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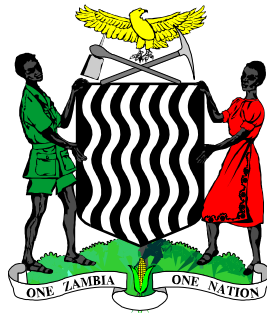
**THE GOVERNMENT OF THE REPUBLIC OF  
ZAMBIA**

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**MINISTRY OF AGRICULTURE & COOPERATIVES**

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# **IRRIGATION DEVELOPMENT AND SUPPORT PROGRAM**

*Resettlement Policy Framework*

**Final Report**

*June, 2010*

**BRL**  
*Ingénierie*



**NIRAS**  
Zambia

# IRRIGATION DEVELOPMENT AND SUPPORT PROGRAM – Resettlement Policy Framework – *Draft Final Report*

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## ACRONYMS

ADSP-SC	Agricultural Development Support Program for Smallholder Commercialization
AMPEDA	Agricultural and Marketing Partnership and Enterprise Development Agreements
CEEC	Citizens' Economic Empowerment Commission
CTAS	Copperbelt Technical Assessment Site
EA	Environmental Assessment
ECZ	Environmental Council of Zambia
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EPB	Environmental Project Brief
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
FSRP	Food Security Research Program
GRZ	Government of Zambia
IBRD	International Bank for Reconstruction and Development
IDA	International Development Agency
IDP	Irrigation Development Project
IDSP	Irrigation Development and Support Program
IPA	Irrigation Partnership Agreement
MACO	Ministry of Agriculture and Cooperatives
MFNP	Ministry of Finance and National Planning
NIP	National Irrigation Plan
NIRAS-BRLi	Consulting team in charge of ESMF and RPF establishment
NGO	Non Governmental Organization
PAP	Project Affected Parties
PPP	Public Private Partnership
PRA	Participatory Rapid Appraisal
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SOW	Scope of Work
WB	World Bank
WUA	Water Users Association

## EXECUTIVE SUMMARY

This Resettlement Policy Framework (RPF) is for the Zambian Irrigation Development and Support Programme (IDSP) which the World Bank intends to finance.

The Agency responsible for the implementation of this RPF is the Ministry of Agriculture and Cooperatives (MACO). This RPF has been prepared simultaneously with the Environmental and Social Management Framework (ESMF). This RPF Report is meant for use by the IDSP to insure that the World Bank's Safeguard OP 4.12 for involuntary resettlement and Zambia's needs for land acquisition and resettlement are addressed adequately. The ESMF on the other hand stipulates the IDSP's mechanisms for screening sub-projects for environmental and social impacts and prescribes measures for mitigating and managing the identified impacts.

### Project Description

The World Bank has agreed with the Zambian Government to prepare and implement the IDSP at the estimated total cost of US\$ 57 million to be financed through a sector investment loan, whereby IDA would provide US\$ 50 million credit equivalent, while the equivalent US\$ 5 million will be provided by the Government of the Republic of Zambia (GRZ). The proposed project has 3 components namely :

- ③ Component 1: Irrigation development whose main objective is to develop a series of medium to large scale small holder irrigation schemes in high potential areas and to ensure their long term sustainable operation and maintenance.
- ③ Component 2: Small holder commercialization, whose main objective is to ensure market access and lay foundations or a sustainable intensification of agricultural production in the targeted small holder irrigation schemes.
- ③ Component 3: main objective is to manage and use resources in accordance with the projects objectives and procedures. The projects subcomponents include monitoring and evaluation.

The IDSP plans to develop irrigation schemes at 3 sites namely Lusitu in Siavonga District of Southern Province, Mwomboshi in Chibombo District of Central Province and Musakashi in Mufulira District of the Copperbelt Province. At Musakashi a total of about 500 ha is proposed to be brought under irrigation using a variety of irrigation technologies whose types and costs are yet to be determined.

At Mwomboshi a total of 1,600 ha is proposed to be put under irrigation agriculture development by small scale farmers using water from the proposed dam reservoir. The irrigation technologies and their costs are still to be determined.

A total area of approximately 250 ha is proposed to be brought under the irrigation scheme at Lusitu for small commercial agriculture development using irrigation technologies and costs to be determined after the necessary on-going feasibility studies are completed.

As the feasibility studies for the development of the irrigation schemes at Musakashi, Mwomboshi and Lusitu have not yet been completed, this Resettlement Policy Framework describes the policies and procedures to be applied in the preparation of the Resettlement Action Plans (RAPs) as soon as the relevant information becomes available during the implementation of the IDSP .

## Legal Framework

In Zambia relevant laws related to land administration, ownership, land use, valuation, compensation, entitlement and procedures for grievance redress include the Zambian Constitution, the Land Acquisition Act, the Agricultural lands Act, the Public Roads Act, the Arbitration Act, the Environmental Protection and Pollution Central Act, the Wildlife Act, the Local Government Act, the Town and Country Planning Act, the Land Survey Act, and the Land Convention of Titles Act.

Differences between the Zambian Legislations and the World Bank OP 4.12 on the general principles of resettlement, eligibility criteria, compensation period for expropriation and resettlement include :

- ③ The World Bank OP 4.12 provision that resettlement should be avoided as much as possible, while the Zambian Legislation provides for repossession of land in the National Interest whenever deemed necessary.
- ③ The World Bank OP 4.12 provision which entitles those without formal rights to the land they occupy to claim compensation while the Zambian legislation provides compensation to land title holders with leases to the properties in question.
- ③ The Zambian legislation provides for the vacating of repossessed land as soon as compensation has been paid contrary to the World Banks OP 4.12 provision that vacating should take place only when the necessary measures for resettlement have been put in place.

## Land acquisition and Resettlement

During the preparation of this Resettlement Policy Framework, accurate figures on affected land, numbers of persons and assets were not available and the estimated figures in this regard had to be driven from field observation and various sources. Given the limited data available at this stage it is estimated as follows :

### Musakashi Irrigation Project Scheme.

About 330 households representing about 2000 people will be affected, while about 100 households within that figure will be displaced, while 50 of the remaining 230 households will lose part of their assets such as land, while the construction of irrigation infrastructure, access roads, canals will affect an estimated 50 households and the consolidation and restructuring of plots and landholdings is estimated to affect 50 households.

### Mwomboshi Irrigation Project Site

The estimated population in Mwomboshi area is 9600 people or 1200 households. The construction of the proposed dam and irrigation infrastructure, pumping station and access roads will affect an estimated 527 households. Creation of Water Users Association(WUA) might necessitate land consolidation and restructuring.

### Lusitu Irrigation Project Site

An estimated population of 300 households representing about 2000 people is estimated to reside in the Lusitu project area. Half of this population is estimated to be affected by proposed sub-project activities such as acquisition of land for construction of irrigation infrastructure, pumping station and access roads. Some of the land to be acquired for sub-project activities will be allocated to outside farmers and private investors.

## Valuation and Compensation

Zambia has a well established valuation system which uses four methods namely ; comparative, investment, residual and depreciated replacement cost method. This RPF provides for the application of the Zambian Valuation Methods and compensation wherever applicable provided they comply with the provisions of the World Bank OP 4.12 as related to Involuntary Resettlement and that in case of conflict, the provisions of OP 4.12 will prevail.

Programmes to Improve or Restore Livelihoods and Standards of living for Project affected persons will include the provision of micro-financial support and skills development .

## RAPs Preparation and Implementation

An abbreviated Resettlement Action Plan is required in case of fewer than 200 people that are displaced by project activity. With 200 or more people affected, a comprehensive Resettlement Action Plan is required.

When preparing each RAP, the following steps will be followed :-

- ③ Screening Process,
- ③ Carrying out the affected areas' socio-economic census, land and asset inventory,
- ③ Identification of Project Affected Parties (PAPs)
- ③ Development of Resettlement Action Plans (RAPs)
- ③ RAPs Review and Approval by Relevant Authorities.
- ③ Implementation of the RAPs
- ③ Monitoring of the RAPs implementation.

It is the responsibility of relevant councils and sub-project proponents to follow the steps outlined above in the preparation and implementation of RAPs.

Consultation and public disclosure will characterize the process of preparing and implementing RAPs, and that the PAPs and affected stakeholders will be informed about the IDSP activities at the project sites.

To be successful the process of implementing sub-project RAPs after their approval should include a Continuous Consultation process with the stakeholders and project affected persons during the site selection, screening and the RAPs development, affected peoples notification, assets' documentation, compensation negotiations and agreements, contracts preparation, and resettlement assistance provisions.

## Grievance redress mechanisms

Affected individuals and households will have been informed of the process for expressing their dissatisfaction and seeking redress by the time that RAPs are approved. The grievance redress methods in Zambia include the Local Government Organs method and the MACO and Local courts system method.

## Implementation Arrangements

The Ministry of Agriculture and Cooperatives (MACO) and the Ministry of Energy and Water Development are the key Agencies in the implementation of IDSP. At the National Level MACO will host the National IDSP Steering Committee (NSC) while at the Provincial level, IDSP activities will be coordinated and facilitated by the PDCC chaired by the Provincial Permanent Secretary while the DDCC chaired by the District Commissioners will coordinate and facilitate the implementation of IDSP activities in their Districts.



The responsibility for the development and implementation of RAPs will be at District/Council or Municipality level in accordance with Zambian Decentralization Policy which the Country is implementing.

The relevant Provincial and District Government Departments will be part and parcel of the RAPs implementation and monitoring mechanisms in their areas.

The Projects Technical Teams operating at District and Ward levels will be responsible for undertaking screening and assessment of potential sub-projects impacts to determine the need or otherwise of compensation and/or resettlement. Local Committees representing community members will be set up to provide Fora for expressing community views and concerns about IDSP projects and its activities.

### **Monitoring Arrangements**

The IDSP monitoring program mechanisms will include arrangements for monitoring compensation and resettlement activities. In this regard, before implementation of sub-project activities are commenced, evaluations will be made to determine whether PAPs have been paid in full and on schedule and whether they enjoy the same or higher living standards than those prevailing before the project commenced. Furthermore the impacts of compensation and resettlement activities shall be monitored using objectively verifiable indicators in order to determine and guide improvements in the PAPs standards of living. The indicators will quantitatively and qualitatively measure the physical and socio-economic status of the PAPs. To accomplish this task successfully, RAPs monitoring indicators tailored to specific site conditions will be developed.

