recognized. Moreover, hygienic conditions have not been improved for anti-

¹ People share a sense of connection through recognition that they have common ancestors. Generally, people's identification is determined by tracking back paternal or maternal origin. In 3.1.2 (2) "Traditional Land Ownership" in this report, it is explained that the right to land management belongs to the lineage, but the word "clan" is used in this section, since it is considered that in the study area villagers are not necessarily aware of their own identification based on their lineage.

malaria and water poisoning, which are the main disease in the Study Area.

4.6 Results of the Analysis of Communities in the Study Area

The potentials and impediments to development were arranged after the extraction of issues and needs of the Study Area sorted by the fields.

Chapter 5 Planning Orientation of Community Development Plan

5.1 Community Development Plan (design)

The contents of the community development plan were intended to items which the residents can implement development activities, and maintain and manage them by themselves. The development plan is consisted of 4 fields such as 1) rehabilitation of community roads, 2) improvement of 2) livelihood, 3) living environment, and 4) public facilities (services).

First of all, the Community roads field should be investigated and implemented because it directly affects the improvement of livelihood and living environment. Secondly, needs for livelihood improvement by strengthening of agricultural production is considerable. As improvement of community roads, the program of improvement of livelihood is pointed out as issues should be solved preferentially. The improvement of living environment should be conducted on a parallel with implementation of livelihood improvement. On the other hands, regarding public facilities which will be shared between several villages such as health center and school, these facilities will be planed and implemented by zone level which composed by several villages.

Implementation system was established for the sustainable implementation of community development plan.

5.2 Process from Implementation of Pilot Projects to Formulation of Community Development Plan

The basic concept of the Community Development Plan corresponds to the major issues of the Community Development Plan in the Democratic Republic of the Congo. It will be verified through implementation of PPs.

The budget required for O&M activities was considered to ensure the sustainability of development under the proposed implementation system.

Chapter 6 Pilot Projects

6.1 Implementation Policy of Pilot Projects

Based on a concept of the community development, the establishment of community development committees, road maintenance led by the committees, and the PP for community development for the villages along the community roads in the targeting area were implemented.

6.2 Establishment of Community Development Committee in the Study Area

The community development committees consisted of Dukis (village chief) of villages along each road were established considering the characteristics of the Study Area.

6.3 Road Maintenance under Initiative of Community Development Committee

Since maintenance of roads must be performed to keep them in good condition and to ensure lasting effects of development, the tools for maintenance were distributed free of cost and no deposit was requested.

6.4 Implementation of Pilot Projects for Community Development

PPs were based on villagers' participation, training of villagers in Kimpese, and presentation of contents of each PP and encouragement of prioritization of PPs in each village were conducted.

For promotion and monitoring of implementation of PPs, PP animators were dispatched to villages for advising villagers' organizations of each PP for making action plans, proposing arrangement of villagers' issues and appropriate PPs on them, introducing resource persons to make technical recommendations, and giving demonstrations on improved cooking stoves.

6.5 Implementation and Results of Pilot Project in Villages

PP evaluation workshops were organized and leaders of each villagers' organization reported their situation and exchanged their points of view. In those workshops, villagers' self-initiative was recognized since they discussed the means of collection of management fee and management to sustain their activities.

The objectives, verified items, details of achievement, relevant sector, terms of achievement, expected results, results and evaluation, feedback on the community development of each PP were integrated into the PP sheet, and the data about cattle ploughing, rice cultivation, animal husbandry, and replantation is summarized into a manual.

6.6 Project Evaluation

Benefits were calculated for PPs of improvement of livelihood.

6.7 Monitoring of Pilot Projects

In the currently assumed monitoring system, as shown in the figure below, 1) a group that performs activities in a village reports to the village development committee, 2) the reported village development committee reports to the community development committee, and 3) the community development committee opens a general assembly to approve the content of activities. It is also important that advice and guidance on each of the activities are given by the sector staff and the sector chief.

At the time of formulation of community development plan, a particular attention was paid on "contents should be implemented by villagers themselves," "available local resources and human resources in the area should be used," and "issues which cannot be cope with by individuals should be implemented by group."

Similarly, the monitoring of PPs related to road maintenance is important as well. Daily maintenance should be carried out for sustainable use of laterite pavement road, namely; cleaning of drainage, a simple repair of pavement, restriction of traffic in the rainy season, and mowing and cleaning around the road. The enhancement of villagers' organization should be carried out, and activities should be monitored to continue the monitoring mentioned above.

6.8 Items Validated by Pilot Projects

According to the results of implementation of PPs, implementation system, target year for the community development, and concrete technical contents of PP were arranged.

Chapter 7 Community Development Plan and Their Preparation Process

7.1 Concept of Community Development Plan and Setting of the Approach

For the community development plan, development vision, development objectives, and target period as a basic concept have been decided as a basic policy after the analysis of major issues on development and impediment factors in the chapter 4 and 5. In addition, development programs have been decided and an implementation system has been installed as an approach to realize the concept. Then, the community development plan has been formulated based on above mentioned process.

The period of short-term plan was set for 3 years from 2010 to 2012, and this was allocated as a period to build the basis of residents led community development. Within this period, high priority projects in target villages will be implemented and developed. The period of mid-term plan was set from 2013 to 2014, the model established during the short-term planning period should be improved by administration and NGO staff who would be trained during the precedent period. After this, the plan will start to horizontal spread with the same process of the short-term plan.

The development vision is "To meet the basic human needs (BHN) sustainably and to enhance tolerance toward conflicts as a future vision of target villages within the target period. The development objective is "To ensure minimum income required to meet BHN" for improvement of livelihood area, "Villagers satisfied with life in their communities with improvement of living environment" for Improvement of living environment area, and "Villagers receiving benefits of public services continuously with improvement of public facilities" for improvement of public facilities area.

The contents of community development plan of the targeting area is consisted of; arrangement of community roads and reinforcement of villagers' organizations which are the tool to promote emerging effects of development components, and stabilizing the area, improvement of agricultural

productivity, improvement in value addition to farm products, and diversification of incomes source in order to improve livelihood, improvement of living environment and natural environment in improvement of living environment area, and arrangement of public facilities in the improvement of public facilities area. It is vital to integrally implement those contents for community development.

7.2 Process of Preparation of Community Development Plans

In a post-conflict country like DRC, an integrated development approach considering with arrangement of financial resources for the maintenance of roads in order to increase potential sustainability of community development and conserve functions of rehabilitated roads. Therefore, it is desirable to apply the Kimpese Model, the approach proposed by the Study in which rehabilitation of Kilueka route and community development are integrally implemented.

Standing from this point of view, the study method of this Study, from a series of planning process up to the residents led plan formulation applied to the concrete planning process, is summarized as a guideline. After completion of this Study, it is expected that the method will be used to prepare a community development plan by counter parts themselves.

7.3 Preparation of Community Development Plan

The contents of community development plan and implementing priority projects in the Study Area are summarized through the above mentioned method. The route community development plan, and development plan of each village have been formulated, and the volume of projects are calculated.

Chapter 8 Emergency reconstruction of the implementation

8.1 Flow of Project Implementation

The Study was conducted in the first year, and from preparation of bid tendering, selection of contractor, and implementation of the work in the second year was carried out based on the results of the precedent Study as the quick impact project.

8.2 Creation of Tender Documents and Selection of Contractors

The work was to rehabilitate Kilueka road, and laterite and concrete pavement were employed. The ordering party is JICA representative office in the DRC, and administrator of the roads is Directorate of feeder roads in Matadi (Matadi DVDA) of the Ministry of Rural Development.

The bid tendering was held with the attendance of the chief of Matadi DVDA, and the contractual negotiation was conducted with M. W. AFRITEC, then both parties closed a contract.

8.3 Details of the Work

The designing of the road was followed following procedure; grasping the current amount of traffic and types of vehicles, an estimation of the amount of traffic and types of vehicles after rehabilitation, and setting of road specification. In addition, the types of work are preparation and clearance fee

9.3 Proposal for Future Community Development

In a post-conflict area such as the Study Area where the administrative service is not functioning, the beneficiaries of the community road, drinking water facilities, educational facilities, and health facilities are not specific people but all the local residents. Therefore, it is advisable that the local residents perform maintenance through collaboration. For such initial investment and enhancement of capabilities required for maintenance, the implementation of projects are recommended, which listed in the following sections by using the Human Security Fund and through collaboration with the UN assistance agencies such as UNICEF and FAO.

The minister of Rural Development, which is the counterpart body of this Study strongly demand Japan to continue its cooperation through the official development assistance after the end of the Study. For this reason, on the basis of results obtained in this Study and in order to contribute to establishing peace in the DRC, we recommend ensuring technology transfer needed to promote the restoration and improvement of communities, and setting up a financial cooperation that will achieve the desired results effectively.

