

## CHAPTER 5 : BASIC POLICY FOR THE REHABILITATION OF N'DJILI COMMUNE

### 5.1 RELEVANT POLICIES FOR COMMUNITY DEVELOPMENT

The fundamental direction of development planning in relevant policy and strategy is specified as follows (refer to Main Text Chapter 2);

**Table 5.1 Major Policies from Relevant Plans and Programmes**

Urban Infrastructure (Roads)	<ul style="list-style-type: none"> <li>- Rehabilitation and construction of intercommoned roads and inter quarter roads</li> <li>- Make use of public buses to reduce the traffic jam</li> </ul>
Health & Sanitation	<ul style="list-style-type: none"> <li>- The development of Health Zones is the main line of the strategy to reinforce the Health System.</li> <li>- It aims at improving the functionality level of hospitals and health centres in order to provide quality health cares to the population.</li> <li>- Promoting community partnership in the implementation of health policy.</li> <li>- Evacuation of rubbish and other waste</li> <li>- Reactivate and reinforce Communal Improvement/ Cleaning up Brigades</li> <li>- Organizing Sanitary and Methodological Education Campaign</li> </ul>
Education & Citizenship	<ul style="list-style-type: none"> <li>- Increasing school attendance from 64.1% in 2006 to 80% in 2008, and 100% from now to 2015.</li> <li>- Annual rehabilitation of 10% of classrooms and equipping them with school furniture.</li> <li>- Train drop-out young children and send them to vocational training centers</li> </ul>
Water & Energy	<ul style="list-style-type: none"> <li>- Rehabilitation of existing infrastructures, thus facilitating access to a greater number,</li> <li>- To identify water needs and inventory</li> </ul>

### 5.2 POTENTIAL OF N'DJILI COMMUNE

There are various kinds of problems in N'djili commune. During the workshops in 13 quarters, on the other hand, potentials for community-led development were identified.

SWOT analysis is a basic, straightforward model that provides direction and serves as a basis for the development of marketing plans. It accomplishes this by assessing an organization's strengths (what an organization is able to do) and weaknesses (what an organization is unable to do) in addition to opportunities (potential favourable conditions for an organization) and threats (potential unfavourable conditions for an organization). Based on the social survey results conducted by The Study Team in addition to the existing analysis of the socio-economic conditions, SWOT Analysis for the N'djili commune is summarized in table 5.2.

Table 5.2 SWOT Matrix for N'djili's Socio-Economic Conditions

Capital	Strengths	Weaknesses	Opportunities	Threats
Human	<ul style="list-style-type: none"> <li>- Existence of demographic statistics</li> </ul>	<ul style="list-style-type: none"> <li>- Unemployment especially for young people</li> <li>- Many young people migrate to Europe</li> <li>- Illiteracy of population</li> <li>- Insufficient number of schools</li> <li>- Large incidence of pregnancy in young girls</li> <li>- Many people are suffering from malaria and other infectious diseases</li> <li>- Insufficient number and quality of health facilities</li> <li>- Selfishness</li> </ul>	<ul style="list-style-type: none"> <li>- Existence of young people</li> <li>- Existence of labour force</li> <li>- Existence of skilled persons</li> <li>- Existence of migrant workers in foreign countries</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of opportunity of vocational training</li> <li>- Difficulty of low school attendance due to additional school fees and corruption</li> <li>- Lack of family planning and undesirable births</li> <li>- Refusal of children vaccinations by parents</li> <li>- Lack of population awareness about health education</li> </ul>
Social	<ul style="list-style-type: none"> <li>- Amicable settlement of conflicts</li> <li>- Presence of the authorities such as parliament members and the vice governor of the Kinshasa province</li> <li>- Household solidarity</li> </ul>	<ul style="list-style-type: none"> <li>- Insufficient functions of street associations and clubs for community facilitation</li> </ul>	<ul style="list-style-type: none"> <li>- Existence of associations and clubs</li> <li>- Presence of churches</li> <li>- Presence of NGOs</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of trust and solidarity of community</li> <li>- Weak community participation</li> <li>- Children's night divagation</li> <li>- Presence of street children (shegues) and criminal activities</li> <li>- Drug addictions</li> <li>- Prostitution by street girls</li> <li>- Sorcery (witchcraft) phenomenon for children and elders</li> <li>- Generation gap and disorder in households</li> <li>- Noise during the day and night by young people, pubs and churches</li> <li>- Land conflicts</li> <li>- Behaviour of NGOs acting as private companies</li> <li>- Intervention of family issues by local churches</li> </ul>

Capital	Strengths	Weaknesses	Opportunities	Threats
Physical	<ul style="list-style-type: none"> <li>- Existence of Quarter administration offices</li> <li>- Existence of football fields</li> </ul>	<ul style="list-style-type: none"> <li>- Bad road conditions</li> <li>- Poor school buildings</li> <li>- Lack of public dustbins</li> <li>- Gutters filled with excess garbage</li> <li>- Aged housing</li> <li>- Lack of food reserve facilities</li> </ul>	<ul style="list-style-type: none"> <li>- Connection to city power</li> <li>- Existence of vocational training schools</li> <li>- Existence of streets and roads</li> <li>- Existence of school infrastructures</li> <li>- Existing of health facilities including a Chinese hospital</li> <li>- Existence of markets</li> <li>- Existence of water supply networks</li> <li>- Existence of transportation</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of sport and cultural facilities including libraries</li> <li>- Insufficient conditions or lack of Quarter administration offices</li> <li>- Water and electricity supply infrastructure are outdated</li> <li>- Lack of public lighting</li> <li>- Bad road conditions</li> <li>- Poor school buildings</li> <li>- Aged housing</li> <li>- No public transportation system in the commune</li> <li>- Bad conditions of markets including public toilets</li> <li>- Lump-sum billing for electricity and water</li> <li>- Vandalism of communal properties</li> </ul>
Natural	<ul style="list-style-type: none"> <li>- Availability of underground water resources (not so deep)</li> <li>- Existence of wells</li> </ul>	<ul style="list-style-type: none"> <li>- Pollution by power generators and use of plastics as fuel</li> <li>- Lack of a dumping site for household garbage</li> <li>- Bad quality of drinking water</li> <li>- Lack of clean environment and excess garbage</li> <li>- High prices of firewood and charcoal</li> <li>- Usage of candles and storm lanterns which cause fires</li> </ul>	<ul style="list-style-type: none"> <li>- Existence of rivers (N'sanga and the N'djili River)</li> <li>- Abundant amount of sunshine for solar energy</li> <li>- Abundant amounts of sand</li> <li>- Sufficient rainfall throughout the year</li> <li>- Land with fertility for agriculture</li> </ul>	<ul style="list-style-type: none"> <li>- Erosion</li> <li>- Floods after rain</li> <li>- Deforestation, including within the reserve sites</li> <li>- Usage of plastic bags</li> <li>- Contaminated water of the N'djili River</li> <li>- Soil contamination of agricultural gardens due to garbage dumping, (including plastic bags)</li> </ul>

Capital	Strengths	Weaknesses	Opportunities	Threats
Financial	<ul style="list-style-type: none"> <li>- Existence of persons with abundant resources in the commune</li> <li>- Money transfers from migrant workers from N'djili</li> </ul>	<ul style="list-style-type: none"> <li>- Low salary/wages</li> <li>- Financial dependency of households with family migrants in foreign countries</li> <li>- High housing rent</li> </ul>	<ul style="list-style-type: none"> <li>- Existence of micro financing institutions such as FINCA and PROCREDIT</li> <li>- Existence of commercial banks and money exchangers</li> </ul>	<ul style="list-style-type: none"> <li>- Monetary instability</li> <li>- Price instability</li> <li>- High interest rates for credits from money lenders or banks</li> <li>- High interest rates and short reimbursement period of micro financing including FINCA</li> <li>- Lack of saving practices</li> </ul>

### 5.3 DEVELOPMENT VISION AND BASIC CONCEPTS

#### 5.3.1 Development Vision for the Year 2018

Considering potentials and predominance in the commune, basic concept for the master plan which harnesses the potentials of the commune and enhances the people's self-reliance shall be established as follows.

#### Actions from N'djili

- Model commune for the development and reconstruction of Kinshasa
- Commune of actions on people's own initiatives

#### 5.3.2 Basic Concept

As the master plan is correspondent with the relevant plans of the government, the basic concept of the master plan is in line with the five pillars in the Provincial Government Program 2007-2011, KINSHASA City. Basic concepts categorized in the five pillars of the program are as follows.

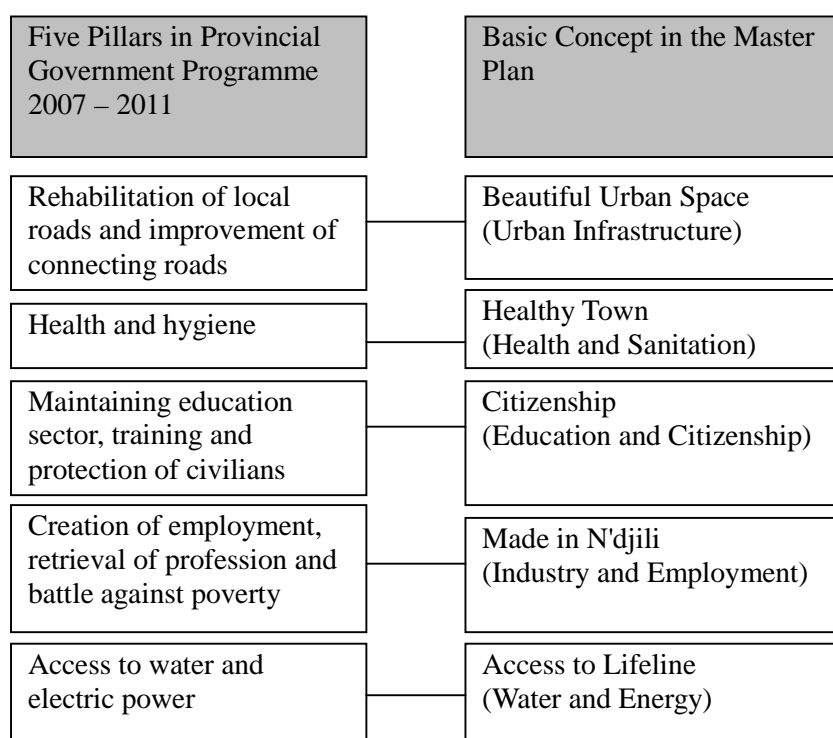


Fig. 5.1 Relationship of Basic Concepts and Five pillars of Kinshasa

### 5.3.3 Province Development Strategy

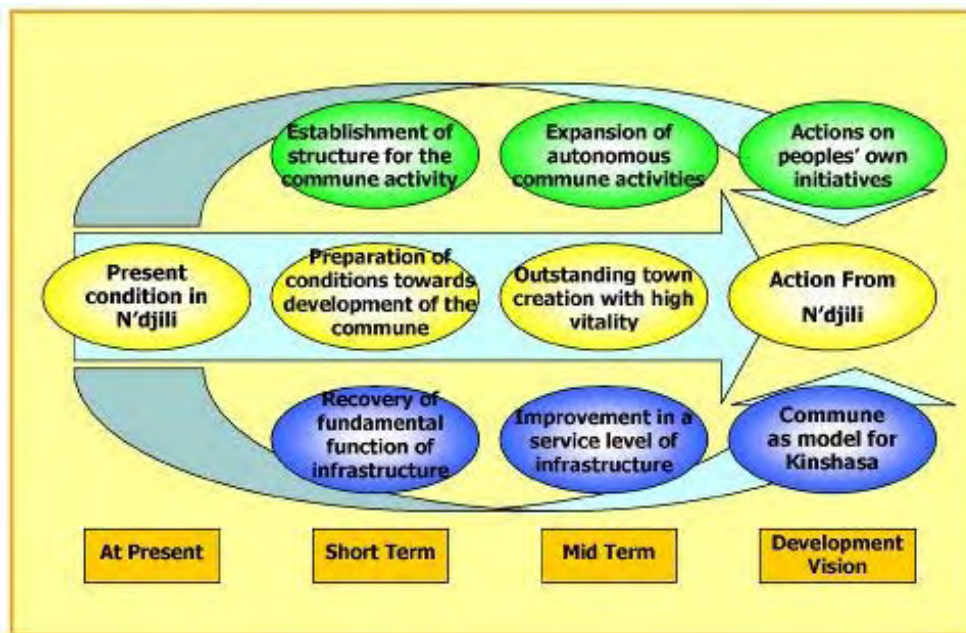


Fig. 5.2 Approach for the Development of N'djili Commune

**Table 5.3 Policy to achieve the Target for the Development of N'djili Commune**

	Short Term (2009-2013)	Mid Term (2014-2018)
Target for the Short and Mid Term	<ul style="list-style-type: none"> <li>a) Fundamental conditions for the overall rehabilitation and development of the commune shall be prepared.</li> <li>b) Towards the rehabilitation and development of the commune, structures of commune people's activity shall be established and reinforced.</li> <li>c) By the recovery of fundamental functions through the rehabilitation of infrastructures in the commune, conditions in which people can enjoy the basic civic services shall be prepared</li> <li>d) The methodology of rehabilitation and development of N'djili commune shall be extended into Kinshasa city and shall be fixed as the model procedure</li> </ul>	<ul style="list-style-type: none"> <li>a) The outstanding town with people's high vitality shall be created and that become the model town in Kinshasa city.</li> <li>b) Positive activities by the commune people shall be deployed in various fields and those activities enable the continuous development.</li> <li>c) In order to make N'djili a commune which has the most superior living environment and living standard, functions and service levels of infrastructures shall be improved.</li> </ul>
Policy to achieve the target	<ul style="list-style-type: none"> <li>a) The organization and system for commune people to participate in administration of commune shall be established.</li> <li>b) Aiming at establishment of organization and system, the model projects through participation of commune people are undertaken.</li> <li>c) Project through participation of commune people shall be deployed and extended taking advantage of the results achieved by the model project.</li> <li>d) Rehabilitation of basic commune infrastructures in each quartier shall be carried out.</li> <li>e) The participation of commune people for the management and practice of maintenance shall be examined, and, in the possible case, shall be carried out by commune.</li> <li>f) Methodology of rehabilitation in N'djili shall be standardized and deployed to other communes by assistance to the provincial government.</li> </ul>	<ul style="list-style-type: none"> <li>a) The planning and implementations of improvement of living conditions and living environments shall be promoted by people's autonomous initiatives.</li> <li>b) Project through participation of commune people shall be deployed extensively and continuously.</li> <li>c) Improvement of infrastructures shall be accelerated to enhance the service level and functions.</li> <li>d) Management and control of maintenance of infrastructure are carried out by autonomous activity.</li> <li>e) Issues for the long term development of the commune shall be tackled for more invigorating the commune.</li> </ul>

## CHAPTER 6 : ACTION PLAN FOR COMMUNITY VITALIZATION

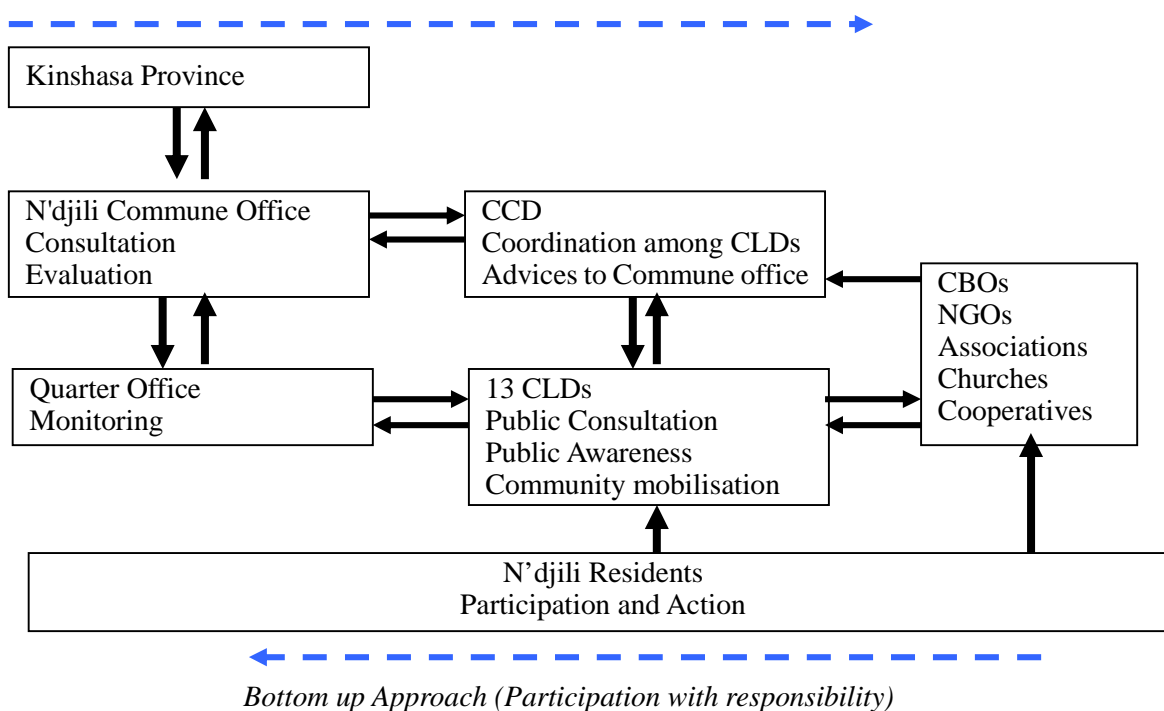
### 6.1 INSTITUTIONAL ARRANGEMENT FOR ACTION

The process of preparation of the Action Plan required actual participation and commitment of stakeholders, especially for responsible official persons from the provincial Ministry of Plan, Budget, Public Works and Infrastructure N'djili commune office and representatives of Committee of Commune Development (CCD) and Committee for Local Development (CLD)

#### 6.1.1 Local Development Mechanism

A local development mechanism should have a significant initiative for commune development. Local government, especially for the commune authority should take a leadership for local level community development. They have responsibilities for drawing development pictures and administrative arrangements. Also, international donors can support to those local efforts. Both government and donors, however, have limited financial capacity to solve various kinds of issues in commune level. Local level or grassroots development mechanism and initiatives are significantly important to tackle various miscellaneous issues in the community. In this regard, the government and grassroots institutions should collaborate for planning, implementation, and evaluation of those community development activities. The CLDs can be a key coordinators and facilitators to mobilize the population in cooperation with churches, NGOs and associations.