### **Budget Estimate**

The estimated figure for RAPs preparations, implementation( Including compensation), for Irrigation Systems and Dams, salary for resettlement specialist, monitoring and technical assistance is US \$ Three million One Hundred and Eighty-five Thousand (US\$3,185,000) .

The exact budget figures for these items could not be calculated because the number of people and assets to be affected by the sub-project activities at project sites were not available at the time of preparing this RPF.

## Introduction and objectives

The Government of Zambia (GRZ) is seeking a concessionary credit from the International Development Agency (IDA) to fund the Irrigation Development and Support Project (IDSP). The project will be implemented by the Ministry of Agriculture and Cooperatives (MACO).

NIRAS Zambia Ltd. in association with BRLi in France have been assigned the task to prepare an Environmental and Social Management Framework (ESMF) and a Resettlement Policy Framework (RPF). Together the two frameworks establish a unified process for addressing all environmental and social safeguard issues of the project. The frameworks will prescribe the process from the preparation, through review and approval to implementation of the sub-projects that will ensure that the substantive concerns of all World Bank (WB) safeguard policies and relevant Zambian legislation will be adequately addressed.

This report presents the Resettlement Policy framework for the Irrigation Development and Support Project which consists of three selected pilot sites at Lusitu in Siavonga District, Southern Province; Mwomboshi in Chibombo District, Central Province; and Musakashi in Mufulira District, Copperbelt Province. The Environmental and Social Management Framework (ESMF) is presented separately in another report.

### RESETTLEMENT POLICY FRAMEWORK PURPOSE

The purpose of this RPF is to clarify resettlement principles, organizational arrangements and design criteria for the resettlement of affected persons in the course of implementation of the IDSP. Specific Resettlement Action Plans (RAPs), consistent with guidelines in this RPF, will be submitted to the World Bank for approval once specific information about land expropriation becomes available.

Implementation of the IDSP will trigger resettlement policy because land will be acquired for irrigation purposes and affected persons will need to be compensated for loss of land, housing or homes, loss of employment or revenues from business, etc. Relocation to outlying areas far from family support networks resulting in potentially diminished mutual assistance is also a consideration for compensation.

### OBJECTIVES OF THE RESETTLEMENT POLICY FRAMEWORK

This framework document is designed for use by MACO, other relevant stakeholders and the World Bank to address the needs of the populations and persons who would be affected by the IDSP, by establishing policies, principles and institutional arrangements for management of issues related to acquisition of land needed for the project's activities, the resultant displacement of people and the impacts on their livelihoods.

### RESETTELEMENT POLICY FRAMEWORK PRINCIPLES AND METHODOLOGY

In line with the World Bank's involuntary Resettlement Policy OP 4.12, the Zambian Government is required to prepare the Resettlement Policy Framework (RPF) to be disclosed before project appraisal. The guidelines contained in this RPF are based on relevant Zambian legislation and World Bank Policy on involuntary resettlement and land acquisition, which recognizes compensation for loss of assets or income as a fundamental right of all project affected persons.

According to the Bank Policy, 'affected people' refers to the people who are directly affected socially and ecumenically by Bank assisted investment projects causing:

- ③ involuntary alienation of land and other assets resulting in:
  - Relocation or loss of shelter,

- Loss of assets or access to assets; and
  - Loss of income sources or means of livelihood whether or not the affected persons must move to another location or not.
- ③ involuntary restriction or access to legally designated parks and protected areas resulting in adverse impacts on the livelihood of the displaced persons.

The implementation of the IDSP will necessitate land acquisition for the construction of irrigation infrastructure and for irrigation land resulting in the resettlement and compensation of displaced people. This RPF will establish resettlement and compensation guidelines and design criteria to be applied to the sub-projects which will be prepared during project implementation in compliance with the Zambian law and the World Bank's policy on involuntary resettlements. The following are some guidelines which should be followed in the implementation of this RPF and the Resettlement Action Plans:

- ③ The RPF applies to all components under the project, whether or not they are funded in whole or part by the Bank.
- ③ The policy also applies to displaced persons regardless of the total number involved, severity of the impact, ethnicity, race or colour, legal title to the land and those who may not be protected through the Zambian compensation legislation.
- ③ Where feasible, involuntary resettlement and land acquisition should be avoided or minimized by exploring all viable alternatives.
- ③ Where relocation or loss of shelter occurs, measures to assist displaced persons should be implemented in accordance with a plan of action for resettlement and compensation.
- ③ The planning and implementation of the resettlement process will be conducted in a consultative manner with those to be displaced.
- ③ Absence of legal title to land should not be a basis for compensation and Resettlement assistance.
- ③ Displacement or restriction to access should not occur before necessary measures for resettlement and compensation are in place. Apart from compensation, these measures should include provision of other assistance required for relocation, prior to displacement, and preparation and provision of settlement sites with adequate basic facilities.
- ③ The displaced must be relocated to areas with basic amenities like schools, potable water, health facilities, etc.; and all affected persons and entrepreneurs or institutions should be assisted to restore their incomes and livelihood sources to at least pre-resettlement levels. Particular attention will be paid to the needs of the elderly, women and children, the handicapped, and the landless, among other vulnerable groups.
- ③ Wherever possible, those impacted by involuntary resettlement should be considered for employment in various project activities including construction works and provision of other services.

According to World Bank, vulnerable groups such as the elderly and women-headed households should be entitled to a special benefit package in addition to compensation entitlement.

The following RPF strategies will be adopted:

- ③ Resettlement activities will be a participatory process guided by informed participation.
- ③ Resettlement Action Plans (RAPs) will be produced in the national local languages spoken in the project sites namely Tonga in Lusitu, Nyanja (Lenje or Tonga??) in Mwomboshi and Bemba in Musakashi. The RAPs will be made available by MACO, the Provincial Administration or Local government to those involved and upon request.

- ③ RAPs will describe all measures for restoration of the livelihoods of affected persons and will include an annual budget for implementation of resettlement and other related activities.
- ③ All affected people will be entitled to compensation for lost assets. They will be paid a replacement cost agreed between themselves and MACO. The compensation will be based on the valuation done by the Government Valuator from the Ministry of Local Government and Housing, and will either be the market value or other value dependent on negotiations between the two parties and witnessed by a third party.
- ③ Whenever possible, land for land, as close as possible to the homestead, should be provided as part of compensation.
- ③ Ownership of the compensated land/or property will be transferred to the state or sub-project beneficiaries by agreement.
- ③ If the affected land is under tenancy, both the landowners and tenants as affected persons will be eligible for compensation and entitlements.
- ③ Compensation for loss of (potential?) crops and trees should be calculated as annual net product value multiplied by the number of years for a new crop to start producing.
- ③ The seriously affected people should be at least well off than they were before the project.
- ③ Exclusive mechanisms will be developed to protect the economically vulnerable.
- ③ Priority for employment arising from project activities will be given to affected persons losing assets.
- ③ A functional mechanism for resolving conflict arising out of the resettlement process will be established.

## THE RPF METHODOLOGY

A multi pronged approach was used in preparing this RPF. Both field work and desk work were employed. Desk work comprised literature review. Literature review was used to gain insight into the World Bank and Zambian policy and legal framework, and to review similar work done both in Zambia and elsewhere in the sub-region.

Field work comprised site visits, including introductory meetings organized by MACO, that also served as public hearings at all three sites. Other field work consisted of group meetings with the communities, focus group discussions; and key informant and stakeholder interviews.

Among the stakeholders and key informants contacted were several Government Ministries and Departments including Ministry of Agriculture and Cooperatives, Ministry of Energy and Water Development, Ministry of lands, etc.; para-statal organizations including Zambia Electricity Supply Corporation (ZESCO), Road Development Agency (RDA) and Zambia Consolidated Copper Mines (ZCCM); the Environmental Council of Zambia (ECZ), the Resettlement Department in the Office of the Vice President, the relevant Municipal and District Councils, Non-Governmental Organizations; and community based organizations. A detailed list of all people and organizations interacted with is contained in Appendix 1.

At Lusitu, an introductory meeting was organized by MACO. MACO officials at national, provincial and district level; members of two consulting teams, traditional authorities and local council representatives were present at this meeting. ... farmers from .. villages were in attendance. A subsequent community meeting was organized by the consulting team, with the help of the local agricultural staff. For the purpose of discussion, farmers were split into 2 groups according to the cluster of residence to which they belonged. In one group representing Simanyangu and Sianyulu villages, 10 men and 8 women attended the group discussion. In the other group... (**MM to provide info. on second group**).

At Mwomboshi, a group meeting and stakeholder meeting were held at the site and the District Commissioners' office. The group discussion was attended by ..men and .. women from .. villages. After the main discussion a focus group discussion was separately held with 5 women. The stakeholder meeting was attended by 15? people including, the District Commissioner, Social Welfare Department, Department of Community Development Forestry Department, Department of Agriculture and Office of the President, among others. An introductory meeting organized by MACO was also conducted here before commencement of the above outlined activities.

Apart from the introductory meeting organized by MACO at Musakashi site at the beginning of this study, a second meeting was convened by the consulting team, with the help of the Mufulira District Agricultural Coordination Office. All three groups of various land ownership types namely titled land, registered land awaiting title and squatters, were represented at the meeting. **(To elaborate with numbers)**. For discussion, farmers were divided into two groups, one group consisting of those with title and the other group consisting the rest of the farmers. The former group was represented by 5 farmers, 2 female and 3 female. **(Info. on other group to come)**.

## Project description

### BACKGROUND

Zambia's economic growth rate has been erratic and the reasons for this are varied. Growth in Zambia's GDP is driven primarily by the performance of the mining sector. Agriculture's contribution remains below potential because of slow growth in the sector. However, it is worthwhile noting that the general trend in GDP growth rate has in the past 3 decades followed closely the pattern of growth in agriculture, which in turn is closely associated with climatic conditions.