The study on Community Development Plan in Cataractes District,
Bas-Congo Province in the Democratic Republic of the Congo

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Chapter 1 Introduction

1.1 Introduction

Bas-Congo Province, in which the Study Area is located, is one of the 11 provinces in the Democratic Republic of the Congo (DRC) and the westernmost province of the DRC. It is bordered by the Republic of the Congo to the north, the Republic of Angola to the south, Kinshasa Province (including the capital, Kinshasa) and Bandundu Province to the east, and Cabinda Province of the Republic of Angola to the west. As the only province in the DRC facing the ocean (the Atlantic Ocean), it serves as the important base of the economic activities and physical distribution for the entire nation. Because of its geographic characteristics, it has experienced repeated influxes of refugees from Angola.

Bas-Congo Province is an agricultural area, since it has a warm climate all year round, high precipitation despite having distinct rainy and dry season, and abundant water resources of the Congo River Basin. However, the stagnant economic activities such as agriculture and physical distribution in the province caused by the long years of civil war have had significant negative impact on the agricultural production and the employment situation. Exhaustion of the communities and increase in the number of people in poverty caused by underdeveloped basic living infrastructures are at critical levels.

In the 1960's, the influx of refugees started in the Study Area, Kimpese Sector in Cataractes District in the central part of the Bas-Congo Province, because of the civil war in Angola. While some of the refugees were deported back to Angola because of delicate political considerations of the governments of the DRC (GDRC) and Angola, many others have settled down in the area and co-exist with the local Congolese through marriage, etc. A large number of refugees immigrated into the area in the 1990's and later, because of escalation of the Angolan civil war. The influx of the refugees has been increasing burden on local resources shared with the local residents. Under such circumstances, it has become important to strengthen the functions of and cooperation between the communities to create an order in the use and conservation of the local resources while promoting co-existence with the refugees. Therefore, improvement in agricultural productivity is urgently required for improving livelihood and basic living environment of the villagers, reducing the burden on the area which has increased because of the influx of refugees, enhancing tolerance toward community-level conflicts, ending conflicts in the entire nation, and providing the people with even a little distribution of peaceful living condition.

After JICA had implemented two project formulation studies, the DRC submitted request for this Study in March 2007. In response to the request, a Preparatory Survey was implemented in May 2007. As the result of this survey, it was decided to implement this Study. S/W of this Study was

concluded on May 14th, 2008.

While the title of this Study includes a phrase “The Study on Community Development Plan,” it includes not only components included in an ordinary “Study” in the DRC but also components associated with formulation of the community development plans in the Study Area, a pilot project to collect information contributing to the formulation of the plans and rehabilitation of community roads so as to have a quick impact project.

1.2 Objectives of the Study

The objectives of this Study are as follows:

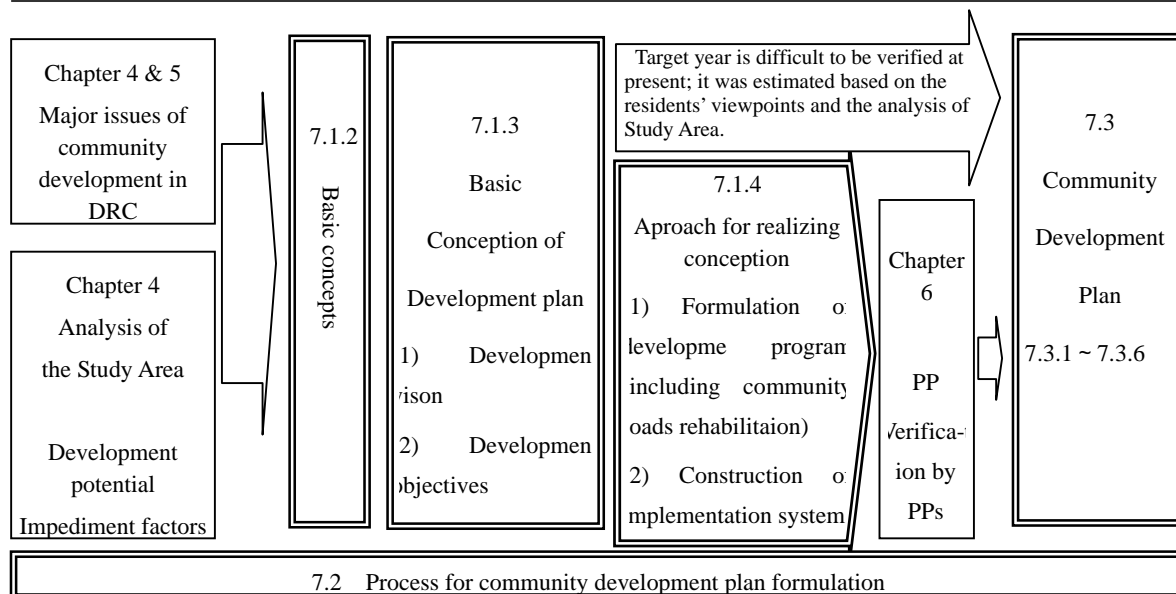
- ◆ To define measures to implement and extend resident-led community development (Component 1)
- ◆ To mitigate the burden on the areas concerned created by the settlement of Angolan refugees, by attempting to strengthen the functions of communities through the process of the formulation of community development plans (Component 1)
- ◆ To ensure access, to promote exchange between communities and to increase the volume of physical distribution with a quick impact project (road rehabilitation) (Component 2)

1.3 Study Area

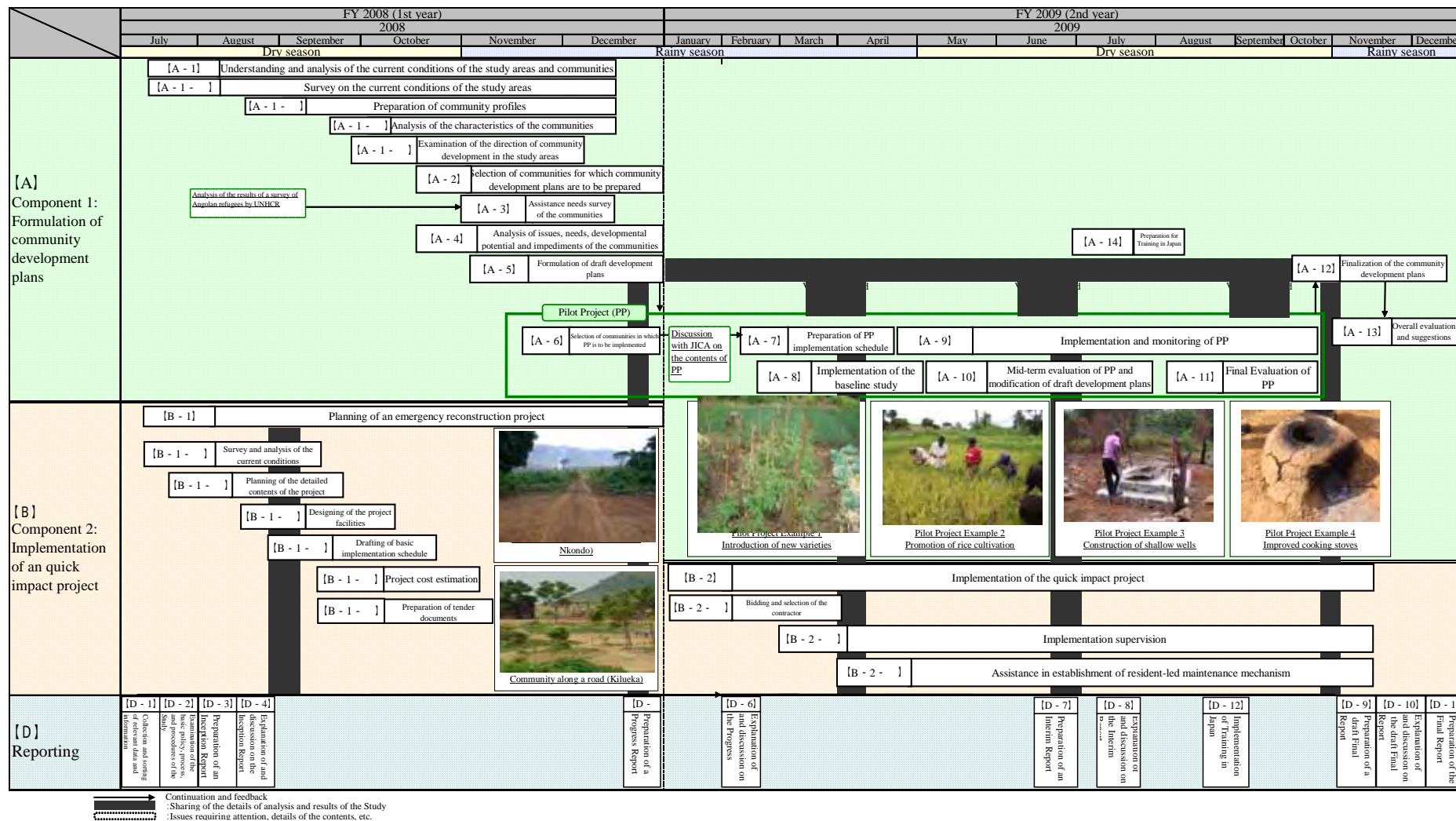
The Study Areas are located in the areas directly benefiting from the rehabilitation of two roads originating from Kimpese, in Cataractes District, Bas-Congo Province, situated at about 220 km southwest of the capital, Kinshasa. One of the roads goes to 20 km northwest to Nkondo Site and the other goes to 18 km northeast to Kilueka Site. A total of 21 villages, eleven and ten along the former and the latter, respectively, were selected for the Study Area. In this Study Area, these two roads are referred to as Nkondo Route and Kilueka Route, respectively.