*Top down Approach (Direction and Accountability)*



**Fig. 6.1 Proposed Commune Development Model**



### **6.1.2 Roles and Responsibilities of Actors**

For the functioning of local development mechanism, the following roles and responsibilities should be taken by the community development actors.

#### **(1) Kinshasa Provincial Government**

As a provincial governance body, the Provincial government needs to respect the N'djili Action Plan for the commune level development intervention and coordinate with higher level development plans such as a Kinshasa city master plan. The responsible officials who are engaged in the process of JICA study, on the other hand, can utilise the Action Plan as a model of commune development plan for other communes in Kinshasa Province in the future.

#### **(2) N'djili Commune Office**

The commune office is the owner of N'djili Action plan. The office needs to prepare development budget considering the realisation of the Action plan and the target year (2018). Also, commune office needs to monitor the progress and achievement of the Action plan and may have to consider the modification of Action plan respecting both the government policy concerning development interventions and opinions from the population. The roles and responsibilities of the commune office are significant. The commune office should be the coordinator and a facilitator for holding consultation meetings with CCD and CLD members.

#### **(3) Committee of Commune Development (CCD)**

The CCD is the highest level consultation body for commune development as a grassroots institution, although it has not been established yet. It needs to take responsibility to coordinate needs and interests of the CLDs considering the common interest of commune, and to advice to the commune office as the representative of the population. On the other hand, it can provide opportunities to train or instruct CLD leaders when CLD members need to conduct development activities with the population using financial support from the government or donors.

#### **(4) Committee of Local Development (CLD)**

The CLDs are grassroots institutions close to the population. They are key for community-led development activities in the field working together with the population and other forms of CBOs considering policies of the government or donors. They need to conduct public consultation, community mobilisation and awareness building of the residents and CBOs when they plan, do and supervise community development activities. Having a good relationship and cooperation with the CBOs such as NGOs, churches, and associations is significantly important for them, because it is difficult for them to implement any development projects without cooperation with other civil society organisations.

#### **(5) Civil Based Organisations (CBOs)**

CBOs in the commune include NGOs, churches and associations. There are many CBOs

working for the population in various sectors. They are key for promotion and enforcement of development activities or community actions. Churches and NGOs have significant roles of sensitising the population both in general development issues and in specific sector issues which they are working for. Associations or cooperatives can be an implementer of specific development activities such as farmers associations for agricultural project and a maintenance committee for road and gutter rehabilitation.

### **6.1.3 Realization of Action Plan and Securing Sustainability**

Implementation of the development Action plan with sustainability requires the commitment of not only the government and donors but also the civil society and the population. In general, the following institution arrangements are needed in each process of preparation and implementation of Action Plan.

#### **(1) Planning Process**

Through the Community Profile Survey, the JICA study team established the good relationship with the CCD members as well as the counterparts of N'djili commune office and the Provincial Ministry of Plan, Budget, Public Works and Infrastructure. The team involved these stakeholders in the process of data collection, planning workshops, and stakeholder meetings. It is necessary for the stakeholders especially the counterparts to participate in the planning activities working together with the JICA study team. On the other hand, the study team needs to coordinate with donors to finance the Action plan in the future. The Action plan should be a feasible plan with dream for the future. It is necessary to examine actual capacity and constraints of the grassroots institutions, budget allocation of the government and donors through the planning process.

#### **(2) Process of Implementation of Pilot Project**

Pilot projects will be evaluated as practices for a feasible Action plan. Lessons learned will be drawn from the pilot projects. Feasibilities concerning institutional and technical aspects are needed to verify through the implementation. Especially in capacities and capability of the grassroots institutions such as CLDs will be assessed through their participation to the project activities. Effectiveness of utilisation of local resources especially in human resources for unskilled works such as construction works, in addition, should be assessed through the implementation.

#### **(3) Implementation and Maintenance of the Action Plan**

It may have to be considered that implementation and maintenance of the Action Plan after the completion of JICA study. The counterparts and the CCD are needed to take initiative for maintaining the Action plan and the local development initiatives for sustainable commune development. Indeed, the Provincial Ministry of Plan, Budget, Public Works and Infrastructure can expand the commune level development planning activities utilizing the

model of N'djili.

## 6.2 ESTABLISHMENT OF IMPROVEMENT POLICY FOR URBAN PLANNING ISSUES

Corresponding to issues mentioned Action Plan Chapter 2 Present Conditions of the N'djili Commune, required activities for urban environmental improvement towards urban rehabilitation are shown in Table 6.2.1 as improvement policy.

**Table 6.1 Improvement Policy for Urban Planning and Land Use Issues**

Urban environment	Urban planning	Legal affairs, Implementation of plan
A-1. Urban redevelopment, land readjustment - high utilization of land (advancement of reconstruction into multi-floor building) - restructuring of public space (road network, park et al.) - improvement of public space relating to redevelopment projects  A-2. Construction and reconstruction of individual public facilities  A-3. Voluntary prescription of construction rules in N'djili commune	B-1. Basic census survey for whole Kinshasa Province.  B-2. Development policy making and preparation of Urban master plan for whole Kinshasa Province - political decision making - inter ministerial counsel - discussion and negotiation with every commune for future prospect  B-3. Prescription of construction rules according to local condition and customs	C-1. Enhancement and complementing of legal system concerning urban planning, construction and land use  C-2. Strengthening capability for observation and verification on construction activities - its entrustment to residents' association for example

### 6.2.1 Improvement Programmes for Urban Planning and Land Use Issues

#### (1) Civic Group Based Town Management Program

The program intends to train residents group on urban management and planning issues. Commission on part of observation works is intended to clue the following voluntary town management activities by residents' group. These activities are expected to be advanced for projects on improvement of urban environment and urban redevelopment in the long term.

#### (2) Facility Improvement Based Program

The program intends to support residents' group in its requests to improve and to newly construct public facilities for related organizations. In N'djili commune, environmental improvement of market area and construction of facilities for agricultural activities such as a public cold storage are recommended to be considered for this program. Applying this program to other sectorized issues should be considered also.

### 6.2.2 Land Use Restructuring Policy

#### (1) About new Development Site

There is no land that can be newly developed in N'djili commune. It is necessary to reorganize existing blocks in urban area to correspond to an overpopulated situation, and to promote their advanced use.

### **(2)About Agricultural Land**

The farmland on east shore of N'djili River is a valuable agricultural site in the Kinshasa outskirts. The productive activity there is limited livelihood for agricultural pursuer. Moreover, it functions as a river buffer zone and easing the erosion of land. The geological features of present agricultural site are considered not suitable for construction. So it should be preserved in the future land-use plan.

### **(3)About the Land Use System**

Considering the current situation of the legal system concerning city planning and construction permission applied to N'djili commune and Kinshasa city, short mid-term effect by the introduction of the control measure based on the subdivided land use division adopted in the advanced country cannot be expected. The mechanism of a clear land use restriction doesn't exist in the law and the legal system now. Moreover, mixed used house combined with shop and atelier occupies many parts in the commune excluding specific facilities such as commercial establishment on the trunk road, market, school and hospital, etc. For this circumstance, the possibility of establishing detailed land use system and regulations that are suited to the local lifestyle is quite low. Therefore, The Study proposes an examination of the building capacity of the whole commune and the entire quartier, and provision for the rough land use policy at the commune level, instead of precise zoning with land use categories.

### **(4)Development of Architectural Capacity**

Since the Commune already suffers from overcrowding, the remodelling of existing building into multilayered structures is needed to secure enough floor space for residents. It is not expected that remodelling of the building in the commune would be advanced rapidly in the short term from the viewpoint of its cost implications. Moreover, a forcible introduction to multilayer building might overflow low quality buildings that would pose a safety problem. When these situations are considered in totality, the evolution of the present one-storeyed house constructions into two storeyed and three storeyed constructions with the adjunctive acquisition of public space and communal facilities in accordance with the construction of multi-layered structures is a realistic and feasible measure for the medium/long term.

### **(5)Reorganization of Land Use**

After the execution goal of the above-mentioned measure and its systematic framework are set up, it is necessary to divide its land use for the long term into a residential, commercial and industrial land use. The commercial zone should be arranged along the main districts road from the viewpoint of the functional, hygiene and safety reasons. Furthermore, industrial and

handicraft land use would be placed near to the primary district road to secure smooth access.

### **6.2.3 Urban Space Improvement Scheme**

#### **(1) Correspondence to Wide Urban Area Function**

In the urban master plan by BEAU in 1975, a connecting road with Matete commune that is adjacent to N'djili commune and the east-west bypass road that passes over the south of N'djili commune are planned in addition to Bld. Lumumba corresponding to the city development in the direction of east and west of Kinshasa. For the road between Metete and N'djili commune, it is difficult to secure construction site because the urbanization of Matete commune has progressed. Therefore, land use plan of N'djili commune in consideration of this road is inapposite. The matter of the latter should be examined in the future, from the viewpoint of the improvement of excessive concentration traffic on Bld. Lumumba and the response to the city development toward the south of today.

It is necessary to work on the rehabilitation and the high standardization of Route Nsanda in consideration of the south to the by-pass road in the future for the future plan of N'djili commune. However, it is not appropriate to plan and design the Route Nsanda for through traffic from the land use situation around the road. It is necessary to supplement the south north traffic in N'djili commune with other road networks even locating Route Nsanda as the trunk road.

#### **(2) Collaboration with the Vicinity Commune**

It should be assumed the functional cooperation of district (5 communes) including N'djili commune is corresponding to the city development in the eastern part of Kinshasa of the future. In the short to mid-term, it is necessary to correspond to the traffic systems between communes of the future, and to advance securing the site gradually. It is necessary to advance improvement of the radial road between Quartier2 and 3 as a primary traffic road with Kinbabwe commune that is adjacent to the east with land. Also environmental improvement of the functional enhancement surrounding of Route Bangala is also required. In the improvement of the traffic with adjoining Masina commune to the north, it is necessary to advance the improvement of the intersection of the access road from N'djili commune and Bld. Lumumba.

#### **(3) Reconstruction of Road Network in District**

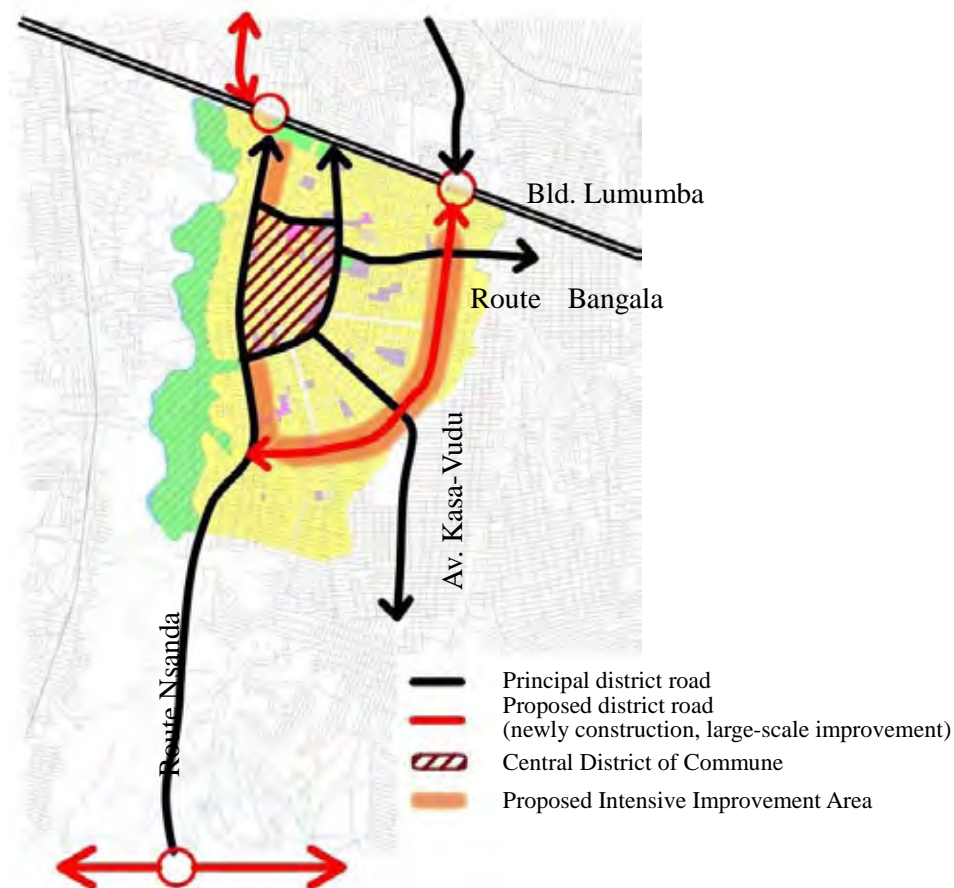
The wide width radial roads of N'djili commune were constructed when the ancient quarters (Quartier1-7) were developed initially. All traffic tends to concentrate to the central ring road that surrounds quartier7, under the network on a current radial road. Considering the enhancement and a population increase of N'djili commune, there might be a problem in its traffic efficiency and safety. In a mid-term frame, an existing road is proposed to be connected and an outer ring road constructed.

**(4) Upgrade of Land Use**

The majority of the buildings in N'djili commune are the one-storied construction, although it is density area. In attempting the improvement of the living environment and living conditions under the situation of the delimitation of land, it is necessary to attempt the construction of the multilayered buildings and introduction of communal facilities (road, park, and district facilities) by redeveloping the district at the same time. Because the budget used for such redevelopment is expected to be limited, it is necessary to attempt the strategically urban space improvement along the frame of the city planning.

**(5) Construction of Agricultural Road**

Because Quartier8 and 9 are located on relatively smooth sloping ground that descends to N'djili River, the district redevelopment similar to other Quarters would be difficult. The improvement of the district environment is planned to be attempted by rehabilitating agricultural roads and area environmental improvement around the road additionally.



**Fig. 6.2 Urban Space Structure in N'djili**

**6.2.4 Developing Scheme in the Commune**

The development capacity is examined about the ring road and the Route Nsanda environmental improvement that relates to a mid/long-term residential environmental enhancement mostly among the district improvement programs proposed in 8-3. The

following content is assumed as a district improvement program.

- In this redevelopment area, the road of width about 15m is constructed in the centre and rebuilding the structures as multilayered buildings is advanced on both sides of the road.
- A necessary public facilities site is secured in the redevelopment area. The cost for district environmental maintenance and reconstruction into multilayered building is managed by delivering and selling these communal facilities sites and road sites.
- The land use after its improvement it assumes 75% for residential and mixed use area, 5% for the public facilities site, and 20% for road area.
- The building constructed by the redevelopment assumes three storeys. The promotion of the business is attempted by easing its building coverage ratio to 50 percent in consideration of contribution to the district environmental enhancement.

### 6.3 ACTION PLAN

#### 6.3.1 Urban Infrastructure

Problems, Actions and Goal in Urban Infrastructure Sector are shown in the Fig.6.3.