A study by the International Food Policy Research Institute (IFPRI) shows that dips in agricultural growth rates during the drought years of 1982, 1987, 1992 and 1994 were accompanied by a similar declining trend in GDP. The effect in flood years is similar but less pronounced. Further, results of a simulation model indicate that climate variability could reduce GDP growth by 0.4 % annually and increase the numbers of those living below the poverty line by 300,000 by the year 2016 (Thurlow, J et. al, 2009). There is need to grow the agricultural sector in order to achieve and sustain favorable GDP growth rates.

In recent years, Zambia has experienced strong growth. From 2005 to 2008, Zambia recorded real GDP growth of about 6 percent annually (CIA World Factbook). However, this has not been matched by concomitant reduction in poverty. According to the Living Conditions Survey of 2006, about 65 percent of Zambian households had incomes below the basic needs basket (CSO, 2006).

The incidence of poverty is higher in rural areas than urban. Most of those in the rural areas rely on agriculture as their main source of livelihood. The crop forecasting survey of 2007/08 found that there were a total of 1, 127,742 smallholders with land holdings of 0.3 to 20 hectares of land. Of these, 44,610 small holders or 4% owned 5 to 20 hectares (FSRP, 2008). This implies that any policies aimed at improving incomes of small holder farmers could improve the lives of at least 5 to 6 million people, assuming a family size of 5-6 persons per small holder farm. The reduction of national poverty is therefore intricately related to income creation policies and strategies for small holders in the agricultural sector.

How Zambia chooses to address the challenges in the agricultural sector will impact the nature of growth in the sector. A strategy that improves productivity in the smallholder sector while not impacting negatively other sectors of the economy, is sure to reduce poverty and lower income disparities. One key constraint to increased productivity in the agricultural sector and its potential impact on poverty reduction is the underutilization of irrigation. Zambia's irrigation potential is estimated at over 423,000 hectares of which some 273,000 hectares or 65 percent is unused. Most of irrigated land is under large scale commercial operation. Without irrigation, small holder farmers are generally constrained to growing only one crop cycle annually of generally low-value crops, with variable yields and quality as well as low profitability.

The Irrigation Policy and Strategy (2004) and National irrigation plan (NIP) together guide the development of the irrigation sector in Zambia. The NIP advocates for inclusive interventions that target all types of farmers living in areas of high potential for irrigated agriculture, whether smallholders, emerging commercial or large scale commercial. It also encourages Public-Private Partnerships, small-large scale farmer cooperative arrangements and pursuance of those market development opportunities where the country has competitive edge in import substitution or export. However in order to successfully implement the NIP, Government will need to cooperate with public and private stakeholders as well as financiers to acquire the required technical and financial capacities.

In view of the foregoing, the Government of Republic of Zambia (GRZ) is seeking funding from the International Development Association to finance the Irrigation Development and Support Program. The proposed project consists of 3 components namely (a) Irrigation Development, (b) Smallholder Commercialization; and (c) Project Management. Three pilot sites have been selected at Lusitu, Mwomboshi and Muskashi. The sites are described in more detail in section , There are two(2) guiding principles for this project:

- ③ Smallholder schemes can only be sustained if they have a commercial orientation which allows beneficiaries to pay for irrigation water and other related services.
- ③ The successful long-term management, operation and maintenance of smallholder irrigation schemes depends on well defined roles and responsibilities, formalized in Private-Public Partnership (PPP) type contractual agreements between government, smallholder farmers and professional service providers.

It is envisaged that successful partnerships will ensure the smooth operation and maintenance of the irrigation schemes and sustainable production and/or marketing of agricultural produce. The nature of the contractual partnership will vary at each irrigation scheme, depending on the specific conditions on the ground.

## PROJECT COMPONENTS

The project has 3 main components. These are:

- ③ a) Irrigation Development;
- ③ b) Smallholder Commercialization; and
- ③ c) Project Management.

All of the three components have sub-components. Irrigation Development has 2 sub-components of Irrigation Development Support and Irrigation Investment. Smallholder Commercialization consists of 2 sub-components namely Agricultural and Marketing Services Development Support and Agricultural and Marketing Investment. The third component is divided in 3 subcomponents of Project Management, Support to Policy and Institutional Framework; and Monitoring and Evaluation. The three components and their sub-components are briefly described below.

### Component 1: Irrigation Development

The overall objective of the component is to develop a series of medium to large scale small holder irrigation schemes with assured long-term sustainability of operation and maintenance, intensification of agricultural production and assured market access. The component will promote economic linkages to enable irrigation project participants to capitalize on opportunities created by the project and non- participant rural households to benefit from spin off activities from irrigation and commercialization activities.

Irrigation infrastructure will be funded under this component including bulk water supply, access roads and power lines, irrigation equipment and corresponding equipment for its use; and complementary investments in agriculture and marketing development.

The project will adopt a contractual approach that empowers stakeholders and clarifies their roles and responsibilities. It will facilitate the establishment of partnerships between smallholders, professional service providers and Government in order to promote the quality and sustainability of irrigation services.

Critical assumptions for the successful implementation of this component include small holder's willingness to pay for irrigation and marketing services and higher productivity arising from investments, which will in turn build smallholder's capacity to pay. A major risk is that smallholders are not willing to pay or do not honour terms and conditions of various contractual agreements.

### 1.1.1.1 **Sub-component 1.1: irrigation services development support**

At each site, local stakeholders will be involved in the structuring of Irrigation Partnership Agreements (IPAs). The range of IPA model options includes a) classical irrigation systems with government as owner and financier of the irrigation infrastructure and a professional entity servicing smallholders through operation and maintenance of the infrastructure; and b) large scale centre pivot irrigation systems owned by smallholders assisted by a professional entity and operated by a company that delivers irrigation and agricultural marketing services to the smallholders.

To support infrastructure development, the following activities will be undertaken: a) the capacity building of stakeholders, including formation and of Water User Associations (WUAs); b) identification, technical support and supervision of entities contracted to operate and maintain schemes; c) annual evaluation of performance and user satisfaction surveys; d) assistance with issues concerning land titling; and e) preparation of a portfolio of irrigation development sub projects; and preparation of environmental social management plans and resettlement action plans (RAP).

The project will be monitored to ensure progress in implementation. This will be accomplished through annual or periodic performance contracts. Among other issues to be monitored at each sub project are governance, the water pricing system, conflict resolution, land demarcation and tenure; etc.

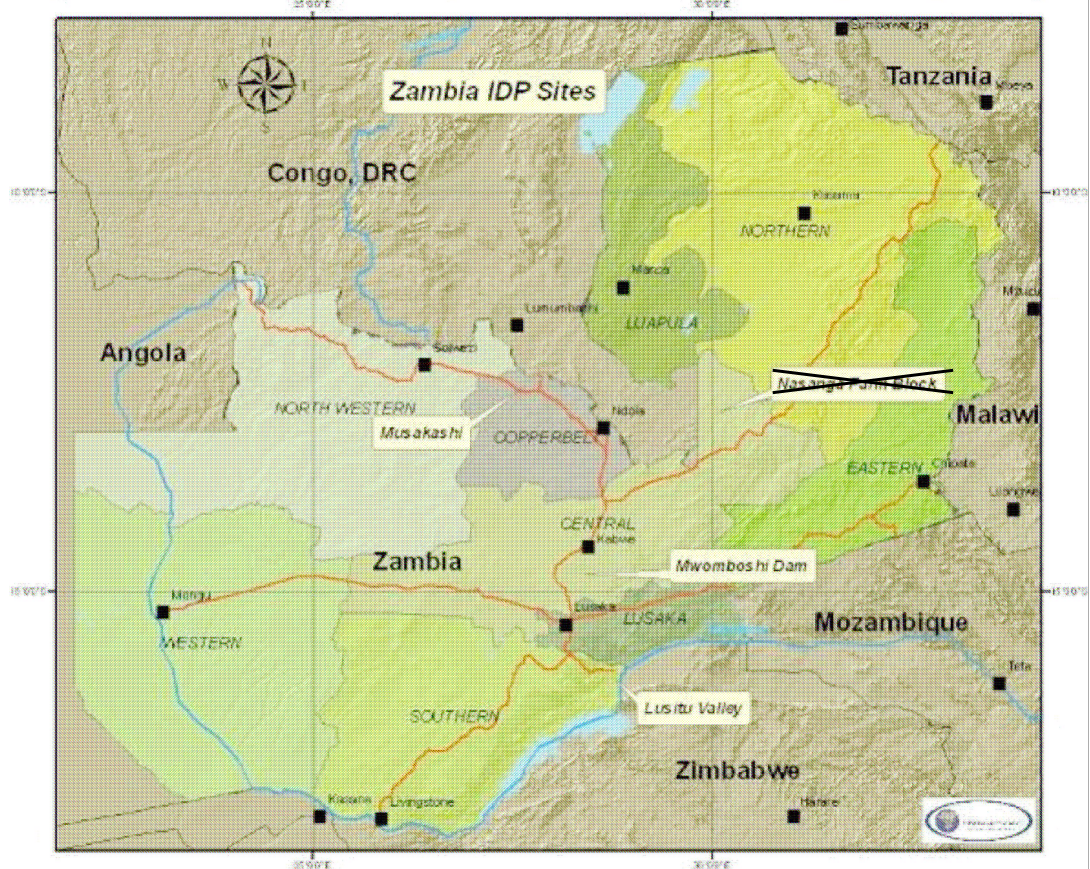
### 1.1.1.2 **Sub-component 1.2: Irrigation Investment**

At selected sites, the project will finance and construct (a) bulk water storage and irrigation water distribution and drainage infrastructure and equipment (dams, canals, pipes); (b) supporting infrastructure (access roads, electrification); (c) equipment (pumps, sprinkler systems, etc.); and (d) implement the Environmental and Social Management Plans and Resettlement Action Plans (RAPs) associated with irrigation investments.

Three pilot smallholder irrigation development sub-projects have been considered for rapid implementation. These are Musakashi (Mufulira District, Copperbelt Province), Mwomboshi (Chibombo District, Central Province), and Lusitu (Siavonga District, Southern Province). The locations of these sub-projects are shown in Figure 1 below. Additional sub-projects will be considered once these are well underway.



Figure 1: Location of the project sites



Source: Sheppard, 2009

## Component 2: Smallholder Commercialization

The main objective of this component is to ensure market access in order to promote sustainable intensification of production at the 3 sites. This component will ensure that farmers capitalize on the opportunities created in component 1. The development of market and knowledge and market linkages will facilitate increased value and volume of agricultural sales. Sub projects will be developed where marketing and commercialization contracts will be negotiated and partnerships established between smallholders and service providers. The nature of these contracts and partnerships at each site will depend on site specific characteristics and conditions.