1.4 Process of Plan Formulation

The figure shown below indicates the flow of process of the formulation of community development plans in the Study and the chapters describing the details of the process.



1.5 Schedule of the Study



This Study was implemented in two phases for about 18 months from July 2008 to December 2009. The table shown below indicates the personnel allocation schedule.

Table 1.1 Personnel allocation schedule

Responsibility	Name	Affiliation	Rating	2008						2009											
				First phase						Second phase											
				7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Team Leader/ Community Development	IWAMOTO Akira	NTCI	1		1.53			1.80			1.23			1.24				1.00		0.50	
Assistant Team Leader/ Agricultural Productivity Improvement	SATO Fusashige	NTCI	2			1.97		1.53			1.23			1.24			1.00			0.50	
Community Support	KONDO Sachiko	NTCI	5			1.50						2.70		1.77				1.03		0.50	
Road Planning/ Implementation Supervision 2/ Maintenance 1	TAKEMOTO Isaburo	NTCI	2		2.00							1.53			1.47						
Design/Estimation/ Implementation Supervision 1/ Maintenance 2	SHUKUYA Kazumitsu	NTCI	4			2.00						2.17		2.13			3.20				
Survey of Natural Conditions/Villagers' Organizations 2	TAKIGAWA Eiichi	NTCI	5	1.00				1.53						3.10				0.9			
Social Survey 1	NARUSAWA Hiroshi	NTCI	4		1.50							1.53				1.47					
Environmental and Social Considerations/Villagers' Organizations 1	GUEYE Massamba	NTCI	3					1.50				2.00			2.00					0.50	
Social Survey 2	SUMI Hisako	NTCI	4					1.17													
Social Survey 2	KATAYAMA Yumiko	NTCI	6											1.00							
Interpreter	SUZUKI Gentaro	NTCI (pioneer)	5		1.53																
Interpreter	ANDO Kazuo	NTCI (pioneer)	5					0.97			0.50			1.00							
Project Coordination	NARUSAWA Hiroshi	NTCI	5	0.23			0.57														
Project Coordination	SUMI Hisako	NTCI	5								1.00						1.00				

1.6 Study Implementation Structure

The counterpart organization of this Study is the Ministry of Rural Development (MDR) of the central government. The Study Team had requested recommendation for candidate counterparts and early assignment of counterparts to MDR and Ministry of Agriculture, Rural Development, Fisheries, Animal Husbandry and Small and Medium Enterprise Promotion of Bas-Congo Province at the beginning of the Study for appropriate technology transfer. However, the DRC side demanded the Team to pay all the costs for dispatch of counterparts including their salaries. After the discussion between the Team and the Permanent Secretary of MDR of the central government and the Minister of Agriculture, Rural Development, Animal Husbandry, Fisheries and Small and Medium Enterprise Promotion of Bas-Congo Province, all the parties had agreed that the JICA Study Team would pay daily allowance of the counterparts and the DRC side would pay other costs including their salaries. It was decided that the central government would assign two counterparts, one in charge of support to women's activities in rural areas and the other in charge of rural development, and the Bas-Congo Province Government would assign three counterparts, one each in charge of rural development, agricultural economics and economics. It was also decided that the person in charge of agricultural development of the Kimpese Sector Administration, who had been cooperating with the Team in its activities since the beginning of the Study, would be assigned as a counterpart of the Study. The technology transfer has been implemented continuously to these six counterparts, whose details are shown below.

As a part of the technology transfer, Training in Japan was implemented for 16 days from late August to early September, 2009. Each participant used the knowledge of the governmental structure for rural development and measures to establish villagers' organizations for community development acquired in the training to prepare an action plan. The prepared action plans were shared with relevant personnel in the DRC.

Table 1.2 List of the counterparts

	Name	Field of specialty	Affiliation	Designation
1	Mrs. Josephine Pacifique LOKUMU ESEMOTI	Support to women's activities in rural areas	MDR of the central government	Conseil
2	Mr. MUNDEKE OLENGAWEDY Michel	Rural Development	Directorate of Community Development, MDR of the central government	Director of Community Development
3	Mr. LUSIAMA MAKOBELE Andre	Rural Development	Ministry of Rural Development of Bas-Congo Province*	Acting Inspector
4	Mr. BIKAWA MAKIESE	Agricultural economics	Ministry of Rural Development of Bas-Congo Province*	Conseil
5	Mr. LUTETE LUKANDA Germain	Economics	Bas-Congo Province Government	Conseil
6	Mr. MUANDA NEKONO Honore	Agronomy	Kimpese Sector	Head of the Rural Development Section

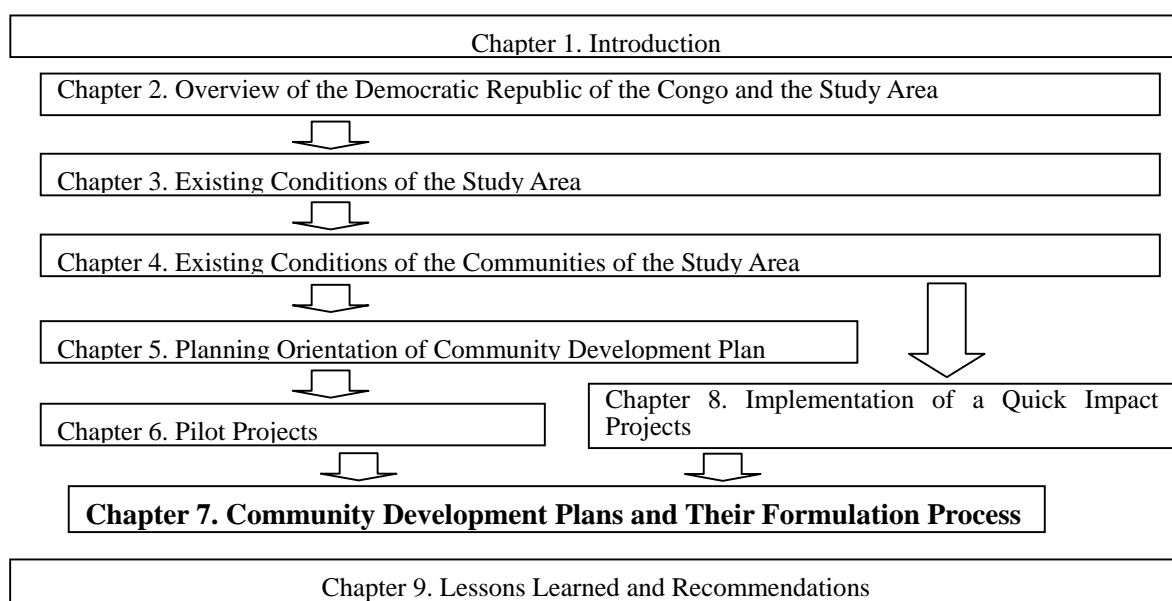
* Official name is Ministry of Agriculture, Rural Development, Fisheries, Animal Husbandry and Small and Medium Enterprise Promotion of Bas-Congo Province

Other people associated with the Study on the DRC side belong to Ministry of Agriculture, Rural Development, Fisheries, Animal Husbandry and Small and Medium Enterprise Promotion of Bas-Congo Province and various administrations such as Cataractes District, Songololo Territoire and

Kimpese Sector. Since the relevant personnel worked at different places far apart from each other, it was decided to hold report explanation meetings so that the people associated with the Study could learn the details of the Study and share the results of the Study. As the first round of the report explanation meeting, the Inception Report Explanation Meeting was held in Kinshasa and Matadi on July 30th and August 4th, 2008, respectively. The national TV station and a radio station broadcast the meeting in French and three local languages including Kikongo and informed not only the people associated with the Study and the residents of the Study Areas but also the people of the DRC in general about the implementation of the Study with the assistance of the government of Japan. As the second round of the Report Explanation Meeting, the Progress Report Explanation Meeting was held in Kimpese on February 12th, 2009. At this occasion, a field inspection tour to the Study Areas was implemented for the participants of the meeting.

1.7 Composition of the Report

This report consists of four divisions and ten chapters. Chapters 1 - 3 describe the background of the Study and overview of the country and the Study Areas. In Chapter 4, the required practical scenario of community development is discussed with participatory analysis of the characteristics of the communities in the Study Areas. Chapter 5 presents a concept of resident-led community development plans, which include establishment of villagers' organizations and their organizational structures, prepared using the results of the analysis. Chapter 6 describes implementation of a pilot project (PP) to verify the concept of community development described in Chapter 5 and the feedback from the implementation of PP to the community development plans. Chapter 7 proposes community development plans which have been prepared as a reference materials for the counterparts to prepare actual development plans. Chapter 8 describes the quick impact project (road rehabilitation). The outcomes of the Chapter 8 are reflected upon in the community development plans described in Chapter 7. In the end, Chapter 9 describes lessons learnt and suggestions from this Study.