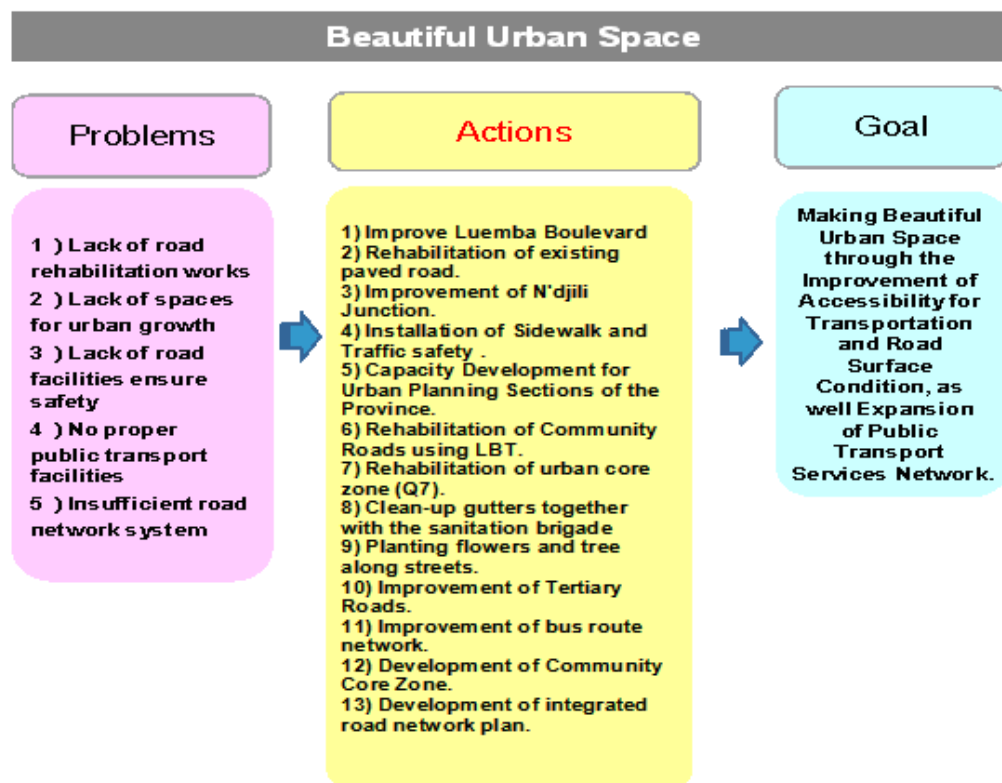


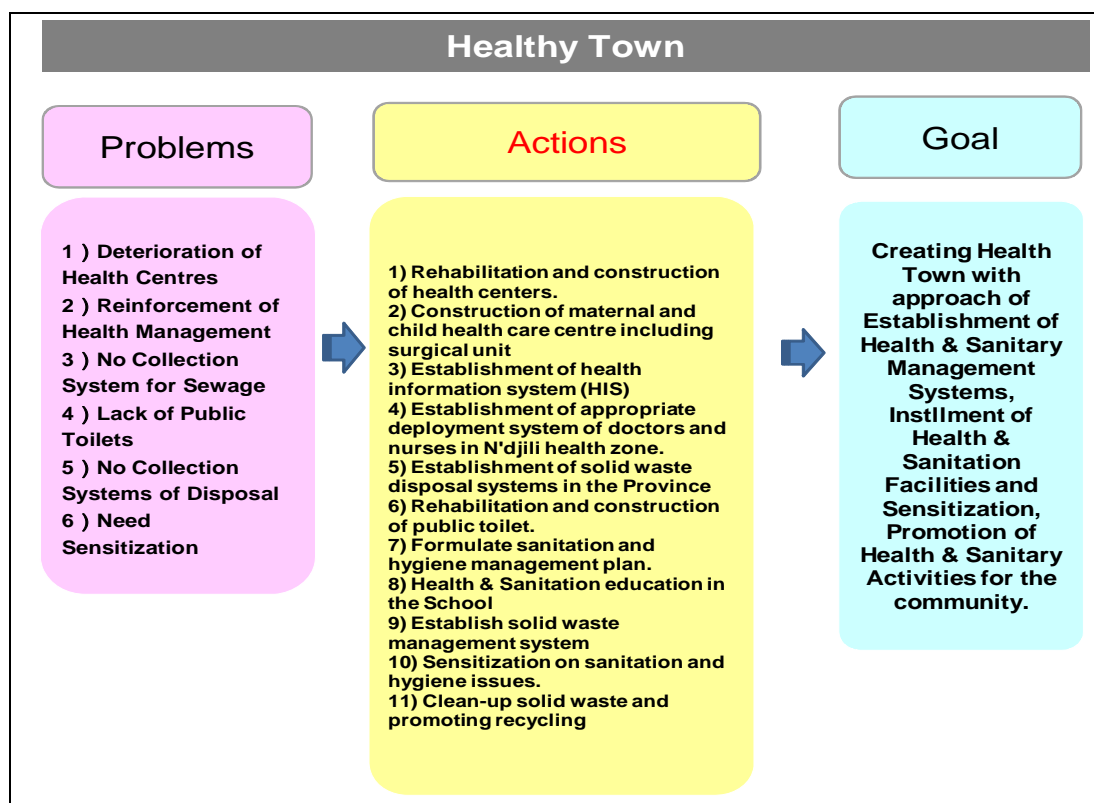
Fig. 6.3 Problems, Actions and Goal in Urban Infrastructure Sector

**Table 6.2 Development Policy and Actions for Urban Infrastructure**

Policy	Action
Establish adequate road and drainage maintenance system by community participation	<ul style="list-style-type: none"> <li>• Improve Luemba Boulevard as a main street of N'djili.</li> <li>• Rehabilitation of existing paved roads.</li> <li>• Improvement of N'djili Junction to relief traffic congestion.</li> <li>• Rehabilitation of community roads by LBT.</li> <li>• Clean-up gutters together with the sanitation brigade</li> </ul>
Ensure the sustainable urban growth with strong and stable economy	<ul style="list-style-type: none"> <li>• Capacity Development for Provincial Urban Planning Sections of the Province.</li> <li>• Rehabilitation of urban core zone (Q7).</li> <li>• Development of Community Core Zone.</li> <li>• Planting flowers and tree along streets</li> <li>• Enhancement of participatory approach for community development</li> </ul>
Satisfy increasing traffic demand and ensure traffic safety and security	<ul style="list-style-type: none"> <li>• Installation of Sidewalk and Traffic safety facilities/Pedestrian crossings, Traffic sign, Humps, etc.</li> <li>• Improvement of Tertiary Roads.</li> </ul>
Enhance equal accessibility and promote public transport	<ul style="list-style-type: none"> <li>• Improvement of bus route network, bus terminal, bus stops</li> </ul>
Establish adequate road network system with accessibility (Long Term)	<ul style="list-style-type: none"> <li>• Development of integrated road network plan.</li> </ul>

**6.3.2 Health and Sanitation**

Problems, Actions and Goal in Health and Sanitation Sector is shown in the Fig.6.4



**Fig. 6.4 Problems, Actions and Goal in Solid Waste Sector**

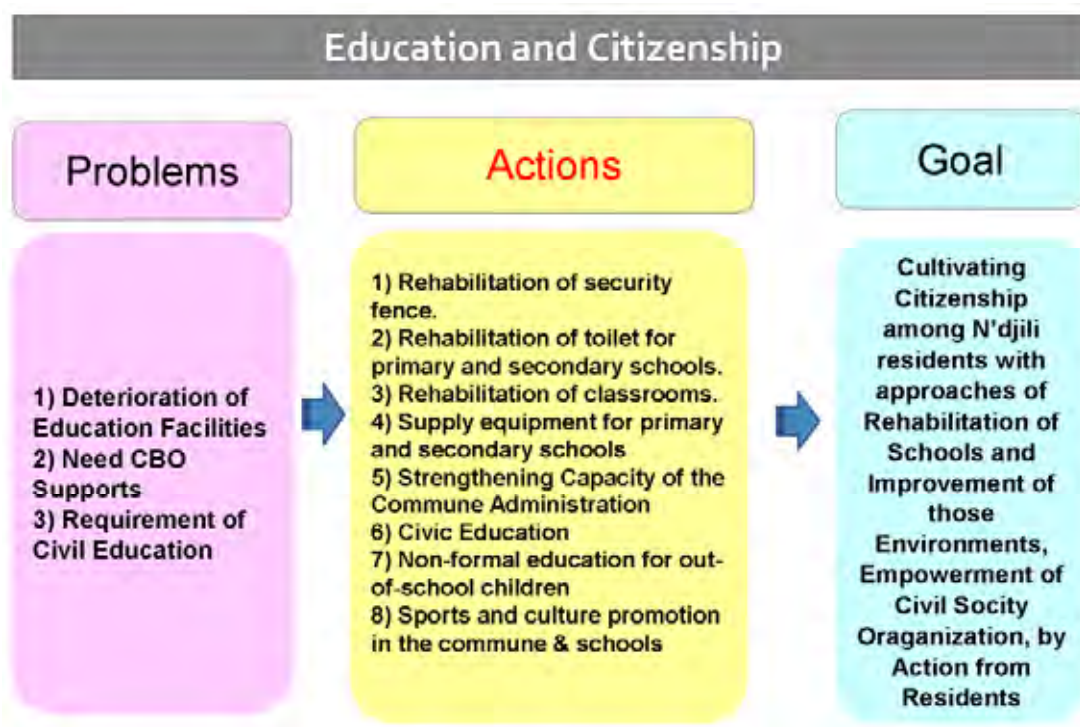


**Table 6.3 Development Policy and Actions for Health & Sanitation**

Policy	Action
Rehabilitation of the Health Centres, Development of Health Centre Maintenance System (Action by Provincial Government)	<ul style="list-style-type: none"> <li>• Rehabilitation and construction of health centers as focal points of local health services</li> <li>• Construction of maternal and child health care centre including surgical unit</li> <li>• Establishment of health information system (HIS)</li> <li>• Establishment of appropriate deployment system of doctors and nurses in N'djili health zone.</li> <li>• Establishment of solid waste disposal systems in the Province</li> </ul>
Establishment of Health & Sanitary Management Systems , Installment of Sanitation Facilities (Action by Commune)	<ul style="list-style-type: none"> <li>• Rehabilitation and construction of public toilet.</li> <li>• Formulate sanitation and hygiene management plan.</li> <li>• Health &amp; Sanitation education in the School</li> <li>• Establish solid waste management system</li> </ul>
Sensitization, Promotion of Health & Sanitation Activities (Action by Residents)	<ul style="list-style-type: none"> <li>• Sensitization on sanitation and hygiene issues.</li> <li>• Clean-up solid waste and promoting recycling</li> </ul>

### 6.3.3 Education and Citizenship

Problems, Actions and Goal in Education and Citizenship Sector is shown in the Fig.4.5



**Fig. 6.5 Problems, Actions and Goal in Education and Security**

**Table 6.4 Development Policy and Actions for Education and Citizenship**

Policy	Action
<b>Rehabilitation of Schools and Improvement of those Environment, Support School Facilities and Equipments.                      (Action by Province)</b>	<ul style="list-style-type: none"> <li>• Rehabilitation of security fence.</li> <li>• Rehabilitation of toilet for primary and secondary schools.</li> <li>• Rehabilitation of classrooms.</li> <li>• Supply equipment for primary and secondary schools</li> </ul>
<b>Empowerment of Civil Society Organization                      (Action by Commune)</b>	<ul style="list-style-type: none"> <li>• Strengthening Capacity of the Commune Administration</li> </ul>
<b>Action from Residents/community peoples                      (Action by Residents)</b>	<ul style="list-style-type: none"> <li>• Civic Education</li> <li>• Non-formal education for out-of-school children</li> <li>• Sports and culture promotion in the commune &amp; schools</li> </ul>

### 6.3.4 Industry and Employment

Problems, Actions and Goal in Industry and Employment Sector is shown in the Fig.6.6

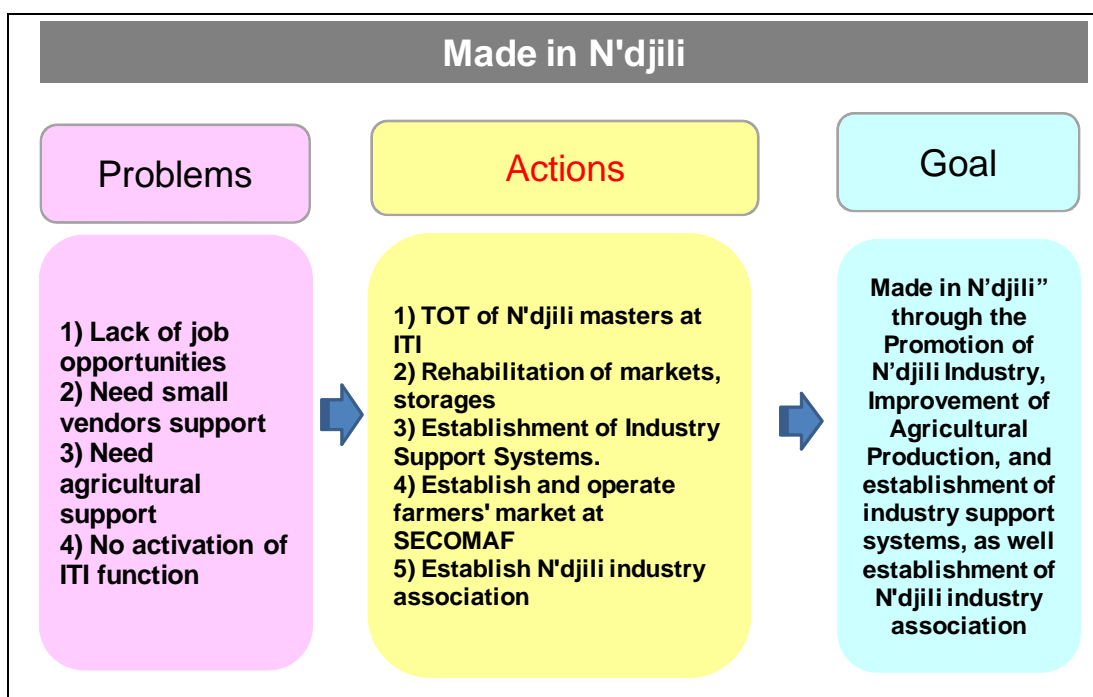


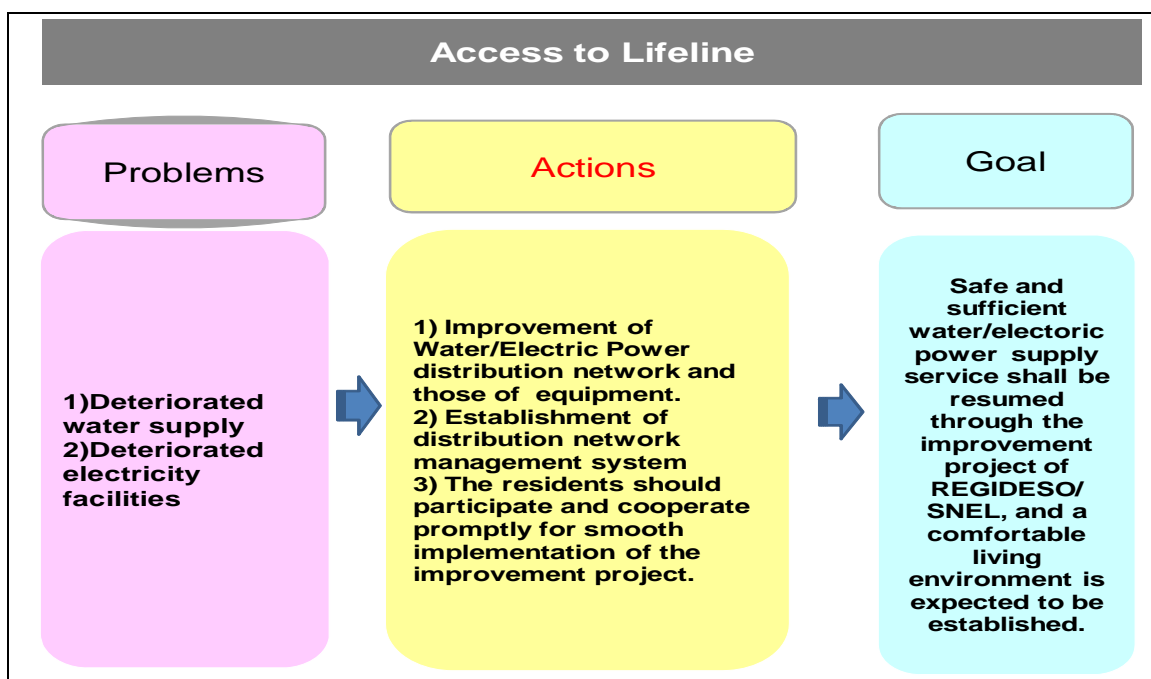
Fig. 6.6 Problems, Actions and Goal in Industry & Employment

Table 6.5 Development Policy and Actions for Industry & Employment

Policy	Action
<b>Promotion of N'djili Industry, (Action by Provincial Government and Commune)</b>	<ul style="list-style-type: none"> <li>TOT of N'djili masters at ITI</li> <li>Rehabilitation of markets, storages</li> <li>Establishment of Industry Support Systems.</li> </ul>
<b>Improvement of Agricultural Production (Action by Provincial Government and Commune)</b>	<ul style="list-style-type: none"> <li>Establish and operate farmers' market at SECOMAF</li> </ul>
<b>Networking of Small Vendors (Action by Residents)</b>	<ul style="list-style-type: none"> <li>Establish N'djili industry association</li> </ul>

### 6.3.5 Water and Electric Power Supply

Problems, Actions and Goal in Water and Electric Power Supply is shown in the Fig.4.7



**Fig.6.7 Problems, Actions and Goal in Water Supply & Electric Power Supply**

**Table 6.6 Development Policy and Actions for Water Supply & Electric Power Supply**

Policy	Action
Distribution Network Management (Action by Provincial Government)	<ul style="list-style-type: none"> <li>Improvement of Water/Electric Power distribution network and water equipment.</li> <li>Establishment of distribution network management system</li> </ul>
Resident cooperation in improvement works by REGIDESO, SNEL (Action by Commune & Residents)	<ul style="list-style-type: none"> <li>The residents should participate and cooperate promptly for smooth implementation of the improvement project.</li> <li>The local residents and community should cope with the suspension of water/electric power supply caused by the construction works during the improvement project.</li> <li>The social education should be carried out as a part of this project and shall include "improvement of water/electric power supply service" and "improvement in water/electric power saving consciousness".</li> </ul>

## CHAPTER 7 : IMPLEMENTATION SCHEDULED ON ACTION PLAN

### 7.1 10 YEARS ACTION PLAN FOR EACH SECTORS

10 year Action Plan for each sectors from 2009 to 2018 are shown in the Table below.