### 1.1.1.3 Sub-component 2.1: Agricultural and Marketing Services Development Support

There are three activities in this sub-component: Marketing Partnerships Development, Action Research and Capacity Building. Site specific agricultural and marketing partnership and enterprise development agreements (AMPEDAs) will be promoted. A range of partnership models is possible, including the out-growers' model, the cooperative model and the peri-urban model.

The AMPEDAs will be supported by relevant action research, for example value chain analysis and feasibility studies of new and promising proposals. Smallholders and their organizations will also be trained on marketing, business management and other specific skills. There will be annual evaluation of performance and user satisfaction surveys to monitor progress and implementation.

#### 1.1.1.4 **Sub-component 2.2: Agricultural and Marketing Investments**

A matching grant of 50-75% will be provided by the project, depending on the public good nature of the investment and the beneficiaries' capacity to pay. Co-financing can be either in cash or kind, as will be outlined in the Project Implementation Manual.

Those to benefit from investments will include small scale farmers , groups of small scale farmers at or near irrigation projects and private operators. The latter would be responsible for implementing the subprojects and related activities.

### **Component 3: Project Management**

Apart from overseeing the management of and efficient utilization of resources in the project, this component will ensure adherence to set procedures and will support establishment of a policy and institutional framework to upscale the project. There are three sub components in this component: a) Management of the Project, b) Support to the Policy and Institutional Framework; and c) Monitoring and Evaluation.

#### 1.1.1.5 **Sub-component 3.1: Management of the Project**

This includes (a) the provision of technical assistance, training, office equipment and vehicles, minor office upgrading works, auditing and evaluation studies, and incremental operating costs in support of project management; (b) overall project planning, quality oversight, procurement, financial management, and monitoring of project activities; and (c) outsourcing of quality oversight through independent financial and technical audits, and evaluation of project activities.

#### 1.1.1.6 **Sub-component 3.2: Support to the Policy and Institutional Framework**

Among items to be covered under this subcomponent are studies, training, technical assistance, information campaigns, exchange visits and activities to support the development of relevant national policies, regulations, institutions and plans.

#### 1.1.1.7 **Sub-component 3.3: Monitoring and Evaluation**

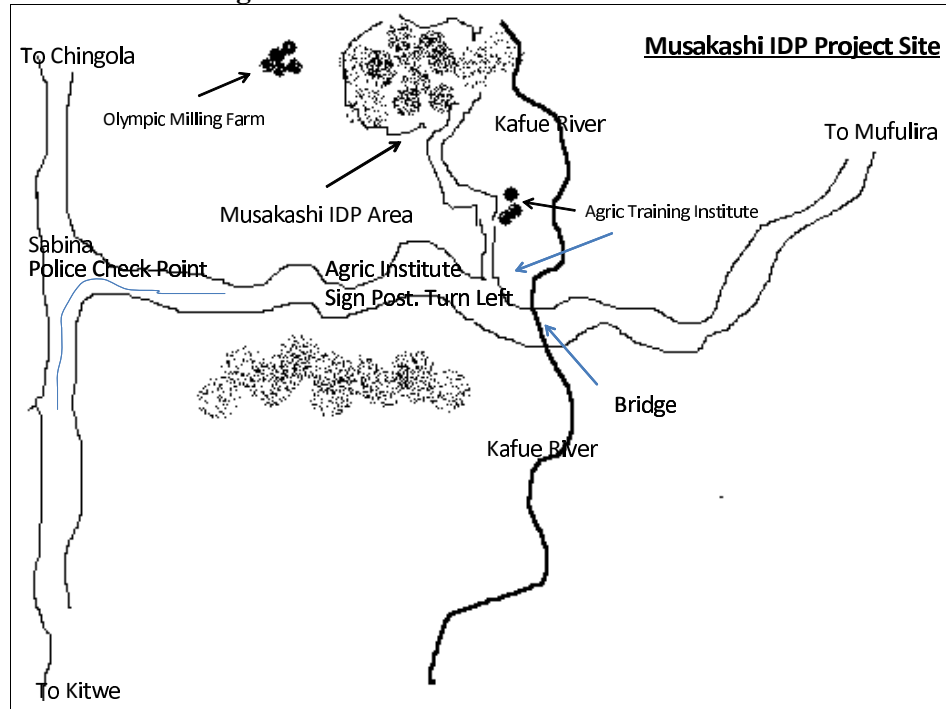
Items include data collection and reporting on key performance output and impact indicators, and mid-term and final evaluations.

## **DESCRIPTION OF THE PROPOSED IRRIGATION SCHEMES**

### **MUSAKASHI Irrigation Project**

#### 1.1.1.8 **Location**

The project site is located in Musakashi Farming Block in Mufulira District in the Copperbelt Province of Zambia at approximate latitude 12o 37'south and longitude 28o 09'east and altitude of about 1,200m above sea level. The area can be accessed by a gravel road from the main Kitwe-Mufulira road about 35kms north-west of Kitwe. Figure 2 shows the project location.

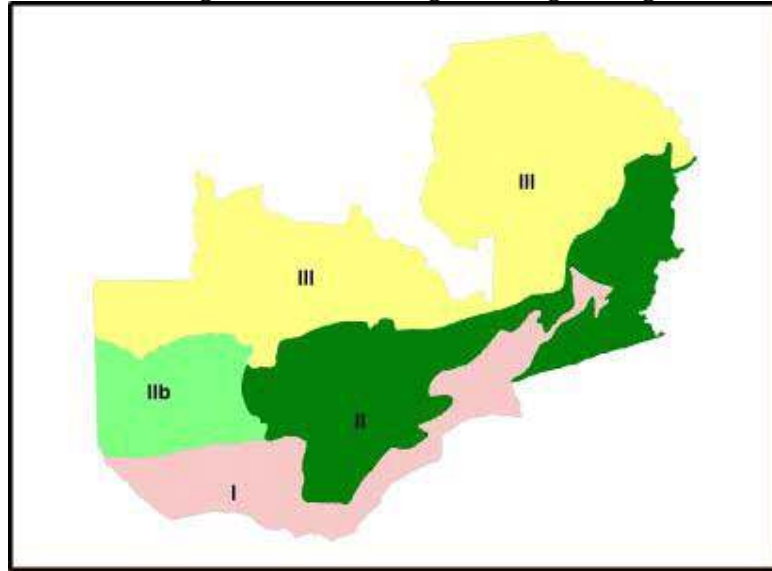
**Figure 2: Location of Musakashi IDSP Site**

The project area is located in a government settlement scheme, and according to plan, the area will contain 53 plots of 3-5 hectares, 25 plots of 5-10 hectares and 30 plots of 10-150 hectares. The area was initially settled by graduates from the Zambia College of Agriculture in Monze and Mpika. Twelve of them formed the Sustainable Agricultural Development Association which has since evolved into the Akabangilile Multipurpose Cooperative with over 120 members.

Close to the project site, the Zambia Agricultural Research Institute operates a Technology Assessment Site which, when full capacitated, will have facilities for soil survey, plant quarantine and seed control and certification, as well as an agro meteorological station.

#### 1.1.1.9 *Climate and Agro-ecological Setting*

Musakashi Irrigation Project lies in what is broadly characterized as region 3, one of four agro-ecological regions in Zambia, as shown in Figure 3. Region 3 comprises the north and north western plateaux and is characterized by high rainfall of 1000-1500mm. There are 3 seasons, a cool dry season (April- August), a hot dry season (August to November) and a warm wet season (November to April).

**Figure 3: Zambia Agro-ecological regions**

Source: CFA, Zambia Branch homepage

The soils in the region are mostly Haplic Acrisols and they are highly leached and acidic. However, an indicative soil survey may be required to better understand the soils available for irrigation in the project area and to refine the water requirements, inputs and other technical aspects.

The Project area consists of the upper reaches of Kafue River. The topography is a series of ridges between a number of streams that flow west to east towards the Kafue River just outside the boundary of the project area. One alternative plan for irrigation is to abstract water from the Kafue River. The upper Kafue River has lower constraints for small holder irrigation compared to the rest of the river catchment. However, the availability of water should be investigated further. Water rights will be required.

#### 1.1.1.10 Farming Systems and Livelihoods

The project area comprises a mix of farmers on a gross area of 4,000ha. The type of land access in the project area can be divided into three. Group discussions with farmers in the area revealed that there are about 25 farmers with title to land, including some graduates from colleges of agriculture and other farmers. A second group of farmers have numbered plots for which title is yet to be formalized. The third group consists of farm squatters, some of whom may have been living in their current stations, even before their locations became titled.

Most farmers cultivate rain-fed crops of maize, groundnuts, sugarcane, pasture, sweet potatoes, sugar cane and cassava. During the months of February to March, hippos destroy crops especially those close to the banks of the river. Among the emergent farmers, those who have title to land, most of the cultivated land is allocated to maize production followed by pasture for those who own cattle, groundnuts and vegetables.

Several farmers have also established small irrigation areas using diesel or electric powered pumps to abstract water from the small perennial streams that traverse the area or from the one small dam located on the northern boundary of the area. Mostly vegetables are grown under irrigation in the dry season, for example tomatoes and okra. Dry season vegetable cultivation depends on accessibility to water fronts or wetlands and not all farmers have access. Among the emergent farmers, most had access to this resource. One large commercial farm pumps water from the nearby Kafue River to irrigate 600 hectares of wheat about 3 kilometres north-west of the site.

Various types of livestock are raised in the area, including cattle, pigs, goats and broilers. Discussions with representatives from the emergent farmer group revealed that about 55 percent of them own cattle, 35 percent own pigs, 15 percent keep goats and only 2 of them raise broilers on a regular basis. Two of the emergent farmers listed the provision of extension service as an activity that generates income for their households. The two provide artificial insemination assistance and other livestock related services to other farmers at a fee.

Five main criteria were used by the emergent farmer group to grade the well being of households in their category. These were area cultivated, employment of labour, type of housing, number of bags of maize marketed and household food security. Twenty five percent who were said to be the most well off cultivated 8 hectares or more and marketed 120 bags or more of maize. They were also able to market their produce without difficulty and employed both permanent (5 or more) and casual labour. The housing of this group was made of burnt bricks and iron roof.