Chapter 2 Overview of the Democratic Republic of the Congo and the Study Area

2.1 Country Overview

2.1.1 Administration

The DRC is gradually recovering from intense conflict that shook the country from 1997 to 2007 and involved the neighboring states. In 2006, the first democratic election in the country in 40 years was held. This process, largely peaceful, led to the establishment of a new parliament and a new President and was warmly welcomed after years of turmoil.

In July 2006, the DRC adopted 'Poverty Reduction Strategy Paper'. It revolves around five pillars of development:

- To promote good governance and to consolidate peace through institutions building.
- To consolidate macroeconomic stability and growth.
- To improve access to social services and to reduce vulnerability.
- To fight HIV / AIDS.
- To support community dynamics.

The strategy sets out a framework for the programs of GDRC and their development partners. These new policies have already produced significant results, especially for the economic stability of the country. Now the challenge is to initiate a process of sustainable development that will encourage development partners in the DRC to increase their assistance, to contribute materially on improving the living conditions of Congolese people, and to stimulate private investment.

A new government, expected for nearly a month, has been formed by the order of President Joseph Kabila published on August 27th 2008. The composition of this third government since the 2006 election of President Kabila intervened to try to pacify the Eastern side of the country, rocked by renewal of hostilities between rebels and the Congolese army.

Lead by Adolphe Muzito (51 years), appointed Prime Minister on October 10, the government has 53 members including 5 women (see composition in Annex 2.1 attached). The number of ministries were increased from 33 to 37. Sixteen people made their entry in the new government, which included three vice prime ministers, 37 ministers and 13 vice ministers. About the innovations, there was appointment of three vice prime ministers, the creation of a Ministry of decentralization, separation of the Ministry of Foreign Affairs and International Cooperation to Ministry of foreign affairs and Ministry of international cooperation, the separation of the Ministry of Agriculture and the Rural Development to The Ministry of agriculture and the Minsitry of rural development, the abolition of the minister of state with the president and that of the minister with the prime minister. The new

government team received three essential tasks, including restoration of peace throughout the national territory, the country's reconstruction, and improvement of living conditions of people.

2.1.2 Socio-economic Situation and Conflicts

(1) Social Situation (social indicators)

After 10 years of war, the socio-economic situation in the DRC has been extremely deteriorated and reached a lower level than in the 1980s. A report says:

(Summary) The public school was destroyed during the civil war, and today the Government fails to provide public services in education. The public health system does not work, and many hospitals and health centers lack equipment and personnel. In many areas they are Christian missionaries that are helping. (PNA, 2008).

According to UNICEF, the average life expectancy at birth in the DRC is 46 years (2006). The infant mortality rate under 5 years is 205 to 1,000 people (2006). This percentage has not changed since 1990 and has not improved. The rate of access to drinking water is 46% for the total population of 82% for urban areas and 29% for rural areas (2004), which shows a marked difference between the two areas. The low access rates recorded in rural areas is the cause of waterborne diseases (PNA, 2008) . The food problems related to poor nutrition are serious, leading to a rate of low birth weight of 12% between 1999 and 2006 (UNICEF, 2008).

The problem of HIV / AIDS is also serious. The estimated infection rate is 3.2%, and the estimated patients are about 100 million people among the population aged 15-49 at the end of the year 2005 (UNICEF, 2008). In the 6 months preceding February 2008, the epidemics of Ebola, cholera and other infectious diseases were the major issues in the Eastern Province and Katanga (PNA, 2008).

These social indicators, which are serious disadvantage in the development of social infrastructure, are among the lowest in comparison with the other countries of Sub-Saharan Africa. The Human Development Index (HDI) of the DRC, which was announced by UNDP, the country is listed at 168th rank in 177 countries (2007-2008), which is also one of the lowest among neighboring countries like Angola (rank 162), Burundi (ranked 167) or Rwanda (ranked 161) (UNDP, 2008).

The national poverty rate is 71.3%. As for the aforementioned rate of access to drinking water, there are a lot of disparities between the urban and rural areas comparing with 75.7% of poverty rate in the rural areas and that of 61.5% in the urban areas. This trend is also observed in the provinces especially in the Equatorial province (93.6%), the Bandundu province (89.1%), and the South Kivu province (84.7%) where a higher poverty rate was recorded, while Kinshasa has a lower rate of 42% (PNA, 2008), which constitutes a major flow of residents from the rural to the urban areas.

(2) Economic Situation

The conflict begun in 1998 has reduced the productivity of the DRC and also decreased the national income dramatically. Moreover, the conflict has increased the external debt, and more than three and half million people died from disease, hunger and violence. In response, foreign companies have reduced their activities following the uncertainty associated with conflict, lack of infrastructure and the difficult business environment.

However, after the conclusion of the Pretoria Agreement in 2002, the most belligerent forces began to withdraw towards the end of that year, which allowed the DRC to recover slowly from the economic recession that lasted for about 20 years. First, the interim government began the restoration of good relations with the donor countries and international economic associations. Although the IMF has reduced its activities since late 2006 because of the excess use of the budget, President Kabila began to undertake reforms. Consequently, many economic activities have picked up the speed, but were not included in the GDP statistics, as most of them were rather in the informal sector. At the same time, reform of the mining sector, which takes a large share of exports and contributes an important economical position in Kinshasa, stimulates the growth of GDP.

The government tries to reform the security sector, although there are still problems in the long term, such as unorganized laws, the existence of corruption, and the lack of government strategy. As some improvements have been observed, it is expected that there would be an increase in government revenues and budget support from other countries and donors, and foreign direct investment (CIA 2008).

(3) Conflict Situation

The DRC has experienced two civil wars in the 1990s. After the Cold War, Zaire and the United States of America have dissolved their relationship, allowing Rwanda, the neighboring country, to invade the DRC to exterminate the extremist Hutu militias. Then the anti-Mobutu forces took control of the capital and placed Mr. Laurent Kabila to the presidency. The country then changed its name to the Democratic Republic of the Congo (the 1st civil war in DRC). Thereafter, the gulf between the group of President Kabila and the group of his former comrades in arms has widened, following a civil war between Kabila and the anti-Kabila. The anti-Kabila was backed by Rwanda and Uganda, while Kabila group was backed by Angola, Namibia and Zimbabwe (the 2nd civil war in the DRC (1998)) (BBC, 2008).

After the civil war, the Pretoria Agreement was concluded in 2002, and an interim government was established. A poll for a new constitution was completed in December 2005, which entered into force in February 2006. The presidential and parliamentary elections followed in July 2006, and the current President Mr. Joseph Kabila was elected (PNA, 2008).

However, the last opponent presidential candidate Mr. Bemba was not satisfied and led a major battle in Kinshasa in March 2007, and the situation remained tense with repeated battles with the national army. Meanwhile, the eastern region of the DRC remained calm after the Pretoria Agreement, but thousands of people were fled following the battle between Rwanda's Hutu militia and the national army of the DRC in April 2008 (BBC, 2008). In addition, military rebels led by Commander Laurent Nkunda resumed conflict with the national army in the eastern region of DRC. The international community insists on a cease-fire and began peace mediations.

2.1.3 Ministry of Agriculture and Rural Development

With the formation of new government confirmed on 27/10/2008, an innovation made was the separation of the Ministry of Agriculture and the Ministry of Rural Development into two distinct ministries. The formation of the two ministries at the central and provincial levels is shown in Annexes 2.2 and 2.3.

2.2 Overview of the Bas-Congo Province and the Cataractes District

2.2.1 Socio-economic Situation and Conflicts in the Province

The Bas-Congo province is one of the eleven provinces of the DRC with an area of 53,000 km² or 2.3% of national territory and the population estimated at 2, 833,168, of whom 64% live in the rural areas and 36% in the urban areas. The population density is 53 inhabitants / km².

The population in this Province lives in a state of extreme poverty with a per capita income of U.S. \$ 0.39 / day.

This province is known to rarely refuse the outsiders. The Bas-Congo province is dominated by the Kongo ethnic group, a native group subdivided into 3 main tribes: the Bayombe (District of Lower River, the Bandibu (District of Cataractes) and Bantandu (District Lukaya). Several other tribes also exist which are: the Bawoyos (Territory of Muanda), the Besingombe (a part of the Cataracts district).

2.2.2 Administrative Division

The Bas-Congo province includes:

3 districts	2 cities	10 Territories	17 towns	
District of Bas-Fleuve Administrative centre Tshela	Matadi Boma	Lukala Tshela	Kasangule Madimba	Kimpese Lukala
District of Cataractes : Administrative centre Mbanza-Ngungu		Seke-Banza Mbanza-Ngungu Luozi	Kintanu Mbanza-Ngungu Songololo	Muanda Lukala Tshela
District of Lukaya : Administrative centre Inkisi		Songololo Madimba Kasangule Kimvula Muanda	Luozi Seke-Banza Kinza-Mvuetete Nsioni	Inga Kwilu-Ngongo Kimvula

It also includes 55 sectors, 366 communities and 6 autonomous entities or communes (3 at Boma and 3 at Matadi).