#### 7.1.1 Action Plan for Urban Infrastructure

**Table7.1 Action Plan for Urban Infrastructure**

	Rehabilitation Phase(Short Term)					Development Phase(Middle Term)					Long Term
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	After 2019
<b>Province</b>	Rehabilitation of Luemba Blv. Rehabilitation of existing paved roads Capacity Development for Provincial Urban Planning Sections of the Province Improvement of N'djili Junction to relief traffic congestion Installation of Sidewalk and Traffic safety facilities/Pedestrian crossings, Traffic sign, Humps Improvement of Tertiary Roads Improvement of bus network, bus terminal, bus stops										
<b>Commune</b>	Rehabilitation of community roads by LBT Rehabilitation of City Centre in Q7 Development of Community Core Zone										
<b>CLDs &amp; CBOs</b>	Clean-up gutters together with the sanitation brigade Planting flowers and tree along streets										
<b>Policy</b>	Establish adequate road and drainage maintenance system by community participation Ensure the sustainable urban growth with strong and stable economy					Enhance equal accessibility and promote public transport Satisfy increasing traffic demand and ensure traffic safety and security					Establish adequate road network system with accessibility

7.1.2 Action Plan For Health And Sanitation

Table 7.2 Action Plan For Health And Sanitation

	Rehabilitation Phase(Short Term)					Development Phase(Middle Term)					Long Term After 2019	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
<b>Province</b>		Rehabilitation and construction of health centers										
			Construction of maternal and child health care centre including surgical unit									
			Establishment of health information system (HIS) on epidemiological deceases and reproductive health									
			Establishment of solid waste disposal systems in the Province									
<b>Commune</b>		Rehabilitation and construction of public toilet										
			Formulate sanitation and hygiene management plan									
			Health & Sanitation education in Schools and Streets									
			Establish solid waste management system in the Commune									
<b>CLDs &amp; CBOs</b>		Sensitization on sanitation and hygiene issues										
		Clean-up solid waste and promoting recycling										
<b>Policy</b>		Rehabilitation of the Health Centres, Development of Health Centre Maintenance System										
		Establishment of Health & Sanitary Management Systems , Installment of Sanitation Facilities										
		Sensitization, Promotion of Health & Sanitation Activities										

7.1.3 Action Plan for Education and Citizenship

Table7.3 Action Plan for Education and Citizenship

	Rehabilitation Phase(Short Term)					Development Phase(Middle Term)				Long Term After 2019
	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Province	Rehabilitation of security fence for primary and secondary schools Rehabilitation of toilet for primary and secondary schools Rehabilitation of classrooms					Supply equipment for primary and secondary schools				
Commune	Strengthening Capacity of the Commune Administration									
CLDs & CBOs	Civic Education					Non-formal education for out-of-school children Sports and culture promotion in the commune & schools				
Policy	Rehabilitation of Schools and Improvement of those Environment, Support School Facilities and Equipments. Empowerment of Civil Society Organization Action from Residents/community peoples									

7.1.4 Action Plan for Industry and Employment

Table7.4 Action Plan for Industry and Employment

	Rehabilitation Phase(Short Term)					Development Phase(Middle Term)				Long Term After 2019
	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Province	TOT of N'djili masters at ITI Rehabilitation of markets, storages Establish and operate farmers' market at SECOMAF									
Commune	Establishment of Industry Support Systems									
CLDs & CBOs	Establish N'djili industry association									
Policy	Promotion of N'djili Industry Improvement of Agricultural Production Networking of Small Vendors									

### 7.1.5 Action Plan for Water and Lifeline

**Table 7.5 Action Plan for Water and Lifeline**

	Rehabilitation Phase(Short Term)					Development Phase(Middle Term)					Long Term
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	After 2019
<b>Province</b>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">                     Rehabilitation and upgrading of REGIDESO water supply network                 </div> <div style="border: 1px solid black; padding: 5px;">                     Rehabilitation and upgrading of SNEL electricity supply network                 </div>										
<b>Commune</b>											
<b>CLDs &amp; CBOs</b>											
<b>Policy</b>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;">                     Distribution Network Management                 </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">                     Resident cooperation in improvement works by REGIDESO, SNEL                 </div>										

### 7.2 IMPLEMENTATION SCHEDULE ON ACTION PLAN FOR N'DJILI

Proposed implementation schedule on Action Plan in N'djili Commune is shown in Table 7.6.



Table 7.6 Proposed Implementation Schedule on Action Plan for N'djili

Sector	Actor	Financ/Cooperation	Rehabilitation Phase (Short Term)			Development Phase (Middle Term)							
			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
<b>Pillar 1 Beautiful Urban Space (Urban infrastructure)</b>  1) Lack of road rehabilitation works 2) Lack of spaces for urban growth 3) Lack of road facilities ensure safety 4) No proper public transport facilities 5) Insufficient road network system	Province	Province/JICA		Rehabilitation of Luembisa Blv.									
		Province/OVD/Donor		Rehabilitation of existing paved roads									
			Province/OVD/Donor		Capacity Development for Provincial Urban Planning Sections of the Province								
			Province/OVD		Improvement of N'djili Junction to relief traffic congestion								
			Province/OVD		Installation of Sidewalk and Traffic safety facilities/Pedestrian crossings, Traffic sign, Humps, etc.								
			Province/OVD/Donor		Improvement of bus route network, bus terminal, bus stops								
			Province/OVD/Donor		Improvement of tertiary roads								
			Province/OVD/Donor		Improvement of bus route network, bus terminal, bus stops								
			Commune/NGO		Rehabilitation of community roads by LBT								
			Commune/NGO		Rehabilitation of urban core zone (O7)								
		Commune/NGO/Donor		Rehabilitation of urban core zone (O7)									
		CLDs & CBOs		Development of Community Core Zone									
		CLD/NGO		Clean-up gutters together with the sanitation brigade									
		CLD/NGO		Planting flowers and tree along streets									
<b>Pillar 2 Healthy Town (Health &amp; Sanitation)</b>  1) Deterioration of Health Centres 2) Reinforcement of Health Management 3) No Collection System for Sewage 4) Lack of Public Toilets 5) No Collection Systems of Disposal 6) Need Sensitization	Province	Province/NGO/Donor		Rehabilitation and construction of health centers									
		Province/NGO/Donor		Construction of maternal and child health care centre including									
			Province/NGO/Donor		Establishment of health information system (HIS)								
			Province		Establishment of appropriate deployment system of doctors and nurses in N'djili health zone								
			Province/NGO/Donor		Establishment of solid waste disposal systems in the Province								
			Commune/NGO/Donor		Rehabilitation and construction of public toilet								
			Commune		Formulate sanitation and hygiene management plan								
			Commune		Health & Sanitation education in the School								
			Commune		Establish solid waste management system in the Commune								
			CLDs & CBOs		Sensitization on sanitation and hygiene issues								
		CLD/NGO		Clean-up solid waste and promoting recycling									
		CLD/NGO		Rehabilitation of security fence for primary and secondary schools									
<b>Pillar 3 Citizenship (Education &amp; Citizenship)</b>  1) Deterioration of Education Facilities 2) Need CBO Supports 3) Requirement of Civil Education	Province	Province/NGO/Donor		Rehabilitation of toilet for primary and secondary schools									
		Province/NGO/Donor		Rehabilitation of classrooms									
			Province/NGO/Donor		Supply equipment for primary and secondary schools								
			Commune/NGO		Strengthening Capacity of the Commune Administration								
			CLDs & CBOs		Non-formal education for out-of-school children								
			CLD/NGO		Rehabilitation of security fence for primary and secondary schools								
			CLD/NGO		Rehabilitation of toilet for primary and secondary schools								
			CLD/NGO		Rehabilitation of classrooms								
			Province		TOT of N'djili masters at ITI								
			Province		Rehabilitation of markets, storages								
<b>Pillar 4 Made in N'djili (Industry &amp; Employment)</b>  1) Lack of job opportunities 2) Need small vendors support 3) Need agricultural support 4) No activation of ITI function	Commune	Commune/NGO		Establish N'djili industry association									
		CLDs & CBOs		Rehabilitation and upgrading of RESIDSO water supply network									
			CLD/NGO		Rehabilitation and upgrading of SNEL electricity supply network								
			CLD/NGO		Rehabilitation and upgrading of SNEL electricity supply network								
			CLD/NGO		Rehabilitation and upgrading of SNEL electricity supply network								
			Province		Rehabilitation and upgrading of RESIDSO water supply network								
			Province		Rehabilitation and upgrading of SNEL electricity supply network								
			Commune		Rehabilitation and upgrading of SNEL electricity supply network								
			Commune		Rehabilitation and upgrading of SNEL electricity supply network								
			Commune		Rehabilitation and upgrading of SNEL electricity supply network								

## CHAPTER 8 : PILOT PROJECT

### 8.1 OBJECTIVE

“Pilot Project” can be defined as “A test or trial to demonstrate the effectiveness of a full program”. The Study implemented 4 Pilot Projects during The Study period. Main Objectives of the Pilot Projects are as shown below;

- Projects of Action Plan include not only facilities/infrastructure improvement but also community participatory approaches particularly sectors of “Health and Sanitation” and “Education and Citizenship” activities.
- To implement a variety of projects successfully, the Action Plan verifies the efficiency and effectiveness of Projects in advance. In this context, The Study tried to implement some Pilot Projects for verification of the Action Plan.
- Pilot Projects also have the intention of gaining precious lessons by the process of trial and error in project activities. Lessons learned from the Pilot Projects would be applied in other projects at the implementation stage.

### 8.2 CIVIC EDUCATION

#### 8.2.1 Outline of the Civic Education Project

Overall Goal	CLDs are recognised in the community and can plan and implement various community development projects in N’djili commune towards MDGs in a participative responsible and transparent manner.			
Project Purpose	CLD members can facilitate participatory community development to the population using acquired attitude, knowledge and skills respect of law, human rights, and realizing internal good governance.			
Outputs	1. CLD members are capable of putting together needs for the community development of their communes, and are fully aware of human right through the training. 2. CLDs prepare action plans for community development in each quarter by a participatory approach			
Activities	Jan	Feb	Mar	Apr
1-1 Preparation of Training	—————			
1-2 Implementation of Training			—————	
2-1 Prepare action plans				—————
Inputs	Human resources: (JICA international and national staff, DMK staff) Materials: (Syllabus, Poster, Sticker) Training: (modules) Events (Grand Opening, Cultural day)			

#### 8.2.2 Selection of Trainees

After a series of discussion between the JICA Study Team and Multina DMK, the preparation works for Civic Education commenced. The JICA Study Team and Multina DMK set up selection criteria of participants of the Civic Education. The criteria were: should be a member of CLD; be available throughout the period of the training sessions; at least 50 percent are youth population; and at least 50 percent are women.

To emphasise the gender equality at least three female participants from each CLD were selected to join the sessions, although the CLDs could not select at least 50% of women and youth as specified in the selection criteria. Many of the participants tended to be in the prime of their lives and highly educated. Thus, the project could select potential leaders in the commune.

### 8.2.3 Module and Material Development

Approach of the Civic Education Campaign was based on the participatory method. First, CLD members discussed the needs and decided the contents of the modules by themselves. For the purpose of this, several workshops were held to increase the awareness of the CLD members who were the main target of this project. Participatory methods were applied for all workshops to find out the problems and identify Civic Education needs in the commune and CLD members. The results of these workshops were used to develop modules of the ensuing Civic Education curricula. The curricula developed through this exercise consisted of eight modules as shown in the table below:

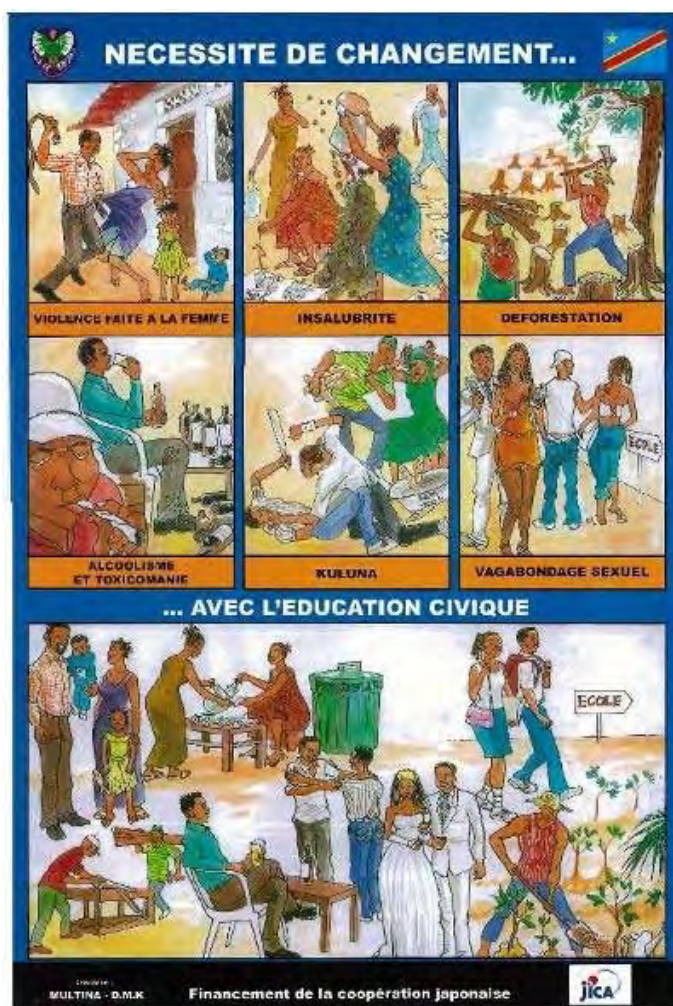
**Table 8.1 Modules of Civic Education**

No.	Module	Facilitator/Trainer
1	Citizens' Responsibilities, Individual and Family Responsibilities	AJEPN Mr. Gustave Nsilulu
2	Good Governance	GAAD/NPO & MULTINA-DMK
3	Human Rights and Law Observation	Multina DMK
4	Problems to be Solved: Problems Related to Citizens and Government	ADEC and Multina DMK
5	CLD Members' Needs, Competencies and Responsibilities	Multina DMK
6	Communication and Peaceful Resolution/Settlement of Conflicts	Multina DMK
7	Preparing Action Plans	Multina DMK
8	Training of Trainers	GAAD and Multina DMK