The medium group cultivated 3-5 hectares, hired 1-4 persons on permanent labour and some casual labour; and marketed 70-120 bags of maize. The housing of this middle group was made of burnt bricks, mostly thatch roof with only a few households affording iron roofs; and their houses had 1 to 3 rooms.

The least well off category cultivated up to one hectare, marketed up to 50 bags of maize, did not hire permanent labour, hired casual labour only sometimes; and had houses made of un-burnt bricks and thatch roof.

Overall, only about 15 - 20 percent of the emergent farmers were said to be food insecure, those who ran out of food during the months November to January, but managed to struggle through with the little income from vegetable sales.

#### **1.1.1.11 Infrastructure and Services**

The community listed several items of priority for the project area. These include, road network, bridges, a clinic and a school. The project site has very poor feeder road infrastructure within the scheme. The bridges are also in poor state of repair. These need to be attended to for the smooth delivery of inputs into the area and commodities out of the area. Another priority was clean, safe drinking water. Currently, the community gets drinking water from streams and wells.

The area also has an estimated 500 households? and it is anticipated that with the opening of the irrigation scheme, there will be an influx into the area. Farmers expressed the need for a local police station to curb crime and to prevent cattle rustling.

The farmers with title to land also complained that they had been granted title to land with a promise of infrastructure and inputs. To date no inputs have been provided and there is only one tractor, without implements, for the whole area.

An 11 KvA ZESCO power line passes through the area and has been used by several landholders for electric power.

#### **1.1.1.12 Main Social Issues**

Anticipated social issues arising from the implementation of the project include the following:-

- ③ Land will have to be acquired for irrigation purposes. There are currently three types of land access in Musakashi as elaborated on earlier. Each will require a different approach to be accessed for irrigation. Specifically, it may involve those with title to give up some of their land to allow wider community access for irrigation. This has caused considerable concern among titled farmers. Some view the apparent concession to give land to squatters as condoning illegality. The local administration, led by the District Commissioner, is consulting with all concerned parties to ensure a harmonious transition.

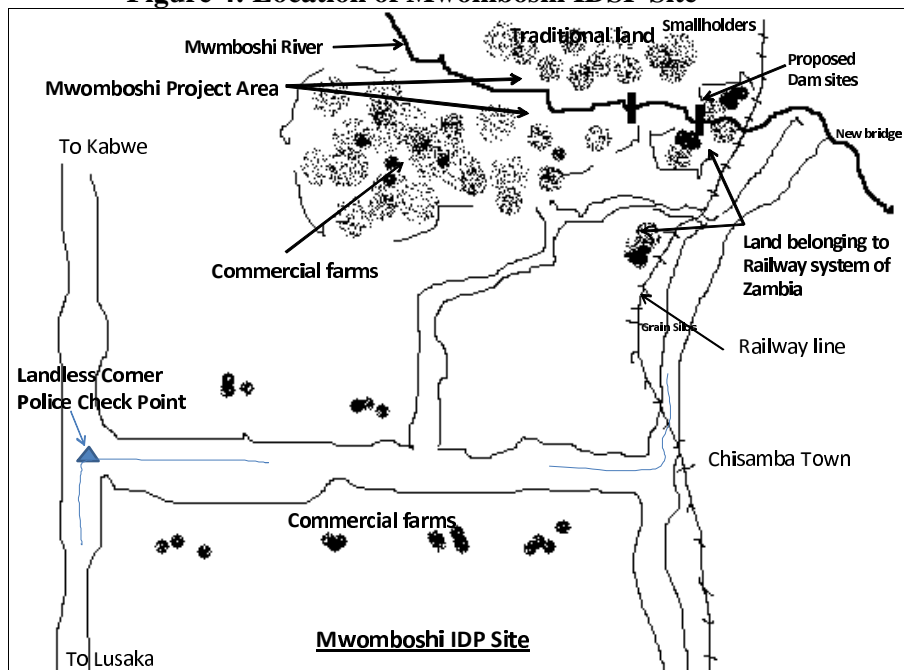
Another concern from titled land owners include the lack of clarity on whether under the new land arrangements in the proposed irrigation scheme, land can be passed on to descendants.

- ③ Involuntary resettlement. People will need to relocate to make space for building of dams, pipe laying and the actual land to be irrigated. Some concerns raised by the community are the mode of compensation and the method of compensation in case of perennial crops/ fruit trees.
- ③ Water use. Use of water for irrigation may conflict with other users.
- ③ Immigration Influx of people into the area will mean increased market for commodities but also increased crime and HIV/AIDS exposure.
- ③ Water based irrigation activities could possibly induce increase of water borne diseases, for example increased malaria due to increased mosquito population from standing pools of water.
- ③ Livelihoods. Loss of livelihoods for some displaced who may not benefit from irrigation and associated activities. Increased income is foreseen for those who will participate in irrigation and its off shoot activities.

## **MWOMBOSHI irrigation Project**

### **1.1.1.13 Location**

Mwomboshi site is located in Chisamba town in Chibombo District, Central Province. To the west of the area is the Great North road which links Zambia to Tanzania. It is about 65-80 Kilometres away from Lusaka. The main railway line linking Lusaka with the Copperbelt Province of Zambia runs along the eastern boundary of the project area. The location is shown on the map in Figure 4.

**Figure 4: Location of Mwomboshi IDSP Site**

#### 1.1.1.14 Climate and Agro-ecological Setting

The project area lies in region IIa of Zambia's agro-ecological regions (See figure 3). This region comprises the central plateaux with annual rainfall of 800-1000mm. As in region III, there are 3 seasons, a cool dry season (April- August), a hot dry season (August to November) and a warm wet season (November to April).

The region is less prone to droughts than areas in region IIb and soils are more productive. However, soils are moderately weathered and have high risk of biological degradation. Soils in the region are mainly Haplic Luvisols, Haplic Acrisols and other types. According to field surveys the project area has clay loam soils underlain by gravel in some places.

The area comprises the upper reaches of the Mwomboshi watershed. The topography is gently sloping towards the perennial river, with ridges occasionally rising over 1100m and the land generally having elevation around 1000m above sea level.

#### 2.2.1.1 Farming Systems and Livelihoods

Both small scale farmers and commercial farmers live in the area. Small scale farmers are spread across 6 villages namely Kalimina (122), Hankwa (47), Chiwala (150-200) Malama, Musopelo (48) and Toba. The numbers in brackets indicate the estimate number of households in each village as obtained from group discussions with community members. There were no representatives from Toba or Malama. Together, the villages are estimated to hold 650 farm families and 5000 individuals. There are 12 commercial farmers.

Small scale farmers occupy the north bank of the river while commercial farmers are located to the south. Land use is similarly split, with smallholders utilizing areas north of the river and medium and large scale farmers concentrated in the south.

Small scale farmers cultivate a variety of rain-fed crops, including maize, sunflowers, cotton, water-melons, sweet potatoes, groundnuts, sugar beans and cowpeas. They also cultivate dry season crops in dambos and or using irrigation. Of those irrigating 80 percent use hand buckets, and the rest either treadle or water pumps. Only one farmer has an overhead sprinkler system. Irrigated crops include cabbages, tomatoes, Irish potatoes, onions, impwa and okra. All small holders present at discussions expressed willingness to pay for irrigations services in the upcoming IDSP as this would make irrigation accessible to more farmers. Fruit trees grown and the proportion of households growing are mangoes (80%), guavas (70%), bananas (20% in wetlands) and pawpaws (20%). Cattle, goats and chickens are also raised.

Farming activities are the chief source of cash for smallholders. Cash is obtained from sales of maize, garden crops, goats, chickens and, occasionally, cattle. Off farm income activities that generate money are wage labor on farms, piece work, hawking, fishing and sale of second hand clothes.

From group discussions, communities claimed that approximately 75 percent of the households were food insecure, not able to feed their households adequately from one harvest to the next. However, a more detailed wealth ranking exercise showed that only 26 percent in Kalimina, 17 percent in Musoplelo and 29 percent in Hankwa were food insecure. There were no representatives to do the exercises for the other three communities. Housing was of two types, that constructed of burnt bricks with iron roofing and that of unburnt bricks with thatched roofing. There were variants in between these two extremes, with most houses having only 2 rooms with a separate kitchen building. It was estimated that 50 percent of the households lived in unburnt brick, thatched houses while the rest lived in the burnt brick, iron roofed houses.

#### **1.1.1.15 Infrastructure and Other Services**

Female members in the discussion groups listed several priorities for the community. These were drinking water, a clinic, a market and farm inputs. This list reflects the current dearth of basic infrastructure in the area.

There are four schools in the area: Shikita and Kalimina Community Schools, Chabusha Middle Basic School and Mwomboshi Basic School. Other infrastructure, apart from housing, are churches and a dip tank. There are no known heritage or archeological sites in the project area, but there is an old iron age mine in the adjacent forest. There are also several grave sites.

There is no health centre in the area and health services are currently accessed through trained village community health workers who administer medicines for common ailments like malaria diarrhoea, coughing, etc. More serious ailments are referred to Mwomboshi? 4-6 kilometers away or Chisamba, even further away..

The community uses shallow wells for drinking water.

The area surrounding the Mwomboshi dam is well served with road infrastructure to be able to access Lusaka. The distance to Lusaka from the project area is about 70 km and the travelling time is about 1 hour. There is a good tarred road from Chisamba town to Lusaka. The road from Chisamba town to the project area is a good gravel road which is well maintained by large-scale farmers. A bridge over the Mwomboshi River, downstream of the dam site, is being built which will help ensure access to the small-scale farming area.

There is a small market and a Food Reserve Agency (FRA) depot in Chisamba, which will absorb some of the increased output. However, most of the increased output will have to be sold to buyers based in Lusaka or possibly the Copperbelt, or marketed in bulk together with large-scale farmers. The short distance and good road network currently in place means that most of the market opportunities in Lusaka are available to the farmers.



The proximity to Chisamba town means that farm inputs will be readily available locally. There is an opportunity of joint inputs and outputs marketing between large and small farmers, and mechanized service provision by large-scale farmers to smallholders on a full cost recovery basis.