The administrative structure of the province includes two types of administrations. On the one hand, the provincial government is made up of provincial branches of the central state. On the other hand, the territorial administration includes decentralized administrative entities (cities and territories) and local autonomous entities (districts, communes, towns, sectors, communities).

The Ministry of Rural Development, in charge of implementation of this Study, is the national body for political guidance and strategy for all the activities. The central administration is headed by the General Secretariat represented in the Province by the Provincial Inspectors working under the Ministry of Agriculture, Rural Development, Fisheries, Livestock, Small and Medium Enterprises of Bas-Congo. The organizational structure of the provincial ministry is as follows:

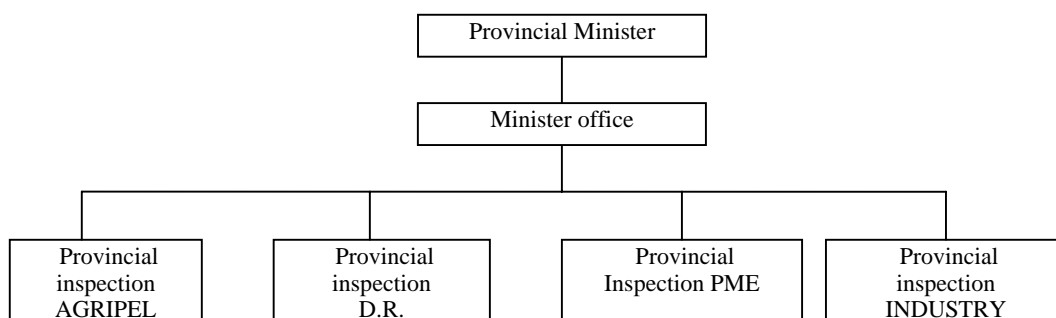


Figure 2.1 Organization chart of the provincial Ministry of Agriculture, Rural Development, Fisheries, Animal husbandry, Small and Medium Enterprises

2.2.3 Policies of Community Development

To help achieving its mission, the General Secretariat of Rural Development has normative and specialized services. The Directorates of the normative and specialized services General Secretariat are represented in the province by normative offices supporting the provincial inspector in the implementation of its activities. The Office of Community Development under the Inspector of rural development is responsible for the promotion of self-promoted and self-managed structures including development NGOs, local initiatives for development, the various cooperatives, mutual development farmers' organizations in the rural area.

Community development activities are implemented on the ground in partnership with people concerned with the provincial coordination under the inspector of rural development. For example, the Provincial Coordination of Direction of Feeder Roads (DVDA) is providing facilities and rehabilitation of agricultural feeder roads like Kiluaka road scheduled for rehabilitation in this Study. In the province, community development process is running at a snail's pace due to the lack of financial and logistics that would have enabled to carry out actions on the ground.

2.2.4 Angolan Refugees

The cause of the influx of Angolan refugees in the DRC is the civil war in Angola. Since the three military powers, the MPLA (Popular Movement for the Liberation of Angola-Labor Party), the FNLA (National Front for the Liberation of Angola) and UNITA (National Union for the Total Independence of Angola) have started the war for independence in the country in 1961, the confusion began. The country was in a state of war until the assassination of Mr. Jonas Savimbi, leader of UNITA, in 2002, while the FNLA capitulated in 1984. Each time when a battle has arisen from this war, people fled to the neighboring countries, including the DRC. It is the reason that the influx of Angolan refugees in DRC took place several times in the past, particularly in the 1990s.

UNHCR supported refugee camps since 1990, but was asked to record Angolans living outside camps in 2003. Accordingly, UNHCR has registered about 120,000 Angolan refugees (UNHCR, 2006). Those who were registered at that time had long lived in the region and were integrated into the society and therefore it is said that their situation may be different from the Angolan refugees of 1990s.

After registration, UNHCR has investigated the possibility of repatriation of Angolan refugees, and nearly half of them wanted to return to their country while half wished to stay in the DRC. Therefore, UNHCR launched an operation to support the repatriation from 2003 to 2006 for the half who wanted to return, and almost all of them have returned. The others that have remained behind seem to be the ones who wanted to stay in the country. Nevertheless, UNHCR plans to reorganize a repatriation support operation, because of the budget allocated by the Angolan government.

The influx of Angolan refugees took place in 1961, 1972 and 1992 in the Bas-Congo province (UNHCR, 2006). As mentioned above, the refugees settled in camps are mainly those of the 1990s, but the camps also include few refugees of the previous periods.

Chapter 3 Existing Conditions of the Study Area

3.1 Socio-economic Conditions

3.1.1 Administrative Organization

The Study Area is located in Kimpese Sector. The chief of the sector is the territorial executive who manages the Sector. His office is constituted by:

- 1 Secretary in charge of personnel and administrative letters
- 1 Clerk of main registry office in charge of the collection of population statistics (birth, deceases, marriages, etc.). He/she collaborates with the registry office of each sector.
- 1 Accountant who manages the budget and accounts (receipts and expenses)
- 9 technical and 3 specialized sections.¹

Each chief of section has staffs who help in collecting data or implementing the work throughout the Sector. The Sector is subdivided into groupings or communities. The chief of a groupings is in charge of the customary administration in the radius which is allocated to him. Furthermore, the Agglomeration is a centre having more than 1,000 people, which is setup with an auxiliary office of registry linking it to the neighboring villages which are under the supervision of the leader of agglomeration. The leader of agglomeration is in charge of the population census in his radius and other tasks entrusted to him by the main office; and also dealing with disagreement between people under his authority.

The village is managed by the Duki who represents his/her village through a village committee composed of:

- Land owner.
- Duki (Chief of village)
- Secretary
- Members or Advisers
- Household: made up of father, mother and children; the father is the head of household but it happens from time to time that a widow becomes head of household if she does not remarry.

3.1.2 Socio-economic Situation

More than 90 % of the population of Kimpese Sector lives based on activities related to agriculture and animal husbandry, taking advantage of the railway and the National Road 1 (Matadi-Kinshasa road). The basic facilities of the sector are very damaged and less equipped

¹ The 9 technical sections are 1) Agriculture – Livestock, 2) Rural Development, 3) Environment, 4) Hygiene, 5) IPMEA, 6) Culture and Art, 7) Sport and Leisure, 8) Tourism, 9) Transport and communication. The 3 specialized sections are 1) Police, 2) ANR and 3) DGM

including schools, health centres, roads and bridges. The rate of unemployment is very high. There are some rural organizations for mutual aid, which are very active in groups' work or social problems. Markets and wholesalers are quasi nonexistent in Kimpese Sector. The access to drinking water is a problem in the majority of the villages across the Sector. Due to the small rural income, the access to schools and to health care is problematic, because on an average 40 % of the children do not complete their first school year, since they can not pay the school expenses, and 70 % of them die because of the lack of money for medical care.

(1) Social Conditions

In regard to the social conditions of the people of Bas-Congo, they are in a very advanced deteriorated stage as mentioned below:

1) Health

- A low coverage of health care in rural areas.
- A high prevalence of the so-called poverty induced diseases such as HIV / AIDS (prevalence rate of 6.2% in 2005), malaria and tuberculosis.
- The resurgence of certain diseases such as meningitis, bloody and simple diarrhea.
- The presence of some endemic diseases such as measles.
- Deterioration of health infrastructure and equipment especially in rural areas.

2) Education

- A severe deterioration of school infrastructure
- A total shortage of educational equipment
- A very low enrollment of girls: 45.00% in primary schools, 37.90% in secondary schools, and 24.70% in higher education and university.

3) Infrastructure

- A network of agricultural feeder roads in completely deteriorated condition (13,474 km).
- A very advanced deterioration of provincial highways and secondary roads (1,760 km).
- National roads are operational, except the Boma-Muanda section, totaling 138 km.

4) Drinking water

- A very low coverage of drinking water : 33% in urban areas and 15% in rural areas.
- Existence of waterborne diseases including: Poliomyelitis, typhoid fever, vermin's, etc.

5) Energy

- Lowest coverage in electrical energy (0.82%), while Bas-Congo province is the largest producer of electricity nationwide and in the continent.

6) Land

- Existence of land disputes, especially in Cataracts district.

(2) Economic Conditions

Bas-Congo province has enormous economic potential, but they are largely underexploited as mentioned below.

- Little usage of vast fertile lands which can be used for agriculture and animal husbandry.
- The presence of minerals not exploited (oil, diamonds, etc.).
- A dense network of rivers.
- A tropical climate favorable to agriculture and animal husbandry (humid rainy and dry seasons).

1) Industry

The industry is dominated by agribusiness, food, production of construction materials, oil and hydroelectric power, or 253 units namely:

- Agro-industrial units:	17	- Oil industry units:	1
(Majority non functional)		- Energy industry units:	17
- Food industry units:	18	- Hotel units:	157
- Construction materials units:	10	- Service industry units:	44
- Manufacturing industry units:	16	- Pharmaceutical industry units:	1

2) Tourism

Several tourist sites capable of producing a considerable percentage of government receipts, but are poorly maintained as shown below:

- Stanley's historical baobab in Boma
- Various caves: in Mbanza-Ngungu, in Kimpese, etc.
- The Atlantic Coast: at Muanda
- The Belvedere: Matadi
- The monument bearer: Matadi
- The ambient peak: Matadi
- The Inga dam: at Seke-Banza
- Etc.