Preparing Action Plans and Training of Trainers were action based subjects while the other modules were theory based subjects. Multina DMK selected facilitators/trainers from them and partner organisations for conducting the sessions using their expertise in the topics. Also training materials were developed for each session. However, the textbook was not prepared and distributed to the trainees before the training sessions, because the trainees tended not to concentrate in lectures and group work when they had textbooks

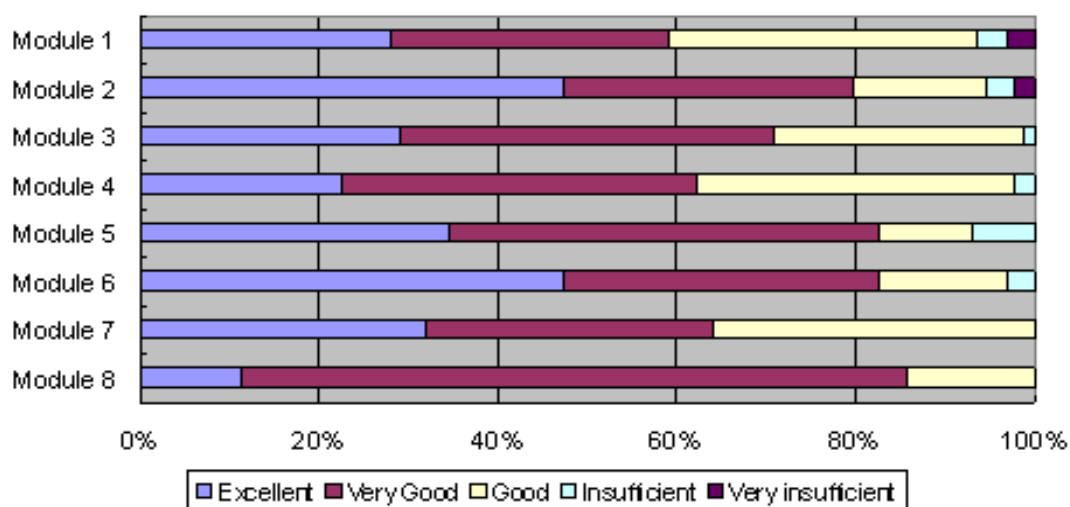
### 8.2.4 Training Sessions

Civic Education training was conducted in each quarter for a three weeks period with two sessions per week to reduce the load for the participants. A day's session was divided into two parts; the first session starting from 9 a.m. to 12 p.m. and the second from 1 p.m. to 3 p.m. Also, minimum Per Diem was provided so as not to hamper the income opportunities of participants during the sessions. It was provided at a weekly basis in order to maximize their attendance. A participants' bag was distributed to each participant. It consisted of memo pad and pens together with the slogan sticker, and was useful for the participants to remember the message "change we need" for the Civic Education project.



**Fig.8.1 Poster of Civic Education**

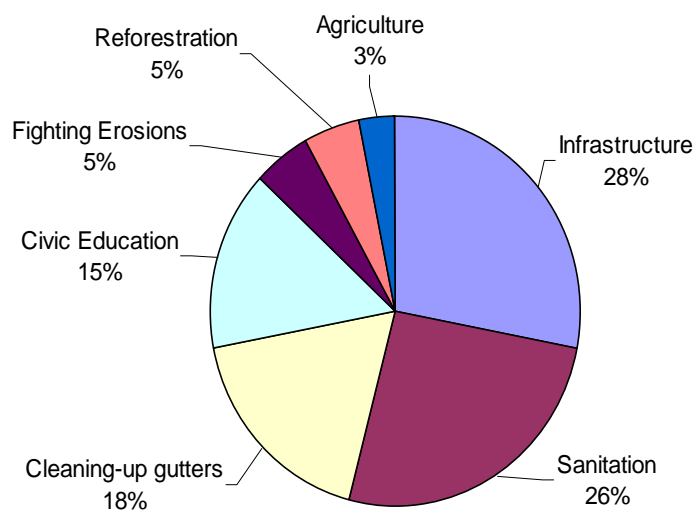
The most interesting session for the participants was module 2: good governance. Module 6: conflict resolution was also popular topic for the participants. Contrarily, Module 4: problem identification and Module 5: roles of CLD members in development were probably difficult for them to understand in such short period. The figures below show the interest of the participants concerning the six theoretical training modules and level of understanding of the participants in each module.



**Fig. 8.2 Level of Understanding of the Participants in Each Module**

### 8.2.5 Action Planning

After the completion of theoretical sessions, the trainees discussed with their neighbours at their quarter concerning problems and needs of their community. Then, the trainees as representatives of each quarter presented their action plans.



**Fig. 8.3 Priority Actions for Quarters**

The above figure shows priority needs of the 13 quarters. Infrastructure development and improvement of sanitation conditions were high priority issues. However, it was difficult for some of the issues to be solved without external resources such as school construction. The JICA Study Team facilitated the participants to consider using own resources to change their conditions. Then, the participants discussed priority action plans for N'djili commune and selected the three priority action plans as shown in the table below:



**Table 8.2 Commune Action Plans from the Participants**

Priority	Action Plan
1	Expansion of civic education
2	Clean-up gutters and solid waste management
3	Infrastructure development (gutters, public toilet, and drainage are high priority)

Expansion of Civic Education was selected as the highest priority action, because the participants recognised that Civic Education was a foundation of community development and mentality change of the people.



**Fig.8.4 Training (Left) and Execution of Action Plan (Right)**

### 8.2.6 Trainings of Trainers (TOT)

There was immense need of expanding Civic Education in the commune after the implementation of the Civic Education project. Training of trainers for Civic Education was conducted to respond to the need. Three potential facilitators were selected among the ten trainees in each quarter. Five theoretical training modules excluding the module 5 were reviewed by the trainees after which they conducted the trial training.



**Fig. 8.5 Expansion of Civic Education by Local Initiative**

### 8.3 CLEAN-UP CAMPAIGN

#### 8.3.1 Outline of the Clean-up Campaign Project

Overall Goal	Solid wastes in the target streets, markets and gutters are cleaned regularly by the initiatives of CLDs			
Project Purpose	Foundation of sustainable grassroots actions for reducing solid wastes and maintenance gutters are established in each quarter.			
Outputs	<ol style="list-style-type: none"> <li>1. Committees are established in 13 quarters and 4 markets for a sustainable system of community based solid wastes management.</li> <li>2. CLD members and community acquire knowledge about how to reduce solid wastes.</li> <li>3. Markets, streets and gutters are cleaned up by community</li> <li>4. Community based Plastic Recycling organization is operating to recycle plastic wastes.</li> </ol>			
Activities	Feb	Mar	Apr	May
1-1. Discuss suitable and sustainable solid waste management system in N'djili.	—————			
1-2. Establish solid waste management committees in 13 quarters and 4 markets.			—————	
1-3. Develop an operation and maintenance plan for solid waste management in each quarter and market.			—————	
2-1. Develop training materials including posters for training of trainers and awareness campaign			—————	
2-2. Conduct awareness campaign on hygiene and reducing solid waste in 13 quarters and 4 markets.				—————
3-1. Prepare plan and logistics arrangement for clean-up activities			—————	
3-2. Implement clean-up activities at the target streets, markets and gutters.				—————
4-1. Develop plastic recycling system and recycle plastic wastes.			—————	
4-2. Organize plastic waste recycling organization.				—————
Inputs	Human resources: (JICA international and national staff, CISP staff) Training materials: (Syllabus, Posters) Equipment and other budget for clean-up campaign and sensitisation trainings Workforce from the commune			

#### 8.3.2 Implementation

This project was implemented by Comitato Internazionale per lo Sviluppo dei Popoli (CISP) an International NGO on a subcontract basis. CISP in collaboration with CLD members, the commune authority and the sanitation brigade conducted clean-up campaign and sensitisation sessions after the opening ceremony.

### (1) Clean-up Activities

Clean-up activities commenced on 27 April 2009. For the first three weeks, 169 cleaners and 13 leaders worked for the Clean-up activities, and then, an extra team composed of 60 cleaners worked for it in the last week in order to ensure the achievement. The cleaners worked six days per week from 8:00 to 14:00 basically.



**Fig. 8.6 Clean-up Activity**

At the beginning of the project, some problems were reported to JICA Study Team. One was the weakness of tools (shovel, rake, wheelbarrow, and broom) and another was method of cleaning. Concerning the problem of tools, CISP repurchased more durable tools instead of the weak ones. As for the cleaning method, JICA Study Team suggested that collected garbage from gutters should be sorted into solid waste and soil. Then, the solid waste would be dumped and the soil would be used to fill holes on roads.

### (2) Sensitisation Sessions

Before the full scale implementation of sensitisation sessions, the CISP and the master trainers of UMOJA, a local NGO which have rich experience in the field, trained trainers from CLD members and the sanitation brigade. A total of 94 persons were trained. Then, they conducted 40 sensitisation sessions in schools, market places, and churches. In each session, the trained trainers conveyed messages regarding both hygiene issues and public awareness of solid waste management using the visual materials to the beneficiaries.

According to self evaluation of the participants, more than 90 percent of them were satisfied with the sessions and could understand the contents. Along with the sensitisation sessions, UMOJA introduced plastic recycling to the population. UMOJA purchased plastic rubbish when the residents brought them to meet quality criteria of UMOJA such as no sand, no water, and soft plastic.

#### 8.3.3 Achievement

The project purpose is achieved. Through the clean-up of target markets, gutters and streets and the sensitisation by CLD initiative, a foundation of sustainable grassroots actions for reducing solid wastes and maintenance gutters was established in each quarter.



**Table 8.3 Result of Clean-up Activity**

Quarter	Market	Gutters	Avenues and squares
Quarter 1			Kinzinga Square (2000 m <sup>2</sup> )
Quarter 2	Market Mangobo (2400 m <sup>2</sup> )	Avenues Akuta and Nseke (900 m)	
Quarter 3			Corridor 5 and St. Thérèse Square (680 m)
Quarter 4		Corridor Zennith towards Bonsomi College (500 m)	
Quarter 5	Market of quarter 5 (3000 m <sup>2</sup> )		Road towards Kimbaseke (800 m)
Quarter 6	Market of quarter 6 (4800 m <sup>2</sup> )	Towards the market of quarter 6 (700 m)	Next to Likasi School (100 m)
Quarter 7	Market of quarter 7 (2500 m <sup>2</sup> )	St. Thérèse Square towards Engen filling station (900 m)	Biochimie Square (200 m <sup>2</sup> )
Quarter 8			Ndjili main entrance (in front of Pro Crédit bank) (200 m)
Quarter 9		Road towards Cecomaf (450m)	
Quarter 10	The quarter 10 worked along with the quarter 5		
Quarter 11	The quarter 11 worked on the temporary dumping site (250m <sup>2</sup> )		
Quarter 12		From Lumumba avenue towards the quarter 2 (600 m)	
Quarter 13		Road towards Cecomaf (550m)	

Achievement of the sensitisation programme is shown in the below table.

**Table 8.4 Result of Sensitisation Programme**

Place	Number of sessions	Direct beneficiaries
Schools	26	5,200
Markets	11	4,500
Churches	3	1,000
Total	40	10,700

During the last two weeks of the Pilot Project UMOJA purchased 1307 kg of plastic rubbish (= 480,720 F) from the 13 Clean-up teams.

## **8.4 ROAD REHABILITATION PROJECT BY DO-NOU TECHNOLOGY**

### **8.4.1 Outline of Do-Nou Project**

One of the objectives of this Pilot Project is to facilitate techniques and/or technology that make possible the improvement of roads by the community themselves. This transfer is ensured through the training process of concerned People.

Overall Goal	Foundation of sustainable grassroots actions to rehabilitate road by the participation of commune people with utilizing of Do -nou technology.	
Project Purposes	Foundation of sustainable grassroots actions to rehabilitate road by the participation of commune people.	
Outputs	<ol style="list-style-type: none"> <li>1. Technology and knowledge are transferred to attendant people to rehabilitate road by themselves.</li> <li>2. Attendants can diffuse the technology to other people and other communes.</li> <li>3. Community based road maintenance activity become general.</li> <li>4. Organization of commune and CLDs are strengthened</li> </ol>	
Activity	Oct.	Nov
1-1 Discuss with representative of commune and quarter leaders for implementation of project and recognize the objective of the project.	■	
1-2 Select trainees for rehabilitation project from quarters by quarter leaders	■	
1-3 Select implementation sites for rehabilitation project and field reconnaissance	■	
1-4 Acquire necessary tools and materials for the project	■	
2-1 Give indoor lessons for the implementation of the project for trainees	■	
2-2 Train by on the job method at the selected site for the attendants of indoor lesson	■	
2-3. Implement road rehabilitation by trainees' own implementation plan		■
3-1 Evaluate the training by trainees		■
Inputs	Human resources : (JICA international and national staff, DMK staff) Training materials: (Pamphlet of Do-Nou technology) Equipment and materials for road rehabilitation Trainees from commune	

#### 8.4.2 Using Do-Nou Technology

The use of Do-Nou Technology for the maintenance of unpaved roads in some Asian countries dates back to 2000s. This technology has been applied in the Philippines; it is being introduced in African countries such as Kenya, Cameroon, Tanzania, Uganda, etc. The Democratic Republic of Congo is the seventh country for its application. Apart from the rehabilitation of roads, the Do-Nou bags are commonly used to raise dykes, to prevent flooding, to build temporary structures after disasters and for the reinforcement of foundations of buildings.

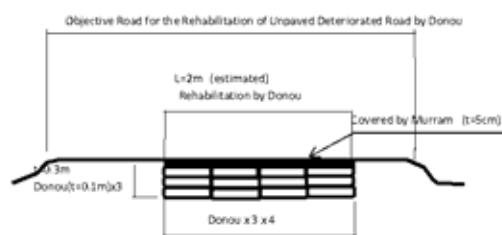


Fig. 8.7 Typical Figure of Road rehabilitation by Do-Nou Technology

### 8.4.3 Implementation of Training

#### (1) Classroom Training

Training started on October the 26<sup>th</sup> 2009 for the members of CLD selected in the Commune of N'djili. Training started with the introduction of the facilitator, Professor KIMURA of the Kyoto University in Japan. The Do-Nou technology was broadly taught to trainees through a single lecture that lasted no more than two hours as pointed out by the inventor of the technology. He actually applied the type of training method that psychologists call "learning by doing" or "learning by acting". Thus, classroom lesson is followed directly with practical applications in the field.

#### (2) Field Training

On Tuesday October the 27<sup>th</sup> 2009, everyone from trainers to trainees met. After training on how to fill the bags with sand to transform them into Do-Nou, the 52 trainees were divided into 4 teams of 13 people each. Then, it was decided that two teams remain on the site to prepare the section intended to receive the Do-Nou bags for road improvement. The work of these teams consisted in excavating, measuring and levelling the section of the road chosen. Meanwhile, the second team had moved to the St. Therese sports field where the sand and gravel were stored. Their task consisted of filling bags with sand and gravel, tie them and bring them to the site to be maintained so that they could implement all the basic knowledge about the technology as described above.

After briefing on technical aspects by the facilitator on how to lay the bags on the excavated section, practice was immediately understood. This allowed trainees to work without necessarily referring to the inventor of the technology. That morning, as the team was laying bags, some residents of the 13th quarter and/bystanders started admiring the transformation that was taking place on the section of the road. Work stopped that day at 5:30 PM with everyone satisfied.

That same Tuesday, October 27<sup>th</sup> 2009, CLD members had agreed by consensus to continue working on the 13th quarter's site so that the implementation of this technology could have a visible and tangible impact on the residents of the Commune of N'djili.



**Fig. 8.8 Field Training**

During the first week from October the 26<sup>th</sup> to the 30<sup>th</sup>, 2009, all trainees of the 13 quarters have been mobilized on this site. At the request of the JICA Study Team, and Multina-DMK facilitation, on October the 30<sup>th</sup> 2009, at the end of the day, CLD members had agreed and chosen "Couloir Zénith"

as second site for the implementation of the technology. Thus, the 52 trainees were divided into two teams for the work carried out during the second week. During that week, as trainees had already mastered the new technology, work could be satisfactorily conducted.

The second site was very complex due to technical characteristics of the ground under the section to be improved. It presents the following characteristics: the section was very depressed, muddy with standing water and bordered on both sides by clogged gutters. This site was a demonstration test which was used to prove that students have actually appropriated the technology and to see if they understood and mastered it. Finally, came the phase of improvement itself with the laying of Do-Nou bags with a 5 cm thick layer of soil applied on top of the last layer of Do-Nou bags to avoid direct contact with vehicle tires and ultra-violet rays.