There are a number of successful Milk Marketing Centres (MMCs) in Zambia and one of the dairy companies has expressed a wish to establish one in Mwomboshi area. If irrigation is established in the small-scale farming area, this could facilitate the growing of dry season fodder crops to provide livestock feed. This will enable high milk yields at the time of the season when small-farmer milk yields normally decline. As the farmers in the project site have a strong cattle culture, it is expected that MMCs could be successfully established in the project area.

Given the good road infrastructure to the main markets in Zambia, it is not expected that there will be any serious marketing infrastructure issues for the proposed expansion at Mwomboshi in the future. A separate study will investigate market prospects and related matters.

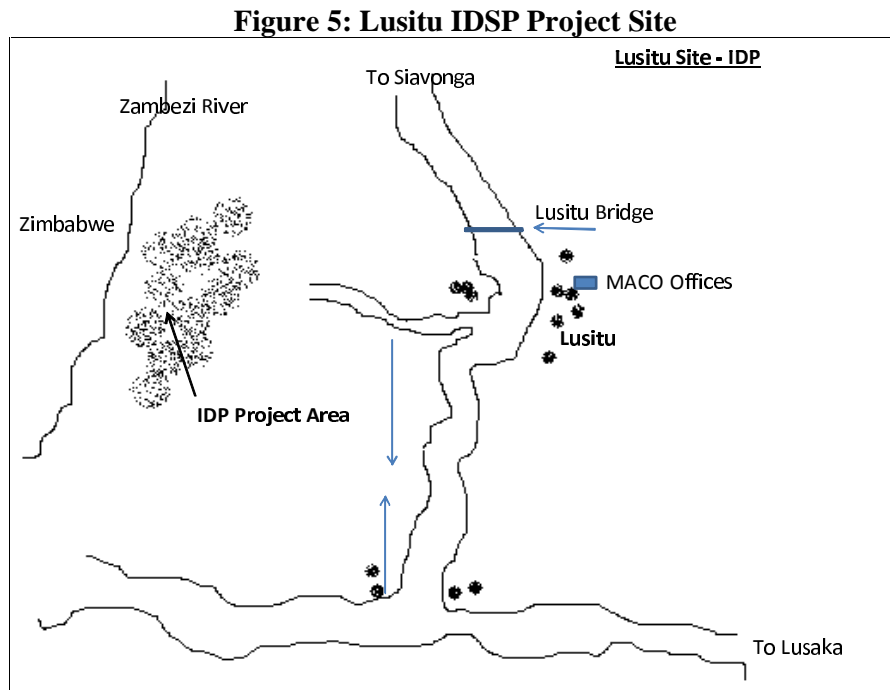
#### 1.1.1.16 *Main Social issues*

- ③ Loss of agricultural and grazing land for irrigation purposes. There are currently two main types of land access in Mwomboshi. Commercial farmers own titled land while small holders have customary tenure. The land for dam building and irrigation will have to be obtained from that under the jurisdiction of the traditional authorities.
- ③ Involuntary resettlement. People will need to relocate to make space for building of dams, pipe laying and the actual land to be irrigated. Some community concerns raised here are the mode of compensation and the method of compensation in case of perennial crops/ fruit trees.
- ③ Water use. Use of water for irrigation may conflict with other users.
- ③ Commercial/ Small holder interface in use of irrigation water and facilities. There is a lot of apprehension on the part of smallholders about how irrigation water is going to be shared. This partly arises from the current unequal relationships existing between the two groups. Many smallholders also work on commercial farms and generally perceive commercial farmers as more advanced and potentially able to accrue most project benefits to themselves at the expense of the smallholders. Sensitization and education is required.
- ③ In-migration. Influx of people into the area will mean increased market for commodities but also increased crime and HIV/AIDS exposure.
- ③ Public health. Water based irrigation activities could possibly induce increase of water borne diseases, for example increased malaria due to increased mosquito population from standing pools of water.
- ③ Livelihoods. Loss of livelihoods for some displaced who may not benefit from irrigation and associated activities.
- ③ Employment opportunities and economic growth. Increased income is foreseen for those who will participate in irrigation and its off shoot activities, for example recreational fishing and or ortourism activities.
- ③ Historical and cultural sites. The project area is in the vicinity of a forest where an old iron age site is located. With increased population pressure on the project area and possible encroachment on the forest, this site could be affected.

## LUSITU Irrigation Project

### 1.1.1.17 Location

Lusitu Irrigation Project is located in Siavonga District in Southern Province. The project site is located on the left bank of the Zambezi River downstream of Kariba Dam and about 15kms south of Chirundu in Southern Province. The scheme is located at latitude 16° 06' 32" south and longitude 28° 50' 31" east at an elevation of 382m above sea level. It comprises the lower reaches of the Zambezi River, downstream of Kariba Dam. Figure 5 shows the location of the project area.



### 1.1.1.18 Climate and Agro-ecological Setting

Lusitu is located in agro-ecological Region I (See map in Figure 3), also known as the low rainfall region. The region consists of the Southern and Eastern river valleys characterized by low rainfall of up to 800mm. The rainy season is usually short from mid November to Mid March. The area is characterized by dry and hot climate most of the year. Most of the streams in the area are dry most of the year except for the Kafue and Zambezi Rivers which border the district. The average annual temperature for Siavonga District is 25° C but it can go up to 40° C.

The project area comprises the lower reaches of the Zambezi River. The topography is both flat and steep, with Haplic Luvisols and Haplic Solonetz on the flat land and Dystric Leptosols on the hills and ridges. The Solonetz, which characterize most of the project area are highly erodible and poor quality for crop production. Soils also tend to be overgrazed in the more populated areas. The most fertile soils are found in the Valleys along the Zambezi River.

### 1.1.1.19 Farming Systems and Livelihoods

Lusitu constitutes a major portion of the rural settlements in Siavonga District, with population concentrated along the Zambezi River Bank for easy access to river bank cultivation and water for human drinking and livestock watering; and along the main road, for easy access to transport and communication.

The project area consists of small scale farmers settled on traditional land. Some of these farmers have associated into the Simanyangu-Sianyulu Cooperative Society and have previously benefited from funds and equipment to irrigate 35 hectares of land under the Gwembe-Tonga Project (2003-2005). The irrigation scheme pumps water from the Zambezi River and services the irrigation plots by gravity.

Damming of the Zambezi River to build the Kariba Dam is said to have significantly transformed land use patterns, resulting in loss of former settlements and access to winter gardens; and increasing dependence on erratic rainfall for agriculture. Most of the farmers in the project area are either those or descendants of those that were displaced as a result of the damming. In addition, relocation then of about 50000 people to marginal agricultural lands beyond their carrying capacity has resulted in overgrazing and land degradation.

Crops are grown both on the upland and the lowland. Sorghum and millet are grown on the upland while maize is grown on the lowland. By area cultivated, sorghum is the most commonly grown followed by millet and maize. Cotton is the main cash crop for the few that cultivate it and it is grown on the upland. Sunflower is grown both on the lowland and upland. Bananas and vegetables are grown under irrigation at the irrigation project earlier mentioned.

Apart from the harsh climate, i.e. erratic rainfall and mid-season drought in the uplands, and flooding in the lowlands, crops in the uplands are prone to destruction by monkeys and birds while those in the lowlands are susceptible to destruction by hippos and elephants. Apart from these animals, there has also been some infrequent sighting of Impala in the area.

Farmers in the project area also raise livestock. A few farmers own cattle and a larger proportion own goats. Other less common livestock raised are pigs and sheep. Chickens and ducks are raised by many households.

The main off-farm sources of income include fishing, reed mat and basket sales, wild fruit sales (baobab fruit and tamarind); and piece work at the nearby commercial farm (Jordan's farm). Men and women also travel to nearby Chirundu town (about 6 kilometers away using shortcut trails) to engage in piece work.

Very basic equipment is used for cultivation. For example, a group discussion of 18 people representing households from Sianyulu and Simanyangu areas revealed that out of an estimated eighty three households in the two villages, only one owned a plough and an ox cart. Most farmers rely on hand cultivation and reportedly relied on food relief as their own harvest could not last till the following season. Most farmers live in mud or unburnt brick houses with grass thatch. For example, a group discussion revealed that only one household out of seventy five in Simanyangu lived in a house built of burnt bricks with iron roofing.

Water pumping lifts are low and water is not a constraint as the site is downstream of the hydro-electric power dam at Kariba.

### 1.1.1.20 Infrastructure and Other Services

There are two schools in the project area. There is no health facility and feeder roads are non-existent, making accessibility to the area difficult, especially during the rainy season. Most of the community obtains water from shallow wells or by the river. The piped water infrastructure that was built as part of the existent irrigation project is non functional.

Most of the administrative support systems are located outside the area. Including the chief, the councilor and the police station. As such, they may not be able to attend to administrative issues in a timely manner when need arises.

There is an 11 KVA ZESCO power line from which the existing irrigation scheme taps power.

#### 1.1.1.21 **Main Social issues**

- ③ Loss of agricultural and grazing land for irrigation purposes. All land in the project area is under traditional tenure. Acquisition of land for implementation of the IDSP will therefore heavily involve the participation and consent of the traditional local leaders.
- ③ Loss of right to pass on land. In the current traditional set up, individuals can pass on user rights to their descendants. There is concern that this ability to pass on user rights may be lost under the new arrangements of the proposed irrigation scheme.
- ③ Involuntary resettlement. People will need to relocate to make space for building of dams, pipe laying and the actual land to be irrigated. This must be done in especially consultative manner as most of the households in the area are those or descendants of those formerly displaced by the building of Kariba Dam. Some community concerns raised here are the mode of compensation and the method of compensation in case of perennial crops/ fruit trees.
- ③ Water use. Use of water for irrigation may conflict with other users downstream of the Zambezi River.
- ③ Willingness to pay for irrigation services. In group discussions, farmers expressed a general willingness to pay for irrigation services in the proposed IDSP. However, there is a real danger that the scheme could be viewed as government's form of compensation for previous displacement by the building of Kariba Dam. For example, it has been documented that some communities in Lusitu previously have resisted efforts by local authorities to make them pay for water supply and maintenance of wells, because they claim government has reneged on its promise to provide free services at the time they were relocated (Chanda, 2000 ; Siavonga District Data Profile Study).
- ③ In-migration. Influx of people into the area will mean increased market for commodities but also increased crime and HIV/AIDS exposure. Some in-migrants that are trooping into the area before commencement of the project may be chancing an opportunity to benefit from project resources, including compensation for displacement and participation in the irrigation scheme. There will also be those that will in the area as employees on various civil works. Those that will migrate into the area after commencement of irrigation will likely be wanting to exploit new business opportunities that will be opening up.
- ③ Public health. Water based irrigation activities could possibly induce increase of water borne diseases, for example increased malaria due to increased mosquito population from standing pools of water.
- ③ Livelihoods. Loss of livelihoods for some displaced who may not benefit from irrigation and associated activities.
- ③ Employment opportunities and economic growth. Increased income is foreseen for those who will participate in irrigation and its off shoot activities, for example recreational fishing and or tourism activities.
- ③ Historical and cultural sites. Close to the project area is the *Ingombe Ilede* cultural heritage site. It is currently believed that the project coverage will not extend to the site. There is a difference in the distribution of grave sites in this area as compared to the other two project areas. Family kin are buried next to the huts and there is no communal grave site as such. Thus any plan that involves inundation of villages also implies inundation of grave sites.