3) Maritime

Bas-Congo province has two international river ports at Matadi and Boma to serve all the country's imports and exports.

(3) The socio-economic Constraints

Agriculture is the main activity for the vast majority of the population of Bas-Congo and provides almost the entire consumed daily food ration. However, agricultural and animal production, one of the determinant factors of poverty reduction, shows a large deficit in Bas-Congo. The constraints which the agricultural sub-sector are facing are socio-cultural, socio-economic and socio-political factors. The socio-economic factors that are most important among them are summarized below.

- Insufficient number and aging of technical supervisors
- Low processing area used by farmers (extensive agriculture)
- Low level of agricultural mechanization
- Use of rudimentary materials and insufficient agricultural inputs
- Farmers lack of access to credit
- Diseases (people and plants)
- Inadequate supervision of peasant farmers (fewer extension staffs)
- Incentives to early harvest partly due to theft
- Poor conditions of feeder roads
- Price not remunerative to producers (terms of trade between town and country are unfavorable)
- Insecurity of farmers' health
- Deviation from commercialization
- Lack of support for agricultural research
- Abandonment of crops with long growth cycle to the ones with short vegetative cycle
- Lack of statistical data
- Low involvement of men in agricultural production in some rural areas
- No assessment of the contribution of women in agricultural production

3.1.3 Land Ownership

(1) Land Tenure System

The base of this system is based on BAKAJIKA Act of 1967, and the law of land tenure in 1973. The former act mentioned above abolishes all forms of private land ownership, and claims that the State holds "all rights of ownership over all lands, including up to 20 km beneath the soil, forests, and mines throughout the territory". The second law mentioned above allows the possession of certain types of private concessions permanently," and also recognizes the traditional laws that allow the user charges on "non-allocated land in rural areas." Land users are considered holding usufruct rights by such laws based on the traditional land tenure system. Under these laws, the land is classified as public lands and private lands.

Public lands: the usufruct of these lands cannot be sold or transferred as long as the change is

not allowed by law for the land provided for public use or work.

e.g. Primary schools' grounds, airports, hospitals and markets, etc.

Private land: private lands are divided into urban and rural lands for all except public lands mentioned above.

Lands in the urban area mean the lands within the territory declared as urban area by law, and other lands are considered as the rural area. The transfer and subdivision of the usufruct right of private land to companies or individuals are allowed. In addition, private lands are classified into five categories according to their usage.

- a) Residential Zone
- b) Commercial Zone
- c) Industrial Zone
- d) Agricultural Zone
- e) Livestock Zone

The usufruct of private land may be acquired by the payment of the usufruct fee and taxes. In addition, the government allows the companies or individuals to acquire the usufruct of land, regardless of the nationality.

An applicant must negotiate with the owner of usufruct to acquire the right of usufruct. The contract is concluded after the agreement of both the parties and after the local government has verified the legality of the contract. Following the conclusion of the contract, the applicant pays the owner in kind as pets, etc. or cash in an amount corresponding to the cost of the usufruct. Thereafter, the land authorities investigate the land. The authorization of the prefecture or the provincial administration is necessary for wider lands. The Minister of Land has the authority to sign on the land exceeding 1,000 hectares.

Eventually, the delimitation between the lands is defined, and is registered as private land owned by a company or an individual for a term limit of 5 to 25 years or 30 years. This right may be extended.

(2) Form of land Ownership

Villages' territories are scattered in Bas-Congo province, which create a complex mosaic of land. In addition, multiple rights exist on the land and several forms of traditional land ownership similar to other parts of Africa. The head of lineage (blood, or clan) or lineage owns the rights to manage the land. As villages are mainly based on the lineage, one can say that the land is owned by each village. The reason for the dispersion of territories or the complicated mosaic arising from it is based on the following.

Firstly, the villages have enclaves which are the secret places where properties and cattle are

hidden.

Secondly, the villages have remained divided. When a village is created on the basis of a lineage and the number of people increases, there may be a limitation to maintain economic unity of the village, or social limitations caused by the looseness of the relationship. Accordingly, it is inevitable that the villages are divided. Thus, the villagers' territory also dispersed several times.

Thirdly, the traditional belief of villagers on the land affects the current form of the territory. In Bas-Congo province, people should keep any land inherited from their ancestors and never give it up. Consequently, they have the clear recognition of the right to their lands even if they do not use them.

(3) External pressure on the land during the colonial period

In addition to the aforementioned situation, external physical pressure was exerted on the land during the colonial period in Bas-Congo. Firstly, there is a deprivation of rights to land by European livestock. European settlers have positively managed livestock breeding by the need to cover their own consumption needs when they immigrated, and livestock breeding was focused on Bas-Congo province. Therefore, an increase of the size of the ranch that Europeans managed decreased the amount of land that local people could use.

Secondly, there is a displacement of villages by the administration or for economic reasons. The colonial government has moved to places along the road for administrative reasons. In addition, the villages have moved voluntarily to sell their agricultural products at high prices in the vicinity of a railway and a main road for transport to the city.

Thirdly, there has been an expansion of cultivated land based on the marketing of agricultural products. The needs of marketing products have rapidly increased with colonization and growth of the city in the province of Bas-Congo. It has caused an increase in the food price. As a result, the production has been stimulated and led the expansion of cultivated area.

(4) Disputes over land and its influence

Based on the above considerations, the limitation of land has caused some tension.

However, the majority of land disputes stems from the lack of information on procedures for acquiring land. Often, people are not sufficiently informed about the BAKAJIKA law and they still believe that they can inherit their ancestral lands on the basis of traditional law. Accordingly, people think that they can reclaim the land without any formalities whatsoever as soon as the occupant leaves or dies. Therefore, when the state allocates concessions to the new owners, there will be conflicts between the villagers and those who have newly acquired the usufruct.

These disputes over land are factors obstructing the development of society, economy, culture and the rural community. For example, there were the followings.

- Influx of villagers who lost land to the city and, accordingly, the depopulation of villages.
- The relocation of villages or complete destruction of them.
- Creation of "satellite villages" from disputes over land. Accordingly, an unstable social climate appears in the rural areas.
- Difficulty in applying modern principles of action on the natural environment and management of land.

In the traditional form of land ownership in Bas-Congo province, villages' territories have dispersed into mosaics. In addition, deprivation of land by European settlers, the relocation of villages, and pressures such as the expansion of cultivated land have taken place during the colonial period. In addition, the disputes on land occur frequently since the Land Law has not been informed to the population, which is a factor obstructing the development of the region.

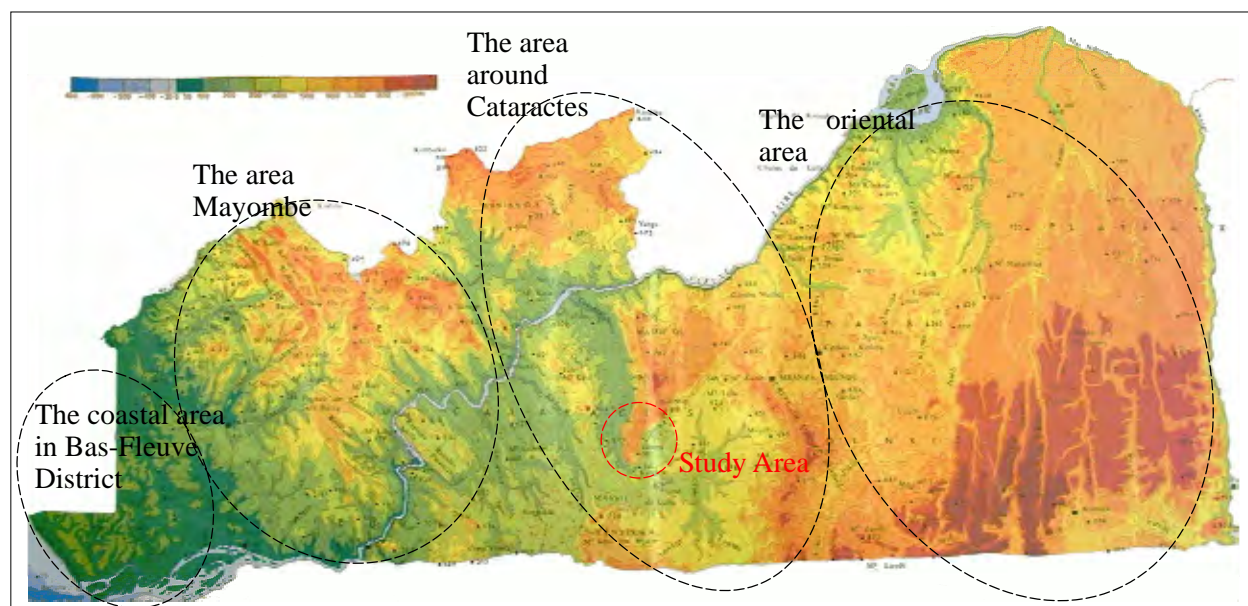
3.2 Natural Conditions

3.2.1 Topography

Bas-Congo extends from the fall of Kintambo near Kinshasa on the downstream stretch of Congo River basin to the Atlantic. Topographically the province can be divided into four areas: the coastal area of Bas-Fleuve District, the Mayombe area, Cataracts District area, and the eastern area; each area is characterized by different topographical features, as a result of geological movements from the past, various rock formations, and the Congo River.