⟨Before⟩



⟨After⟩

**Fig. 8.9 Result of Field Training**

## 8.5 REHABILITATION OF LUEMBA BLVD.

### 8.5.1 Outline of the Rehabilitation of Luemba Road

Project Overall Goal	<ul style="list-style-type: none"> <li>- Rehabilitation of Blv. Luemba</li> <li>- Provision of beautiful urban space</li> <li>- Reduction of the flood area by the installation of the storm water drainage system</li> <li>- Traffic safety by the provision of sidewalk with traffic safety measures</li> </ul>														
Project Purpose	<ul style="list-style-type: none"> <li>- Urgent distribution of the peace dividend to the beneficiaries visibly</li> <li>- To collect information on the business practice, design and cost estimation, the capacity of the local contractor for the confirmation of the possibilities for the execution of the new project</li> <li>- Capacity development to provincial government and commune office</li> </ul>														
Outputs	<ol style="list-style-type: none"> <li>1. Paved carriageway</li> <li>2. Provision of the sidewalk</li> <li>3. Provision of proper storm water drainage system to the existing outlet</li> <li>4. Minimum land acquisition and house compensations</li> </ol>														
Activities	Ja n	Fe b	Mar	Ap r	Ma y	Ju n	Jul	Au g	Sep	Oct	No v	Dec	Ja n	Feb	Mar
1. Confirmation of the contents of the Pilot Project	—														
2. Preparation of the tender documents	—	—	—	—	—										
3. Tender stage/Contract Amendment of Contract					—	—	X				X				
4-1. Preparation Work							—	—							
4-2. Relocation of existing public utilities located under the ground along Blv. Luemba											—				
4-3. Construction works								—	—	—	—	—	—	—	—
5. Final inspection															X
6. Handing over															X
Inputs	Human resources: (Local Contractor: AFRITEC, Public Utilities Company: REGIDESO&SNEL, JICA international and national staff) Budget for the rehabilitation of Blv. Luemba														

**Table 8.5 Summary Project Contents**

Items	Description	
Road Name	Blv. Luemba	
Road Length	971m	
Total Road Width	25m	Carriageway width W=5x2=10m(incl. Shoulder) Sidewalk width W=3x2=6m
Carriageway	Asphalt Pavement t=5cm Base Course t=20cm Subbase Course t=20cm	A=12,140sq.m(V=607cu.m) A=12,670sq.m(V=2,534cu.m) A=10,695sq.m(V=2,139cu.m)
Sidewalk	Asphalt Pavement t=3cm Base Course t=15cm	A=5,312sq.m(160cu.m)
Earth Works	Excavation for disposal Excavation Embankment	V=5,139cu.m V=314cu.m V=314cu.m
Drainage Works (U shaped Drain)	L=2,183m L=355m L=325m	Blv. Luemba Av. Boki Av. Maman Mobutu
Pot hole patching	A=665sq.m	Av. Maman Mobutu



Fig.8.10 Before Construction

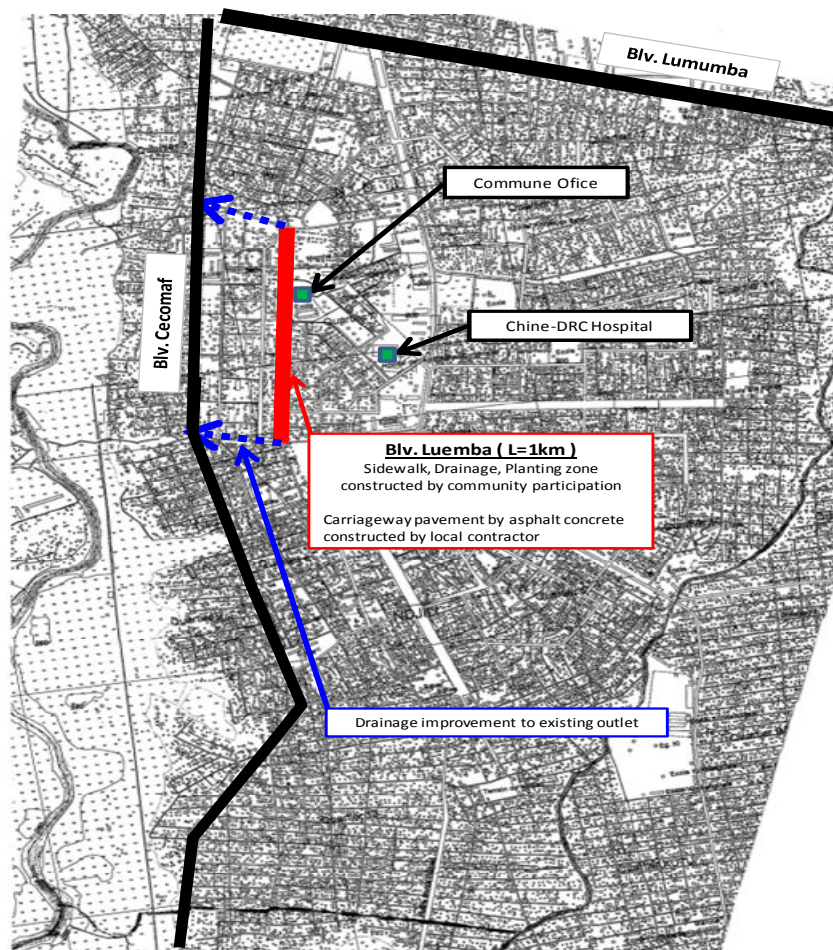


Fig. 8.11 Location Map



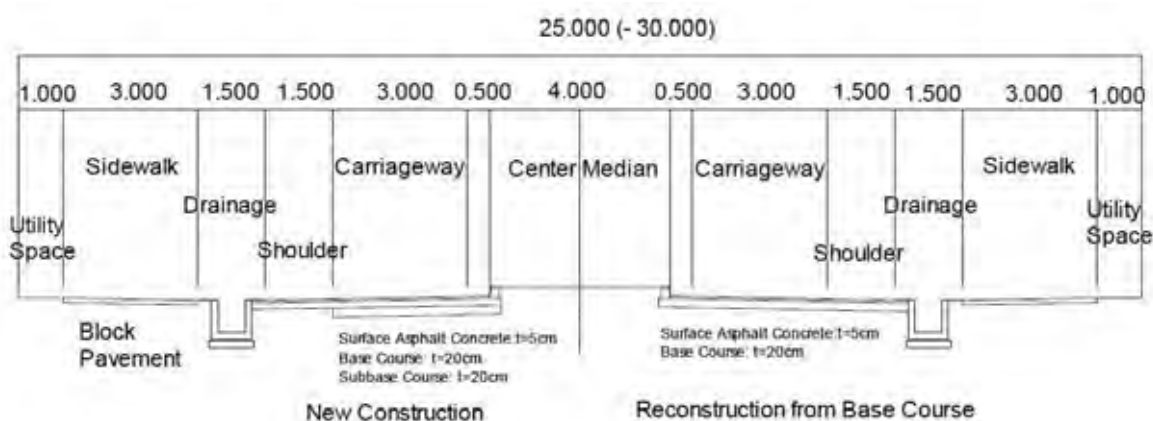


Fig. 8.12 Typical Cross Section

### 8.5.2 Implementation Plan

#### (1) Implementation Organization Structure

Before implementation of Pilot Project, the committee was set up between DRC side and Project team. Organization structure for the execution and cooperation for the Pilot Project is shown as follows:

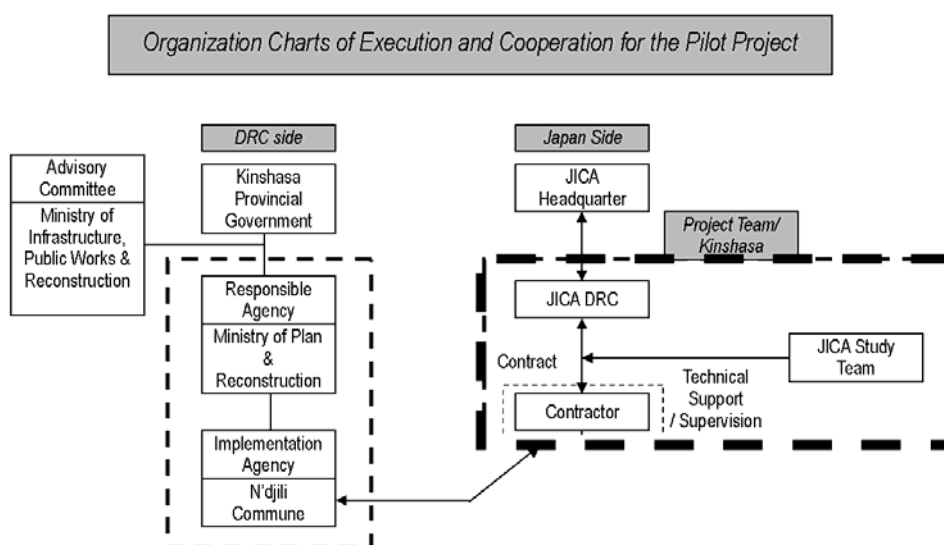


Fig. 8.13 Organization Charts of Execution and Cooperation for the Pilot Project

#### (2) Design Policy

The following policy was established for the design and the implementation of the project;

- 1) To construct a symbolical avenue of N'djili commune,
- 2) To secure the safety of pedestrians, cycles and vehicles,
- 3) To create a focus of prosperity of the commune.

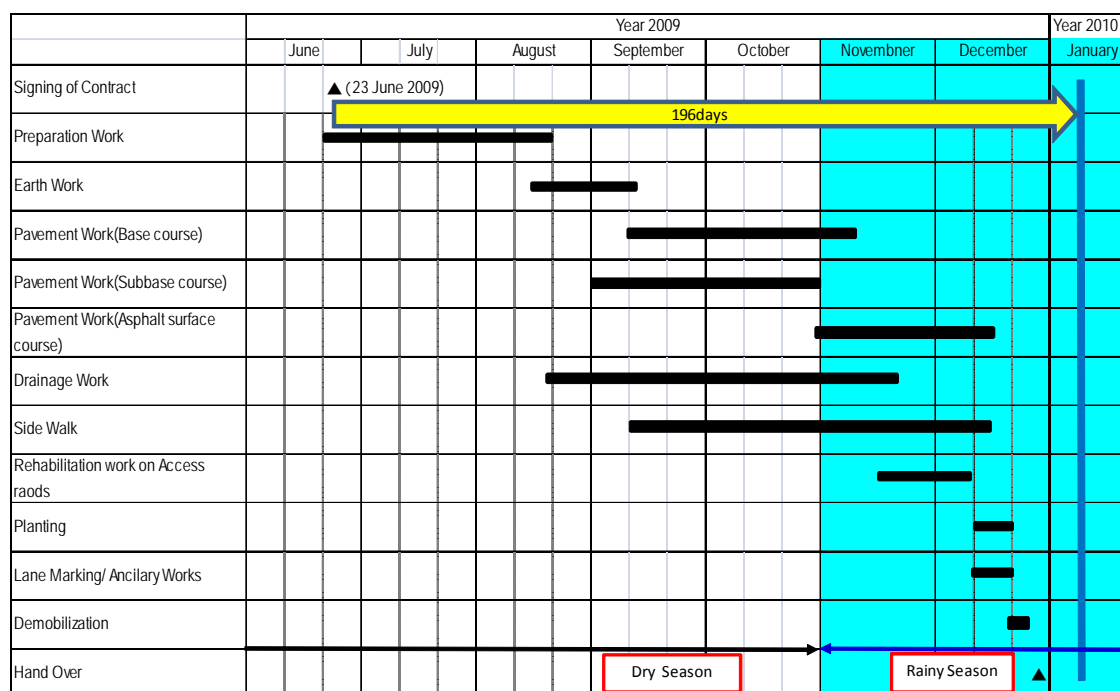
**(3) Design Criteria**

Item	Criteria
Applicable Design Standard	DRC road design standard and ASSHTO pavement design were applicable for the design of the pilot project.
Design Speed	V=40km/hr
Pavement Design	<ul style="list-style-type: none"> <li>- Asphalt surface: t=5cm,</li> <li>- Base course: t=20cm</li> <li>- Subbase course :t=20cm</li> </ul>
Drainage Design	<ul style="list-style-type: none"> <li>- Rainfall Intensity: 120mm/hr (data provided by Office de Routes)</li> <li>- Return period: 5years</li> <li>- Runoff coefficient factor: C=0.9 from road surface, C=0.6 from residence area</li> <li>- Drainage size was determined in consideration of the 80% discharge capacity.</li> <li>- U shaped drains were installed along Blv. Luemba and connected to the existing outlet along Av. Boki and Av. Maman Mobutu.</li> </ul>
Safety measures	<ul style="list-style-type: none"> <li>- Installation of traffic safety measures</li> <li>- Lane marking, marking with pedestrian crossings and speed humps were installed for traffic safety measures.</li> <li>- Installation of Bus bay</li> <li>- Bus bays were installed for keeping the smoothly traffic flows.</li> </ul>

**(4) Implementation Schedule**

Original construction schedule was 196days from 23 June 2009 in consideration of weather condition.

Original schedule is shown as follows;



**Fig. 8.14 Original Construction Schedule**

**(5) Bidding Stage**

This project was implemented by AFRITEC on a contract basis with JICA DRC. AFRITEC was selected through the designated bidding.

**8.5.3 Construction Stage**

The period of execution of the Work was amended from 196days:28weeks to 266 days: 38weeks on the



amended contract on 13<sup>th</sup> November 2009. The factors which caused the extension of the construction period were as follows;

- 1) Unexpected obstructions under the ground.
- 2) The latter half of construction period was in rainy season.

A final construction schedule is shown in figure below.



Fig.8.15 Final Work Schedule for the Rehabilitation of Blv. Luemba



Fig.8.16 Completion of the Construction



Fig.8.17 Handing Over Ceremony

## 8.6 CONCLUSIONS

### 8.6.1 Overall Evaluation

The JICA Study Team evaluated each pilot project and projected the results and lessons learned to the Action Plan, especially in consideration of future implementation and institution arrangements. For the purpose of assessing impacts of the pilot projects, on the other hand, the JICA Study Team conducted questionnaire evaluation surveys for the counterpart personnel, CLD members and the general public of N'djili. Generally, most of the respondents were of the view that these pilot projects had positive impact on the commune. The evaluation result of each pilot project by the general public of N'djili is shown in the figure below.

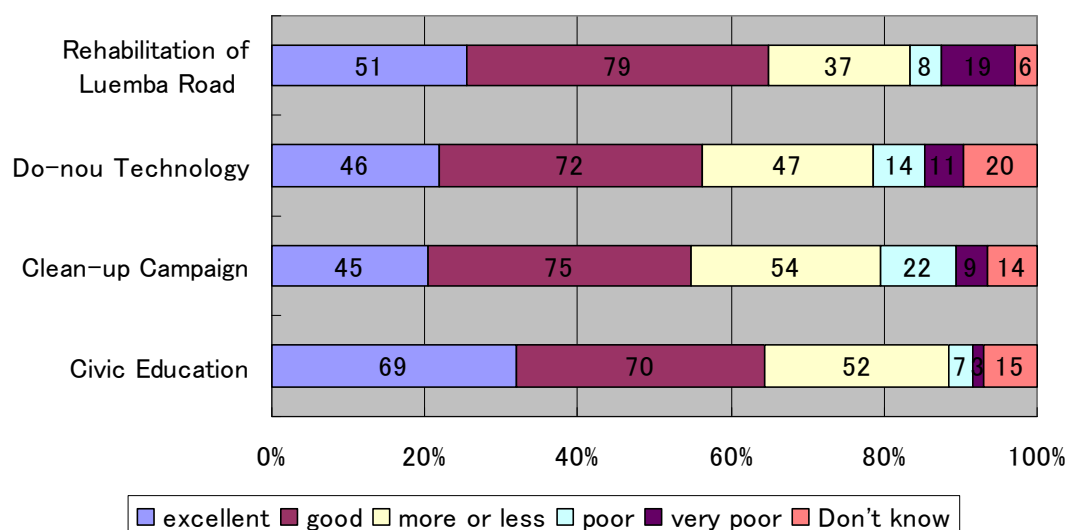


Fig. 8.18 Evaluation Result of the N'djili Population on the Pilot Projects

More than 68 percent of N'djili residents recognised the JICA study in N'djili commune. Approximately 60 percent of residents among them evaluated the pilot projects as positive for the commune, especially in the civic education project and the rehabilitation of Luemba Road. In terms of recognition of the projects by the residents, Luemba Road project was highly visible and the Do-nou technology project was the least visible among the pilot projects; although counterpart personnel and

CLD members tended to evaluate the project as one of the most successful projects. The reason seems that the project was small scale and was conducted in only two quarters. As the clean-up campaign project and Luemba Road project, more than 10 percent of the population evaluated the project as poor. It was because of insufficient sustainability in clean-up part of the project after the completion of the pilot project; although the sensitisation part and recycle parts have been continued by the CLD's initiative. Also, because Luemba Road is located at quarter 7, some of residents who live in other quarters seem not to feel the benefits from the project.