## Legal framework

The legal framework relating to resettlement issues consists of the World Bank safeguard policy and various pieces of Zambian legislation. This section presents both aspects and identifies overlaps and gaps between the two.

### WB SAFEGUARDS POLICIES

The World Bank safeguard policy OP 4.12 relates to the administration of resettlement issues in the event of project activities inducing displacement of people and disrupting their livelihoods. The policy applies to Component 1 of the IDSP which deals mostly with construction of irrigation and other supporting infrastructure. Most of the components of the IDSP and to all physically project displaced persons regardless of the persons affected, the severity of the impacts and land holding legality.

According to the World Bank's safeguard policy OP 4.12, particular attention should be given to the needs of vulnerable groups such as the poverty stricken, the landless, the elderly, widows, child-headed households and other disadvantaged persons. It is also a requirement of the policy that provision of compensation and other assistance be effected prior to people's displacement. This implies that acquisition of land for IDSP activities can only take place after those affected have been compensated.

In this regard, resettlement sites, new homes and related public infrastructure, public services and moving allowances will be provided to the affected persons and incorporated in all resettlement action plans in accordance with the OP 4.12 provisions. In addition, the World Bank policy offers the impacted persons an opportunity to improve their livelihoods and living standards through the participation in the planning preparation and implementation of RAPs.

The safeguard policies also require that:

- ③ Resettlement should be avoided wherever possible or minimized. All viable alternative project designs should be considered.
- ③ Resettlement activities should be conceived as sustainable development programmes, providing sufficient investment reserves to enable the person displaced by the project to share in project benefits.
- ③ Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least restore them, in real terms to pre-displacement levels or to those prevailing prior to the beginning of project implementation whichever is higher.

The OP 4.12 also stipulates that the RPF and RAPs should include measures to ensure that the displaced persons are safeguarded as follows:-

- ③ They should be informed about their options and rights pertaining to resettlement.
- ③ They should be consulted on, offered choices among and provided with technically and economically feasible resettlement alternatives.
- ③ They should be provided with prompt and effective compensation at full replacement cost for loss assets attributed directly to the project. The resettlement plan or resettlement policy framework should include measures to assure that the displaced persons are :
  - Provided with assistance, such as transport and other allowances during relocation.
  - Provided with residential housing or housing sites or as required agricultural sites for which a combination of productive potential, location advantages and other factors are at least equivalent to the advantages of the old site.

- Offered support after displacement, for a transition period, based on a reasonable estimate of time likely to be needed to restore their livelihood and standards of living.
- Provided with development assistance in addition to compensation measures such as land preparation, credit facilities or job opportunities.

## THE ZAMBIAN LEGAL FRAMEWORK

There is currently no specific law or policy pertaining to involuntary resettlement in Zambia. The existing policies and arrangements only deal with voluntary resettlement. What exists are various pieces of legislation that provide guidance regarding legal provisions for resettlement. Below are legal statutes that have provisions pertaining to resettlement:

### Constitution of Zambia

Chapter 1, Article 16 of the Laws of Zambia provides for the fundamental right to property and protects persons from the deprivation of property. It states that a person cannot be deprived of property compulsorily except under the authority of an Act of Parliament, which provides for adequate payment of compensation. The Article further provides that the Act of Parliament under reference shall provide that, in default of agreement on the amount of compensation payable, a court of competent jurisdiction shall determine the amount of compensation.

### Lands Acquisition Act Chapter 189 of the Laws of Zambia.

Section three of the Lands Acquisition Act empowers the President of the Republic to compulsorily acquire property. Sections 5 to 7 of the Act provides for the issuing of notices to show the intention to acquire, notice to yield up property and to take up possession.

Section 10 of the Act provides for compensation as consisting of such moneys as may be agreed from moneys appropriated for the purpose by Parliament. Furthermore, this section provides that where the property to be compulsorily acquired is land, the President, with the consent of the person entitled to compensation shall in lieu or in addition to any compensation payable under the section, grant other land not exceeding the value of the land acquired.

Under the Lands Acquisition Act, the value of the property for purposes of compensation shall be the value of the amount which the property might be expected to realize if sold on the open market by a willing seller at the time of the publication of the notice to yield up possession of the property. Section 11 of the Lands Acquisition Act provides for the settlement of the disputes relating to the amount of compensation in the High Court.

Part VI of the Lands Acquisition Act (Cap. 189) provides for the establishment of Compensation Advisory Board to advise and assist the Minister in the assessment of any compensation payable under the Act. Other functions of the board, its operations and constitution are also prescribed.

### The Agricultural Lands Act

This Act provides for the establishment of the Agricultural Lands Board and for tenant farming schemes. The act empowers the Minister, by statutory notice, to declare any state land and, with the consent of the registered owner, any freehold land, and to alienate any declared land in any of the following ways:

- by state grant,
- by the lease of holdings, or
- by any other state lease or tenancy.

Subsection 5 of section 21 provides that a lessee shall use his holding primarily for agricultural purposes, for purposes ancillary thereto and for the personal residence of himself and his family and necessary staff and for no other purpose.

Subsection 1 of section 40 permits a tenant who obtains approval from the Agricultural Lands Board to make improvements to a holding at his own expense. Improvements which are permitted are those which are reasonably required for the management, improvement or development of the holding. Only improvements which are approved by the Agricultural Lands Boards qualify for compensation.

Section 43 provides that, if any dispute shall arise relating to:-

- ③ (a) The amount of any compensation, not being an ex gratia payment;
- ③ (b) Any valuation for an option to purchase a holding; and
- ③ (c) Any valuation for a state grant;

such dispute may be referred to arbitration under the provisions of the Arbitration Act.

### **Land tenure systems in Zambia**

As land alienation will be a crucial part in the implementation of the IDSP, it is useful to outline the Zambian land tenure system in order to appreciate the alternative ways in which land at the three sites can be accessed for project purposes.

There are two land tenure systems in Zambia namely, customary and statutory tenure. The customary tenure system applies in areas under the jurisdiction of traditional authorities (chiefs/chieftainesses). The traditional system of tenure is the most prevalent among the majority Zambians who live in rural areas.

#### **1.1.1.22 Customary tenure**

Customary land ordinarily cannot be used as collateral, as in many cases there are no legal defined physical boundaries, as required under the Land Survey Act. Thus customary lands are prone to encroachments which often result in land disputes. Customary land in Zambia which accounts for over 70 percent is now very much in demand for the country's development.

#### **1.1.1.23 Statutory tenure**

The president of Zambia holds the country's land in perpetuity on behalf of the Zambian people. The president has delegated his powers to make and execute grants and disposition of land to the Commissioner of Lands. The Commissioner has agents who plan the land into plots and thereafter select and recommend suitable candidates to the Commissioner of Lands for issuance of certificate of title. the Commissioner's agents in this regard, are the District, Municipal, and City Councils. These agents use the Town and Country Planning Act to plan the land in their areas in their capacities as planning authorities under the Act.

Once the lands are planned, they are then surveyed as per the Land Survey Act and then delivered to the eligible by the council using powers vested in them under the Local Government Act. Applicants who follow this route, if successful, would usually end up with a title deed to the land which gives them formal legal rights to them i.e. by being offered a 99 year renewable leasehold of the state land. The state lands acquired and owned in this way are surveyed, mapped and have legally recognised commercial value.

Those who occupy land under customary tenure system, though having customary claim to the land, and cannot engage in the land's transaction without the relevant chief's consent.

## Land delivery system in Zambia

The following 2 sections outline the processes for acquiring title to land from state land and from customary land. These guidelines will be useful for land access at the various sites of the IDSP.

### 1.1.1.24 *State land*

The system to acquire titled land from state land is as follows:

The District, Municipal or City Council identifies an area for which a layout plan is made, subdividing the identified land into several plots. In the case of agricultural land, the relevant departments in the Ministry of Agriculture and Cooperatives and the Resettlement Department under the Vice President's office are responsible.

The layout plan is endorsed and stamped by the appropriate planning authority that later transmits the endorsed plan to the Lands Department for scrutiny and verification of the planned land's availability.

If the planned land is available, the plan is approved and transmitted to the Survey Department for surveying and numbering as per the Land Survey Act.

Upon receipt of numbered and surveyed plots, the relevant authorities advertise them to the public after which applicants are interviewed.

Selected applicants are recommended for further consideration and approval by the office of the Commissioner of Lands, who is the final authority to grant title to land.

### 1.1.1.25 *Customary land*

The customary land delivery system is as follows:

- ③ The prospective developer approaches the Chief or Chieftainess of the area for consent to hold land on leasehold tenure and obtain certificate of title.
- ③ Where the Chief or Chieftainess is satisfied that the land being requested for is available (unoccupied), s/he writes a consent letter to the office of the Council Secretary, with the land's location site plan, drawn by the local planning authority attached.
- ③ The Chief's consent letter and attached site plan are taken to the relevant Council Secretary who endorses and stamps the document(s)??
- ③ The Council Secretary arranges for the land in question to be inspected by a committee which deals with land matters in the area.
- ③ The committee interviews the applicant.
- ③ If the applicant is successful, the Council Secretary brings the application to the full council for consideration.
- ③ If the council approves the application, they will recommend to the Commissioner of Lands the allocation of the unnumbered plot to the applicant.
- ③ The application forms, site plans and council minutes are attached to the recommendation letter which certifies that the recommended plot is free of settlement by other subjects in the jurisdiction of the Chief/ Chieftainess.
- ③ If satisfied, the Commissioner of Lands approves the application. For land in excess of 250 hectares, the Commissioner of Lands is required to seek clearance from the Minister of Lands before approval .