The Coastal Area of Bas-Fleuve District

The coastal area of Bas-Fleuve, the only seaboard of the Congo, is located between Angola and Cabinda, reduced to some 30 km of low coast, formed of marshy plains, around the cliff shelf bottom of Moanda (25-30m). Towards the interior after the Yema plateau (70m), it links to the vast Tchikay plateau (115 to 165 m) up to the Bakongo plateau (180 m south-west and 265 meters north-east). The staggered sandy plateaus end to the south on the estuary of the river up to Boma, and they construct many sand dunes and swamps luxuriated by mangrove after Boma. From the north side of them up to Cabinda border, the relief becomes more complicated, and forms hills or steep valleys.



Source: Relief, ATLAS OF ZAIRE BAS, Bureau of Urban Planning Studies

Figure 3.1 Topography of Bas-Congo province

Cataractes District area

Cataractes region or central region of the province is characterized by a quieter relief, more homogeneous plateaus and hills. The lands, schistose-sandstone plateaus, are separated by 2 parts by the Congo River with 30 falls stretching 132 km from Kintambo to Manyanga. In the northern side, there is Mayanga upland at 825 m of altitude around the summit of Mt. Kinzoye, and Bangu range lies at the southern side of the river. At the foot of Bangu trays and Manyanga, the depressed ground of limestone extends towards the Inkisi region where it is crossed by diagonal ridge of Mbanza-Ngungu, oriented from south-east to north-west which is the line sharing of water between the basin Kwilu and Inkisi.

The Study Area is located in this area. This relief can be divided into trays and hills, riverbed, and alluvial range. The altitude around Kimpese is about 250 to 400 m, and there is the Bangu plateau (700 - 800 m) which is mentioned above by the northern side of the Study Area.

The Mayombe Area

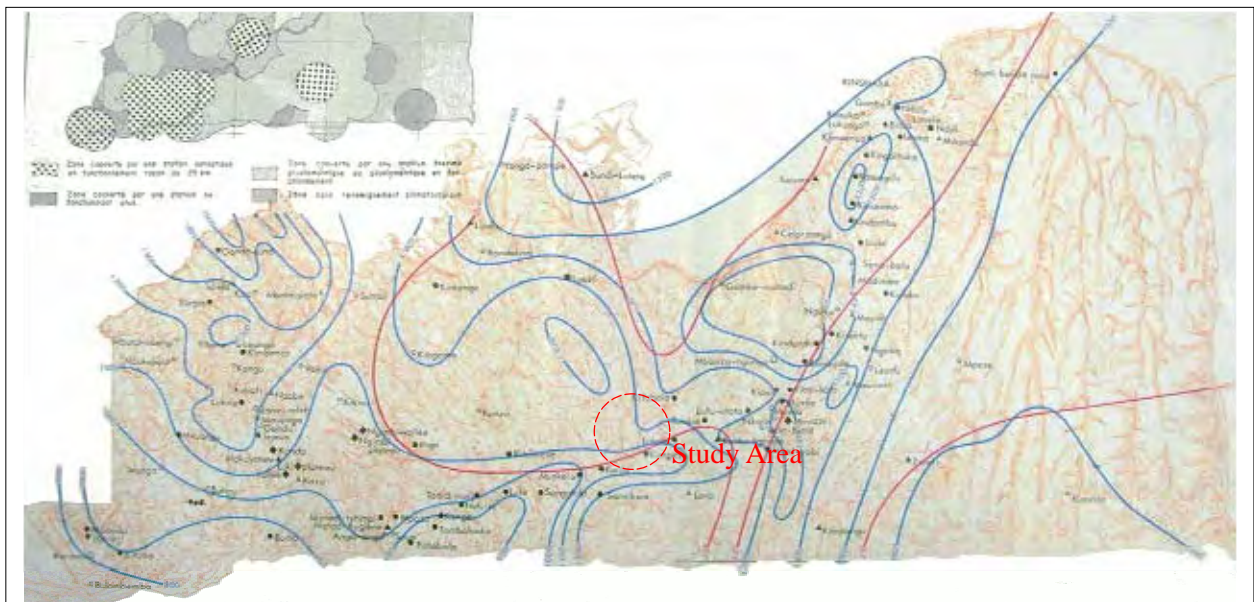
The area is located at east of Boma, and there is a contrasting scenery between the uplands and the mountainous lands. In the northern part of this area, high hills give a mountainous land-like landscape due to bluff river sides of dense streams, which create the characteristic features of Mayombe such as particular undulating areas. The Maduda area, northeast of Tshela, Maduda Mountains, Madiakoko, Masisi, and Koromazo, etc. (600 to 750 m) are forming secondary veins from north-northwest to south-southeast. By the eastern side of this area, Manianga uplands are formed with fragments of peneplain. In southern Mayombe, the area from Mt. Bangu (meaning “Cristal” in Kikongo), which is upheaved upon Seke Banza plateau and tableland, to Matadi gives a rolling

landscape. This mountain range is formed by folded metamorphic rocks and massive granite. The vertical drop between south Cataract and the port of Matadi is 170 m, which is very large. There are 23 waterfalls and rapid streams through a stretch of 81 km.

The Oriental Area

In this area, flat upland around the Inkisi area extends from the eastern part of Bas-Congo province up to Kwango river. In the east, the Bateke plateaus (1,000 m) forms an upland southward up to the border with Angola. In the west, there is a hill formed by limestone which stretches up to 750 m of altitude by the south and 650 m by the north. Narrow canals and deep ditches run between Black river and Maluku beyond the northern side of the Congo River.

3.2.2 Meteorology



Source: Climate, ATLAS OF BAS-CONGO, office of Urban Planning Studies

Figure 3.2 Precipitation and temperature in Bas-Congo province

The climate of Bas-Congo is divided into 2 types:

The dry season is from mid-May to late September (Aw: savannah season, according to Köppen’s climatic division) and the rainy season is from early October to early May. The rainy season is often interrupted by a small dry season between January and February.

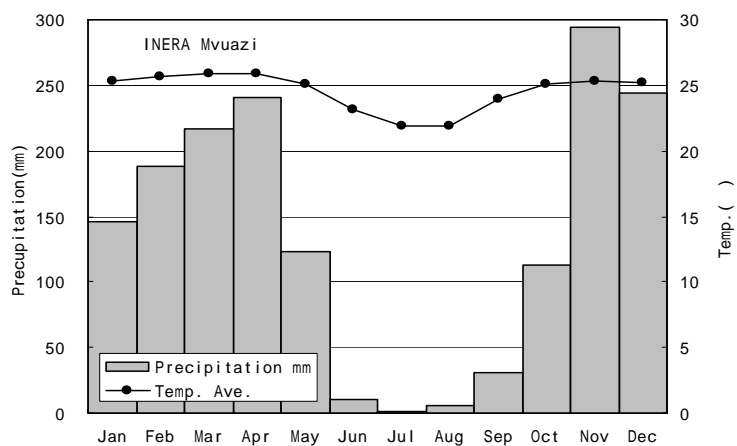
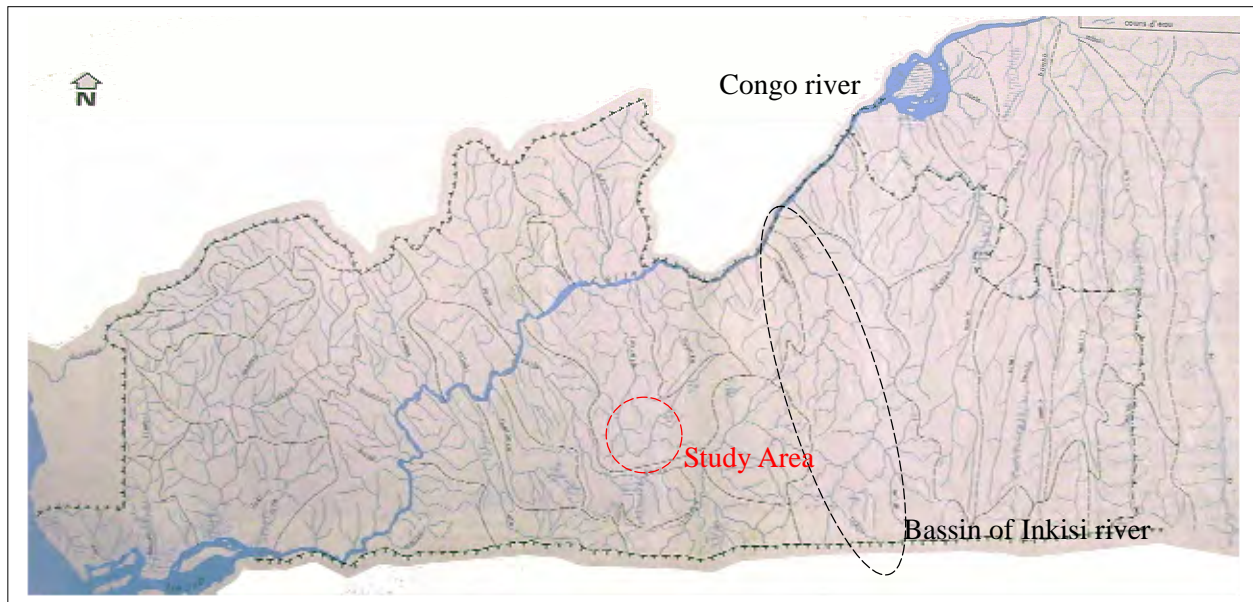


Figure 3.3 Monthly precipitations and average temperatures (Mvuazi, INERA)

The average annual precipitation over the past two decades is 1,614.2 mm (Mvuazi, INERA). The rainfall is concentrated from 94 to 99% in the rainy season.