## **8.7 OVERALL CONCLUSION**

### **(1) Achievements**

#### **a) The participant's expansion and capacity development in the commune activity**

The expansion of the level of participation in the activity in the commune was achieved through the execution of the pilot project. There was not only an increase in the number of participants that was achieved in the Civic Education project but also the commune peoples' awareness for the improvement of the environment and improvement of their lives. In addition to that, among the commune people, some members acquired the capacity to conduct the Civic Education on their own. The fundamental condition to realize the Action Plan in the near future was formulated based on these outcomes.

#### **b) Reinforcement of commune organization**

The members of CLDs, which was the major player in the Pilot Project, gained capability in acting systematically as organization members. Moreover, the ability to find the problem in quarter or the commune and the ability to use the resource in the commune were also acquired. Also, the manner for the consensus building in the organizational activity was acquired. The reinforcement of CLD organization has been achieved to some extent by these results.

#### **c) Expansion of independent activity**

Partially the activities of Civic Education and Clean-up are continued by the individuals and the groups that participated in Civic Education, Clean-up campaign, and the Do-Nou project even though they are not in the commune organization. One of the groups has drawn up a plan to execute for the improvement of sanitary condition. Activities by these grass roots organizations are expected to contribute to the environmental reform of the commune and to expand the circle of independent activity.

#### **d) Formation of core of the commune**

The rehabilitation project of Luemba Blv. is an improvement of the infrastructure facilities in the heartland area of commune. By the improvement of the road, the area along the Luemba Blv. including the commune office is expected to be the heartland of vigour where people gather and interchange.

**(2) Recommendation**

**a) Necessity of functional enhancement of commune administration**

Although the activation of a basic organization of the commune was achieved by executing the Pilot Projects, the commune administration is weak in its capacity and system. It is necessary to establish the organization and system which enable decision making based on the public opinion of commune. Usually three hundred thousand residents make one city; therefore the function of the commune assembly is also necessary.

**b) Necessity of continuous support for sustainable activity**

Improvement activities by commune people are still in the infant stage and it cannot be deduced with certainty that the activities will continue without interruption. Therefore, it is necessary to support continuous activity by the provincial government or the donor.

**c) Acknowledgment of action plan and maintenance of plan**

Though the execution of the pilot project was acknowledged by many commune people, still the action plan is not acknowledged by the general commune people. Hence, the Action Plan should be acknowledged as the guideline for the people's action and it should be updated according to changes in the environment.

## CHAPTER 9 : SOCIO-ECONOMIC FRAMEWORK AND METHODOLOGY FOR URBAN REHABILITATION PLAN IN KINSHASA

### 9.1 SOCIO-ECONOMIC FRAMEWORK OF N'DJILI COMMUNE IN 2018

Socio-economic framework is composed of the population and economic performance of The Study area projected to the year 2018, and it serves the following purposes.

- To provide a basis to scrutinize the growth potential of each production sector: agriculture, industry and services.
- To provide a planning framework for infrastructure development.
- To provide a basis for identifying the need for projects and measures.

Socio-economic framework for N'djili Commune Regional Development presented hereunder is worked out by a macroscopic approach, mainly based on the past trend in DRC, the indices used in the previous section and the experience drawn from other developing countries to examine the development plan. The following principles are incorporated in the framework:

- Care repair industry should be promoted in the integrated cluster system to endorse the current "Petit Japon" reputation.
- Urban agricultural basis to supply fresh vegetables in the Kinshasa City should be enhanced in cooperation with the neighbouring communes.
- "Informal sector", occupying major parts of industry, should be shifted to "Formal sector" to enjoy the advantages of legal entities.

On the basis of above principles for the development, N'djili Commune socio-economy in the year 2018 is designed by GRDP and the labour force by each industrial sector as well as "per capita GRDP".

#### 9.1.1 Population Framework in 2018

Based on the latest demography as of 2008, The Study Team has made population projections of Kinshasa and The Study area of N'djili Commune taking into account past trends of mortality and fertility plus the effect of HIV/AIDS, at the target year of 2018. The population of Kinshasa Province and The Study area are projected as shown in the following table. Population growth rates applied are 3.20% for the nation and 2.35% per year for Kinshasa respectively according to the Kinshasa Development Plan 2007-2011, which is reviewed on the basis of the recent trend. Annual average growth rate applied to The Study area is 1.80% in view of higher density rate (34,020/km<sup>2</sup>) of the existing population and the future land use plan as proposed in the section below.

**Table 9.1 Population Forecast in 2018**

2007			2018		
2007	Population	Density/km <sup>2</sup>	Growth/year	Population	Density/km <sup>2</sup>
DRC	65,837,000	28	3.20%	93,099,000	40
Kinshasa	6,387,725	719	2.35%	8,054,229	907
N'djili	320,762	34,020	1.80%	390,448	41,411

### 9.1.2 Labour Force and Employment

Ratio of working age population to total population or the labour force coefficient (15-60 years old) is 54% in The Study area. The labour participation ratio including formal and informal is 67% according to the household survey conducted by the team for The Study area. Although the labour force coefficient will increase steadily as the generation affected by the civil war is replaced by the younger generation, it is assumed to be stable as 53.8% in 2018 which is worked out from the following population structure.

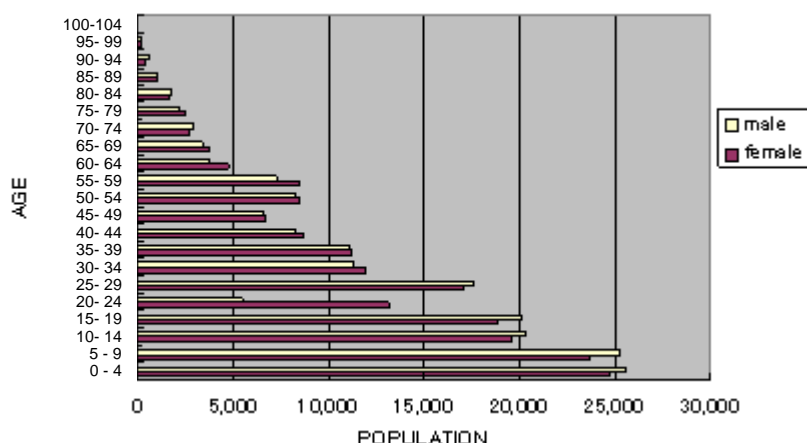


Fig. 9.1 Population Structure of N'djili in 2018

### 9.1.3 Economic Indicators

It assumes that the medium-term growth would be led by a rebound in mining output and a pick-up in the reconstruction effort. While the growth rate of national GDP, 8% is ambitious, improvements in the socio-political situation and high commodity prices have sparked investor interest in the mining sector, which holds a large share of world reserves. Concomitantly, an ambitious program—within a budget that is consistent with macroeconomic stability—to rebuild infrastructure would boost activity in construction and public works, water and electricity, transport, and telecommunications. This would require measures to boost revenue and better spending prioritization. On the contrary, moderate forecast indicates the growth rate of national GDP as less than 5%.

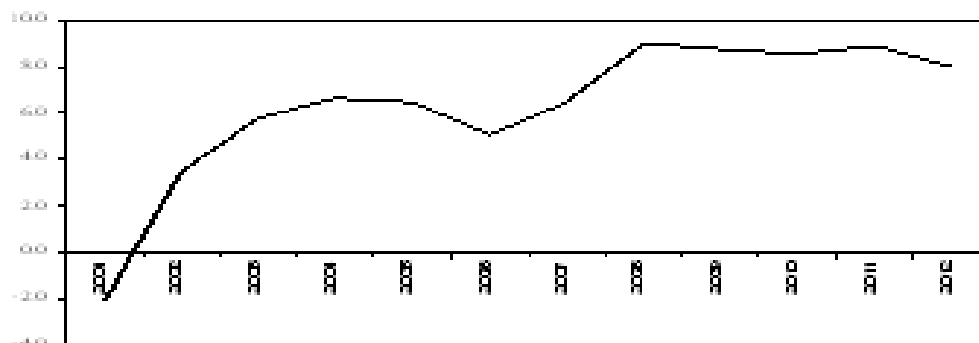


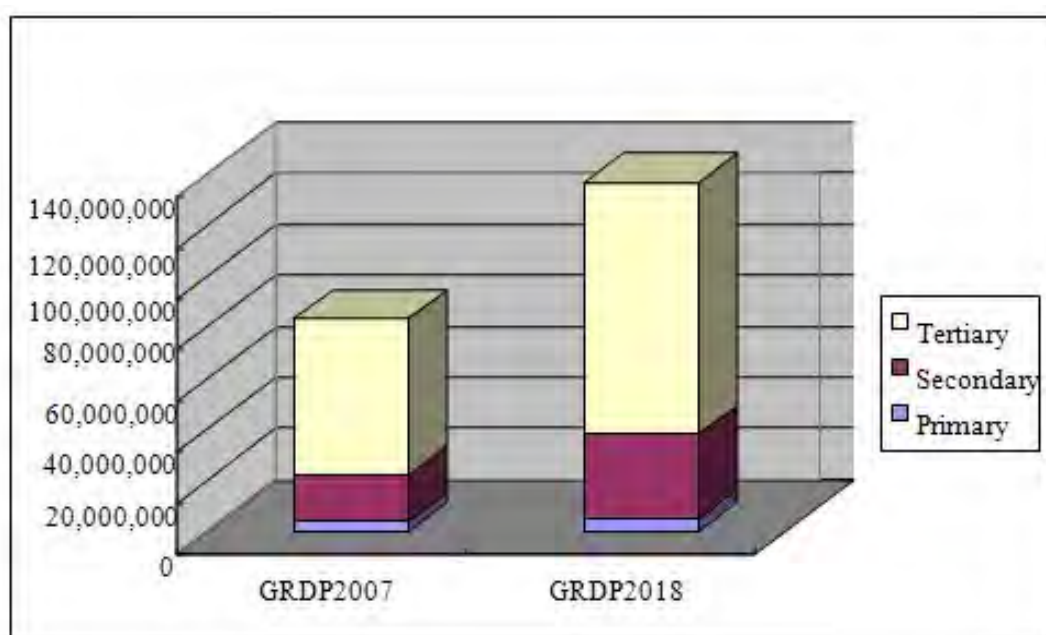
Fig. 9.2 National GDP Projection

Updated data on gross regional domestic product (GRDP) for smaller administrative unit are not readily available in DRC. Hence, the annual growth rate of GRDP of Kinshasa which is forecasted as

4.7% in the Provincial Development Plan 2007-2011 has been applied in the projection. The economic structure of The Study area can only be inferred from the gross regional domestic product (GRDP). According to the household survey conducted during The Study in N'djili, the share of agricultural employment is 7.4%, and the shares of industrial and services employment are 33.9% and 58.7% respectively. Assuming that the labour-related parameters are more or less the same in The Study area as of Kinshasa Province, the employment structure may be converted into the economic structure by applying differential labour productivity by each sector. Based on the assumptions that the GRDP per capita of Kinshasa 2007 estimated in the development plan, US\$260 and the growth rate of 4.7% is applied, in conclusion, the economic structure of The Study area is roughly estimated in the following table.

**Table 9.2 GRDP by industry in N'djili Commune in 2007**

Industry	Population	Structure	Coefficient	Modified	GRDP 2007
Primary	8,588	7.4%	1.0	4.2%	\$3,537,496
Secondary	39,342	33.9%	1.2	22.5%	\$18,735,878
Tertiary	68,122	58.7%	2.2	73.3%	\$61,124,746
Total (GRDP)	116,052	100.0%		100.0%	\$83,398,120
GRDP/capita					\$260



**Fig. 9.3 GRDP Projection (USD)**

## 9.2 METHODOLOGY FOR URBAN REHABILITATION PLAN IN KINSHASA

### 9.2.1 General -“Action from N’djili”-

To formulate the urban rehabilitation plan, this plan reviews existing data and development plans and specifies medium to long term (10year) range development policy together with Action Plan. Consecutive stages of this study are following;

- Stage 1: Compile existing data of Kinshasa Province and N’djili commune,
- Stage 2: Prioritize community demands by dialogue and participatory approach.
- Stage 3: Indicate development policy and address Action Plan for the commune,
- Stage 4: Examine Pilot Projects to provide feedback on the Plan.
- Stage 5: Evaluate Pilot Projects and review The Study for improvement the Plan.
- Stage 6: Implement Projects of Action Plan.

9.2.2 Procedure

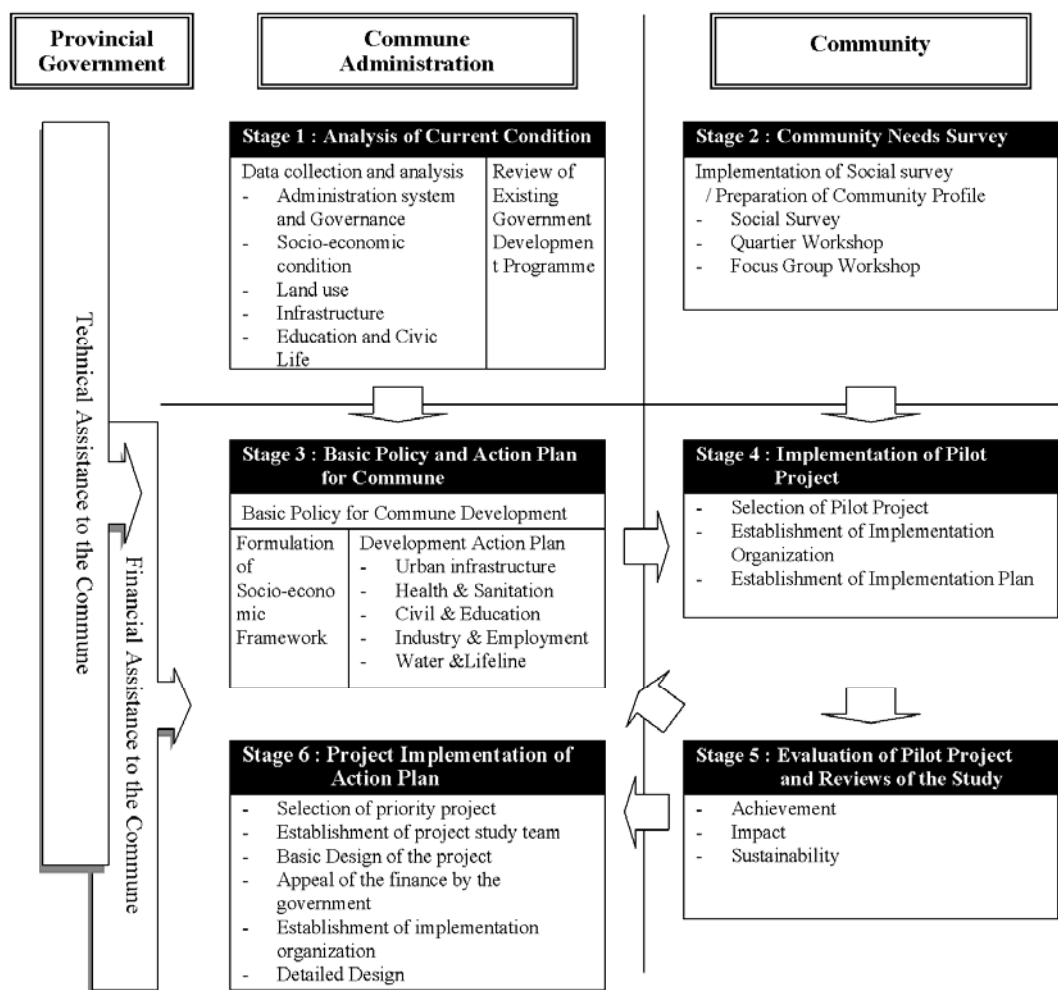


Fig. 9.4 Procedure for Urban Rehabilitation Plan

Basic roles in main actors in commune Rehabilitation Plan is described in table 9.3.



**Table 9.3 Basic Role of Each Actors in the Rehabilitation Plan**

Actor	Basic Role
Provincial Government	<ul style="list-style-type: none"> <li>- Offering technical assistance in the planning</li> <li>- Approval of the plan through Steering Committee</li> <li>- Creating financial resources by the budget of the government or cooperation with donors</li> </ul>
Commune Administration	<ul style="list-style-type: none"> <li>- Arousal of commune people's concern in the Rehabilitation Plan</li> <li>- Establishment of the organization for participation of commune people</li> <li>- Establishment of the original plan for discussion by commune people</li> <li>- Discussion of the implementation method with the provincial government</li> </ul>
Community	<ul style="list-style-type: none"> <li>- Participation in the commune discussion and submission of opinions for commune improvement</li> <li>- Positive participation in commune activities</li> </ul>

### 9.2.3 Methodology

#### (1) Stage 1 Analysis of Current Condition in Kinshasa and Commune

Stage 1 is the initial stage of the urban rehabilitation plan. To understand general conditions of commune, data compilation is an indispensable activity towards making an Action Plan.

Compiling urban rehabilitation plan in the post conflict nations has a lot of difficulties compared to the existing urban Master Plan. As an urban rehabilitation, The Study compiled necessary data of Kinshasa and Commune areas as shown below;

- Natural Conditions,
- Administrative System,
- Socio-Economic conditions,
- Sector Conditions,
- Environment Condition System in Congo.

Up-dated Kinshasa province data (refer to Chapter 3 Volume I Main Text) is highly valuable for making other commune's rehabilitation plan. Furthermore, survey items for data collection concerning communes are also applicable as a sample of those of activities as well. The contents of survey on present conditions and issues of commune are shown in Chapter 2 of Volume II Action Plan.

#### (2) Stage 2 Community Needs Survey.

To signify priority of community development, Stage 2 involved collecting community opinion through several community surveys. Basically, the Community Needs Survey is applied as a way of community participatory approach, and it is an indispensable approach towards a successful implementation of the urban rehabilitation plan; rather than mere complimentary method. Results of the Community Needs Survey of N'djili commune reflected Chapter 2 of Volume II (Action Plan) and verified those of data and information accuracy. The methodologies of the Community Needs Survey include;

- Social Survey/Community Profile,
- Infrastructure Inventory Survey,
- Quarter Meetings,

- Industrial Potential Survey.

### **(3) Stage 3 Basic Policy and Action Plan for Commune**

After completion of data collection, analysis and community needs surveys, basic policy and Action Plan for commune had been addressed/ formulated. Stage 3 is making a Basic Policy and Action Plan for commune based on previous surveys' results. Contents of Basic Policy for community vitalization (refer to Chapter 3 of Volume II Action Plan) are shown as follows;

- Characteristics of the commune,
- Opinions from the Community,
- Development Diagram in N'djili,
- Development Vision and Concepts,

Additionally, contents of Action Plan for community (refer to Chapter 4 of Volume II Action Plan) are shown as follows;

- Institutional Arrangement for Action,
- Establishment of Improvement policy for urban planning issues,
- Urban Infrastructure (Road),
- Sector Plans based on the strategic category of Kinshasa Province
- Urban Infrastructure (Road)
- Health And Sanitation,
- Education and Citizenship,
- Industry And Employment
- Access to Water and Lifeline

### **(4) Stage 4 Implementation of the Pilot Project**

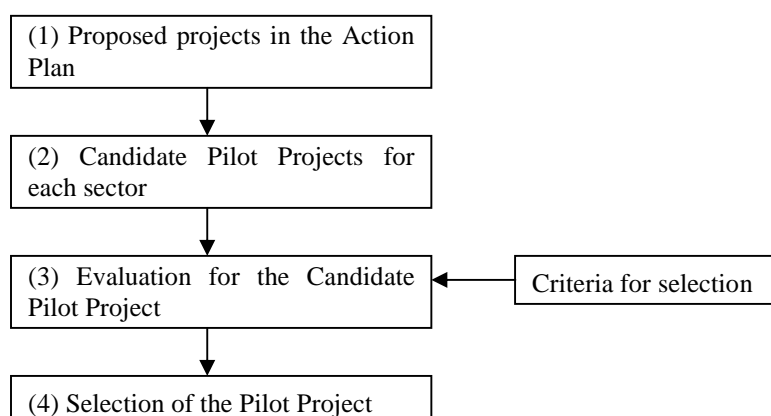
#### **1) Objective of Pilot Project**

Before the implementation of Action Plan of the commune, it is recommended to conduct Pilot Projects. The objective of the Pilot Projects is as follows;

- To promote commune people's participation towards the rehabilitation of the commune.
- To activate the grassroots organization of the commune
- To improve the capacity of the commune administration for the management of the project
- To learn the method of the consensus building aiming towards the execution of the plan.
- To enhance consciousness of ownership for the infrastructure of the commune
- To verify the effectiveness and possibility of proposed action plan

## 2) Selection of Pilot Project

The selection of Pilot Project is conducted by the following procedure;



**Fig. 9.5 Procedure for Selection of Pilot Project**

## 3) Establishment of Implementation Organization

### a) Clarification of Role of Relevant Authorities

In order to establish the structure of implementation organization, capacities of relevant organization shall be evaluated and roles of each organization shall be clarified. Such as;

- Evaluation of capacities of commune leader and CLDs
- Experience of commune leader and CLDs

Based on above evaluation, extent of participation of provincial government is decided.

### b) Participatory System of Commune People

Participatory system of the commune people depends on the past activities in the commune.

- Existence of grassroots organization
- Relationship between commune administration and quarter organization
- Support by the commune people

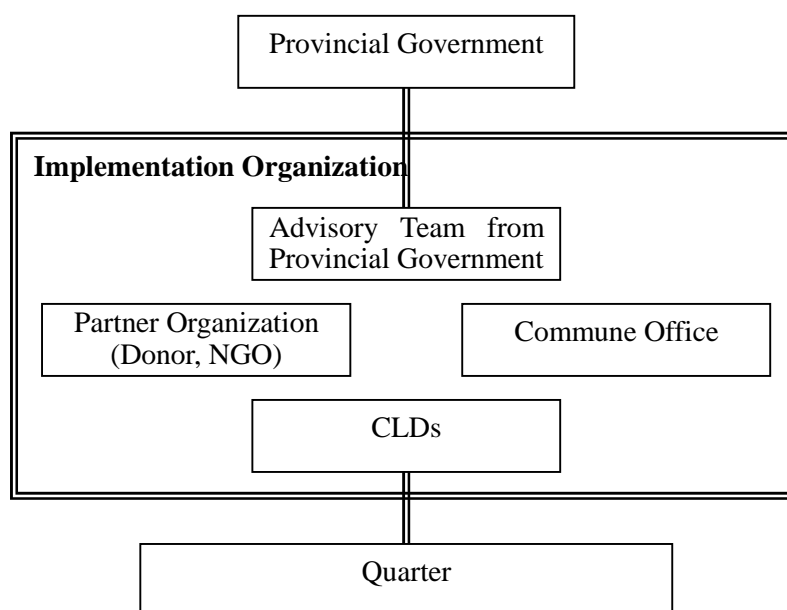
If the relevant experience of commune people is limited, organization should be developed from grassroots level to administrative level. In this case, reinforcement of communal organization is emphasized in the objective of the project.

### c) Selection of Partner Organization

Assistance by partner organization is essential for the implementation. Partner organization, such as donor or NGO, can provide technical assistance, introduce appropriate methodology and build capacity for the participants.

#### d) Model Chart of Organization

The following figure shows the model organization chart of the Pilot Project implementation.



**Fig. 9.6 Model Chart for Implementation Organization**

#### 4) Establishment of Implementation Plan

##### a) Drawing up of Implementation Plan

The implementation plan for Pilot Project includes following items;

- Overall Goal
- Project Purpose
- Inputs
- Outputs
- Procedure
- Activities in each process
- Schedule
- Staff assignment plan
- Detailed design in case of infrastructure improvement
- Cost Estimate

##### b) Acquisition of Budget

In cooperation with the provincial government, the budget for implementing the project shall be pursued. The provincial government evaluates the proposed plan by its effectiveness and practicality and makes a decision to execute. The budget shall be acquired by the government's own finance or by cooperation with the donors.

#### (5) Stage 5 Evaluation of the Pilot Project and Reviews of The Study

The partner organization shall monitor the implementation of the Pilot Project and evaluate. Pilot Project is evaluated from three aspects such as Achievement, Impact and Sustainability.

### **1) Achievement**

Evaluation of achievement shall be done through following viewpoints;

- The objective of the project met the needs of commune people.
- The participants of the project were satisfied with the project's contents.
- The participants understood the lessons to be learnt.
- The motivation of participants increased.
- The overall goal of the project was attained.
- Organization of the commune was activated.
- Fundamental structure of the commune organization was strengthened.

### **2) Impact**

Evaluation of impact shall be done through following viewpoints;

- The project showed its presence to general public.
- The project attracted general public's concern from not only the commune but also adjacent communes or provinces.
- General public was interested in the progress of the project.
- The participants' performances were improved through the implementation of the project.
- Negative impact, such as people's complaint or destruction of community, was not observed.

### **3) Sustainability**

Evaluation of sustainability shall be done through following viewpoints;

Key organization with ability to manage the project was established..

Participants have willingness to continue project.

Motivation of the community leaders is maintained.

Participants of the project have sufficient knowledge and techniques to implement the project by their own efforts

The least tools and materials to implement project are of the commune's possession.

The participants can establish a cost recovery system which enables the sustainable project.

If some difficulties were observed from the results of the above evaluation, the partner organization shall recommend the measures to overcome those difficulties.

## **(6) Stage 6 Project Implementation of Action Plan**

### **1) Selecting the priority project of the Action Plan**

The Action Plan proposes implementation program of the Action Plan. The priority projects are selected from the projects which are recommended to be conducted at an early stage. Method for selection of the priority projects is the same as the procedure mentioned in the selection of Pilot Project.

### **2) Formation of Study Team**

In order to formulate the framework of the project, the study team for the project shall be organized.

The Study Team is comprised of provincial government, commune administration and CLDs. Role of parties concerned are;

**Table 9.4 Role in The Study Team**

Organization	Role
Provincial Government	- Technical assistance and advisory in the planning - Policy decision of the government level especially in the finance
Commune Administration	- To preside over The Study Team and steering committee meetings - Arousal of commune people's concern in the Project - Establishment of the original plan for discussion by the team
CLDs	- To submit the opinions that are representative of residents' concerns - To offer resources in the community to realize the project

**3) Basic Design of the Project**

Basic design of the project shall be established. The items to be designed shall be same as Pilot Project.

**4) Discussion with the government to acquire budget**

The commune administration should try hard to acquire budget for the implementation budget. The commune leaders discuss with the representatives of provincial government for acquisition of the budget by the government's own finance or by the donor's contribution.

**5) Establishment of implementation organization for the project**

The implementation organization is composed of project management committee and implementation team. The project management committee is responsible for decision making of important issues brought up by the implementation team.

The implementation team has the mandate to implement the project. All the activities of the implementation team are under the direction of the implementation plan. Any problematic issues shall be discussed by the management committee.

**6) Detailed design of the project**

Detailed design of the project is accomplished under the supervision of the implementation team and approval of the management committee. Detailed design includes exact cost estimate of the project.

**7) Implementation of the project**

Implementation of the project is supervised by the implementation team and under the control of the management committee.

**8) Monitoring of the project**

The management committee also monitors the achievement of the project. The viewpoints of monitoring are the same as the viewpoints described in evaluation of Pilot Project, such as outcome, impact, sustainability. Those of results are gaved necessary feedbackes to the Project planning and Implementation stage.

## CHAPTER 10 : CONCLUSION AND RECOMMENDATIONS

### 10.1 CONCLUSION

The Development Study for Urban Rehabilitation Plan of Kinshasa in the DRC is conducted to rehabilitate the situation of N'djili commune through the analysis of present conditions and formulation of Action Plan. Based on the study experiences, conclusion can be pointed out as following;

#### **(1) Identified necessary actions for stakeholders**

The Plan studied as an urban rehabilitation plan for urgent rehabilitation/reconstruction planning just after recovering from political conflicts and/or economic turmoil which is a situation similar to the one present in Kinshasa province. Characteristics of the plan involve a variety of stakeholders and participatory approaches to activate commune development. Through the study, necessary actions of respective stages and relevant stakeholders were identified. That information and progress are quite necessary for stakeholders, such as central government, commune authority/local government and commune residents.

#### **(2) Intervention for community organization**

The plan intentioned to share information broadly with involvement of community organization for Action plan formulation works successfully. At the beginning, the study team started its role as a surveyor. Then, through the process of various activities such as workshops and pilot projects, the team accordingly shifted its role as an adviser or a facilitator with collaboration of counterparts. For community, it had also a good opportunity to familiarize Action Plan and deeply understand own roles respectively. Their opinions were also precisely referred to the plan. Consequently, that process of the intervention for community organization by the study team is a good lesson for community development projects.

#### **(3) Activate community organization based on Civil Education**

For community development, the plan encouraged activation of CLD in N'djili, as a community organization by/for residents. Accordingly, CLD would play an indispensable role in the studies which is an essential factor in the success of the participatory approaches.

#### **(4) Compile current data and analyze conditions in Kinshasa province**

The study compiled current data and information in Kinshasa province while having interviews with official personnel from relevant sectors. Development policies, programs and projects of respective sectors in Kinshasa were integrated for study's reference. Therefore, by employment of that data and information, other communes can refer to necessary information to construct their rehabilitation plans as a database.

#### **(5) Compile current data and analyze conditions in the pilot commune**

The study also compiled current data and information in the pilot commune, N'djili, while holding interviews with stakeholders, such as provincial government, official personnel, representative

persons in charge, and community residents. This database can provide necessary information for further actions in N'djili. Although N'djili database cannot duplicate directly for other provincial government and communes, data collection approach and basic contents of database are applicable for them.

**(6) Forecast future demand and indicate development policies in the pilot commune**

To establish a Socio-economic framework in the Kinshasa and N'djili, the study forecasts future demand and indicates development policies in the pilot commune, N'djili, through statistical analysis and interviews with stakeholders. Forecasted future demands and indicated development policies facilitate effective policy making and appropriate project formulation in N'djili as a development scenario. Although those of forecasted future demands and indicated development policies cannot duplicate for other communes directly, the demand forecasting approach for making Socio-economic frameworks and indicated development policies in the study are also applicable and valuable for their activities.

**(7) Formulate an Action Plan in the pilot commune**

To clarify necessary actions for rehabilitation commune, the study formulates an Action Plan in the pilot commune, N'djili, through statistical analysis and dialogues with stakeholders. Under the development scenario of N'djili, formulated Action Plan clarified necessary actions/feedbacks for rehabilitation and prioritized projects to be implemented. Although the Action Plan cannot be directly duplicated for other communes, a variety of menu and indicated outlines of prioritized projects are valuable for making their Action Plans respectively.

**(8) Implement Pilot Projects for the verification of the Action Plan**

For the verification of the Action Plan, the study implemented Pilot Projects. Through the participatory action process of the Pilot Projects, various lessons learned were scrutinized and gave feedbacks to the planning. Moreover, the Pilot Project contributes not only to the verification of the Action Plan, but also motivates the community for participation of the planning. Under the experience gathered in the implementation of Pilot Project it can be established whether the approach is effective for Action Plan formulation works.

**(9) Verified applicability of the study as a model of urban rehabilitation planning**

As mentioned above, the study applied the participatory approach to formulate the plan. This approach was warmly welcomed by the stakeholders and it is also being verified as a crucial method to formulate the plan successfully. Consequently, participatory approach and its methodology, defined as "N'djili Model", are highly valuable for making urban rehabilitation plans that can be applied for other communes as a model of urban rehabilitation planning. In this context, it is expected that N'djili model can be successfully duplicated in other Kinshasa Communes and thus become a suitable Master plan for Kinshasa Capital City with possible expansion to other DRC provinces and communes.

**10.2 RECOMMENDATION**

Based on the study experiences, recommendations of the study can be pointed out as following;



**(1) Modification depending on community characteristics**

N'djili model can be utilized as a development guideline for other communes, but it requires some modification of scale and approaches for depending on community characteristics.

**(2) Highlight capacity building through Civic Education**

For sustainability in development actions, capacity building activities through Civic Education Campaign are of paramount importance at Government level, Commune level and Community level so as foster a unified vision about the development progression. Those lessons are replicable for other Commune as well. In addition, application of Civil Education for other commune, or encouragement of community independence, or further supports by Kinshasa Government and donors are expecting to proceedings.

**(3) Support for decentralization**

Commune autonomy is an important factor for decentralization. However, organizations at provincial and commune levels are still immature. Therefore, continuous supports for capacity development of community are required.

**(4) Support for community**

CLD played active role in the project. To encourage their activities, continuous necessary support is indispensable for sustainable impact on the residents and also better appropriateness of the development process. For development partners, with collaboration of counterparts, various community participation approaches such as utilizing workshops and pilot projects are highly effective ways for community development.

**(5) Coordination of development actions**

It is necessary to establish sound Coordination Structure for Community Development between Kinshasa Provincial Government, Commune level and Community or CLD level. Due to lack of necessary funds to implement development projects, potential donors, international organization assistance and coordination activities for Kinshasa Provincial Government, N'djili Commune and CLD are highly expected.