The average annual temperature is 24.5 °C. The maximum temperature reaches up to 31.5 °C in March whereas the minimum temperature drops down to 16.5 °C in July. The annual average relative humidity is 77.9%.

3.2.3 Hydrology



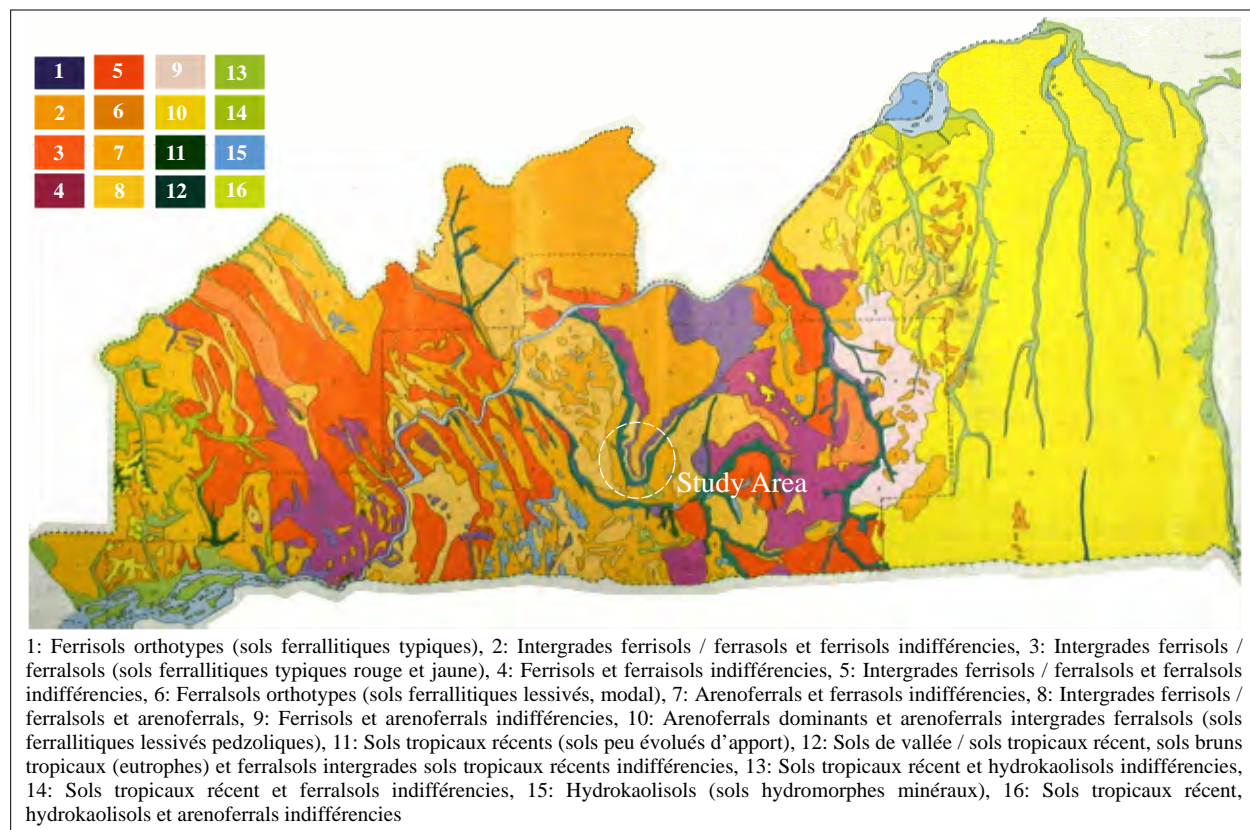
Source: Hydrography, ATLAS OF ZAIRE BAS, Bureau of Urban Planning Studies

Figure 3.4 Hydrology of Bas-Congo province

As mentioned earlier, the Congo River crosses Bas-Congo province. The basin area of whole river is 3,684,000 km² which is the 2nd largest river in the world after Amazon river. Among the other rivers crossing Bas-Congo province, Inkisi river is the most important although its basin area is very small comparing with the Congo River. Its headwaters are in Angola, and it forms several falls and rapid streams between Sanga and Zongo; eventually it flows into the Congo River.

In the Study Area, Lukunga river runs along the bottom of Mt. Bangu to north-east and south-west, and then it runs to north-west to eventually inflow to the Congo River around Luozi. There are also several tributaries of Lukunga river which cross the two axes of Nkondo Site and Kilueka Site of this Study, namely Lukala, Nlombua, Ndongue, Nkeng, Nene and Kimu according to the order of the flow direction. Most of these tributaries are dry during the dry season, but there are some rivers, which the Study Team verified their flow throughout the year, that the local people use for irrigation and other domestic use such as drinking water.

3.2.4 Pedology



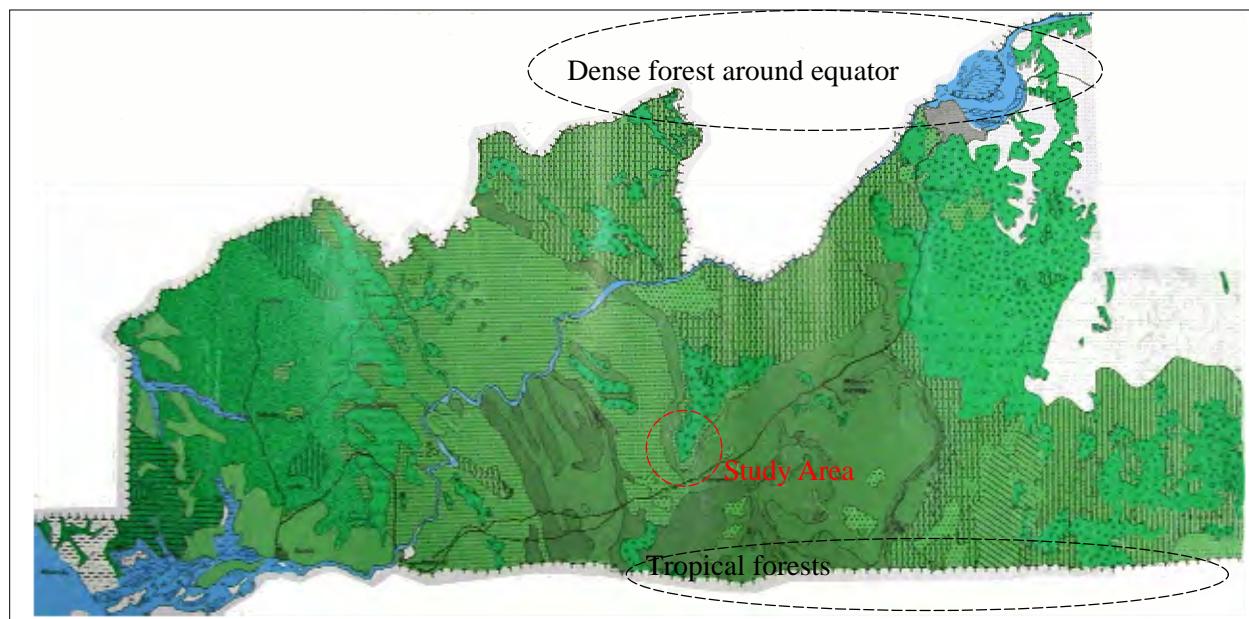
Source: Pedology, ATLAS OF ZAIRE BAS, Bureau of Urban Planning Studies

Figure 3.5 Pedology of Bas-Congo province

Concerning the pedology of Bas-Congo province, the land is covered with tropical soils, especially Ferralsols, and Kaolinite which contains high iron and aluminium.

In the Study Area, the soil is mainly Ferralsols orthotypes and there are other five soil groups; intergrades ferrisols, valley soils; recent tropical soils; and ferralsols undifferentiated.

3.2.5 Vegetation



Source: Vegetation, ATLAS OF ZAIRE BAS, Bureau of Urban Planning Studies

Figure 3.6 Vegetation of Bas-Congo province

Bas-Congo province is a region dominated by grassy savannah. This savannah exists between southern dense tropical forests and northern open tropical forests.

The vegetation of the Study Area is divided into three types: savannah grassland, savannah and shrub forest. The grassy savannah is covered by luxuriant grasses, mainly those of hyparrhenia of Andropogon (grass), and of sporobolus Loudetia.