### **The Public Roads Act (2002)**

Section 18 (3) of the Act gives authority to the envisaged Road Development Agency to enter upon any land for purposes of extraction of materials for road formation. It also provides for notification to the property/land owner before preparation for commencement of extraction of materials starts. Under section 18 (4) of the Act, compensation should be paid to the affected land owner/occupier if such land is on title.

Section 18 (5) of the Act allows the land/owner occupier to submit some written request to the Agency for any expense or loss that may be incurred if such land is appropriated. Section 18 (6) states that in the event of failure to agree upon the amount of compensation the matter shall be decided by arbitration in accordance with the Arbitration Act. The Act under section 18 (7) provides a number of conditions which shall form the basis for assessment of properties or envisaged losses that are the subject of disagreements.

### **Arbitration Act No. 19 of 2000**

This Act provides for arbitration in cases where the land owner/occupier does not agree with the amount of compensation being offered. Under section 12 (2) of the Act, the parties to arbitration are free to determine the procedure for appointing the arbitrator or arbitrators. Section 12 (3) (b) states that if the parties are unable to agree on the arbitration, another arbitrator shall be appointed, upon request of a party, by an arbitral institution.

### **Environmental Protection and Pollution Control Act, Chapter 204**

Environmental Impact Assessment Regulations (1997) are promulgated under this Act. The First Schedule of Regulation 3 specifies which type of developments requires a project brief. It specifies that all major roads outside the urban areas, the construction of new roads and major improvements over 10km in length or over 1 km in length, if the road passes through a National Park or Game Management Area, requires a project brief and/or an environmental impact statement.

Regulation 10 provides for public consultation by the developer before submitting the environmental impact statement to the Council. The developer should seek the views of the people in the communities which will be affected by the project. The developer shall:

Publicize the intended project, its effects and benefits in the mass media in a language understood by the community for a period of not less than fifteen days and, thereafter, at regular intervals throughout the project implementation schedule.

After the expiration of fifteen days referred to above, hold meetings with affected communities in order to present information on the project and obtain views of those concerned.

Regulation 11 provides for the contents of environmental impact statements to include:-

- ③ The social and economic impact of the project, such as resettlement of affected people;
- ③ Socio-economic and cultural considerations such as effects on generation or reduction of employment in the area, social cohesion or resettlement and local economic impacts; and
- ③ Effect on land uses and land potential in the project area and surrounding areas.

### **The Zambia Wildlife Act No. 12 of 1998**

Section 32 of the Zambia Wildlife Act provides that any activity or plan which is likely to have an adverse effect on any wildlife species or community in a National Park, Game Management Area or Open Area shall be subjected to a wildlife impact assessment as required by the Zambia Wildlife Authority (ZAWA). Where resettlement would have or is likely to have an impact on wildlife, a wildlife impact assessment would be required under this Act.

### **The Local Government Act**

The Act provides for the system of local government administration in Zambia at city, municipality and district council levels. Each level has delegated statutory functions with respect to development planning and participatory democracy.

### **The Town and Country Planning Act**

The Act provides for Ministerial powers to appoint planning authorities to prepare structural, regional, integrated development, and layout plans to guide physical urban and rural development in Zambia.

### **Land Survey Act**

The Land Survey Act provides for the surveying of lands and properties before they are numbered, allocated and registered.

### **Land Conversion of Title Act**

This Act provides for the alienation, transfer, disposition, and change of use of land. The Act also provides for compulsory acquisition of land by the president wherever he is of the opinion that it is desirable or expedient to do so in the public's interest.

### **Lands Tribunal**

The tribunal was set up as been to speedily settle or prevent land disputes.

### **The Forest Act of 1999**

This Act provides for the establishment and management of national and local forests, conservation and protection of forests and trees; and licensing and sale forest products. The act also provides for the involvement of local communities and the private sector in the planning, management and utilization of forest resources and the sharing of costs and benefits obtained from the open and forest reserves.

### **The Water Act**

The Water Act provides for the establishment of the Water Board and regulates the protection of water against pollution and the use of public water.

A summary of the various legislation above, the provisions contained therein and the relevance of the laws for the RPF or RAP implementation is contained in Appendix.

## OVERLAPS AND GAPS BETWEEN THE ZAMBIAN LEGISLATION AND WORLD BANK PO 4.12

### Overlaps

There are many similarities between Zambian law and the World Bank's OP 4.12. The overlaps include:-

- ③ the requirement to pay compensation in advance where land is compulsorily acquired
- ③ compensation based on full market value or through grant of another plot of land or building of equal quality, size and value, [to quote relevant Act
- ③ avoidance wherever possible impacts on forest reserves, national parks and other fragile ecosystems,
- ③ the requirement to compensate for losses whether temporary or permanent in production or damage to productive assets and crops; and
- ③ provision for the rights of appeal and other judicial avenues for resolution of disputes.

### Gaps

The following gaps exist between the World Bank Op 4.12 provisions and Zambian legislation:

- ③ Comprehensive resettlement planning. There is no requirement under the Zambian law for the preparation of a comprehensive formal resettlement action plan (RAP) including carrying out a census, social economic survey, consultations with project affected people, monitoring, reporting, etc. The Town and Country Planning legislation which deals with issues of human settlement and development in Zambia does not refer to involuntary settlement but only to the removal of squatters on state lands needed for urban expansion and development.
- ③ Compensation eligibility in Zambia. Under the Zambian law, only people and entities with title deeds are entitled to compensation e.g. those with registered third party rights or those who have legally obtained the right to register but have not yet completed registration.
- ③ Under World Bank's OP 4.12, illegal land users without title to the land are entitled to compensation. In some cases of illegal development, compensation is provided on discretionary basis on case by case basis.
- ③ Compensation and resettlement assistance. The current Zambian law provides for the payment of compensation at market value for losses of land, buildings, crops and other damages arising from the acquisition of land for project activities. Under the Zambian law, moving costs or rehabilitation support to restore previous level of livelihood or living standard are not recognized, and there is no government agency charged with that responsibility.
- ③ Property measurement. Under the Zambian law, compensation is equal to the market value of the property without reference to depreciation. On the contrary, under the World Bank Safeguard policies, compensation for lost properties will be calculated on the basis of full replacement cost i.e. equal to what enables the project affected people (PAP) to restore their livelihoods at the level prior to resettlement.
- ③ Income restoration. The current Zambian law does not recognize compensation for lost income contrary to the World Bank's OP 4.12 provision which requires that lost income due to project activity should be compensated.

## First Assessment of Impacted Populations in the project Areas

Impacted persons according to the relevant Zambian national legislation and the World Banks OP 4.12 are:

- ③ **An individual** who loses assets or investments, property and land, access to economic and natural resources due to the project activities,
- ③ **Household(s)**, if one or more of its/their members are affected by the sub project activities through either loss of land, property, access etc. by the activities of the project; and
- ③ **Local community**, if the project activities will affect the communities' socio-economic conditions or the cohesion of its social fabric.

In this section categories of people who are likely to be affected by the proposed irrigation activities at the three sites are identified. The socio-economic conditions at these sites have already been covered in detail in chapter two(2). The exact numbers of people to be affected by the projects at the sites could not be determined because the technical information on the proposed irrigation schemes and their infrastructure was unavailable. However, from the available literature and experience at similar schemes in Zambia, it is estimated that at least twenty percent of the areas' population will be impacted by project activities.

### MUSAKASHI IRRIGATION PROJECT

At Musakashi project site, the various categories of persons likely to be impacted by the projects activities include the following:

- ③ **Affected individuals-** who are likely to lose assets or investments, land or property access to economic or / and natural resources.
- ③ **Affected households-** who one or more members are likely to be affected by the projects activities in the form of loss of property, land or access to services or socio-economic natural resources like charcoal burners. Household members affected in this category include men, women, children, dependent relatives and friends.
- ③ **Vulnerable Children-** and the elderly who may be too old or ill to farm or perform any duties with other members of the family affected due to loss of land, property, loss of access to resources or resettlement in other localities.
- ③ **Vulnerable households-** such as those headed by unmarried women, non-farmers, the elderly, the handicapped on plans and migrants from other areas who might suffer losses from the project activities.
- ③ **Landowners-** who might lose their agricultural land needed for project activities.
- ③ **Squatters-** there are many people in Musakashi who are squatting on land without title.
- ③ **Encroachers-** on Government forest reserves and farm land are common at Mushakashi Irrigation Site.
- ③ **Tenants-** there are a number of tenants at Musakashi who might lose contracts on farms when part of the farmland would be needed for project activities. Loss of homes would also result
- ③ **Government staff-** such as agricultural assistants, health workers etc. supplement their incomes by engaging in farming on land which might be required for project activities.

## MWOMBOSHI IRRIGATION PROJECT

Within the Mwomboshi area, there are an estimated 4,000?? Inhabitants. An estimated 20% of households might be displaced while the remaining will lose part of their assets, mainly land, shelter, livestock and will be physically displaced. The construction of access roads will affect other population. Land redistribution will also affect some households. Land will be acquired for reconstruction of irrigation infrastructure, service stations and access roads. No farmers from outside the scheme are expected although once the scheme is in operation, job seekers and other opportunities will be attracted to the area.

The identified vulnerable groups who are likely to be surely impacted by the project's activities in Mwomboshi area include:

- ③ Houses whose villages, fields and grazing areas are likely to be inundated once the dam is built,
- ③ Unmarried women dependant on others for support. Resettlement can deprive them of their support; and
- ③ Persons affected with HIV/AIDS who depend on community members and NGO's might lose their support

## LUSITU IRRIGATION PROJECT

From the literature review and focus group discussions in the field, the following categories of persons are likely to be affected by the proposed irrigation project activities at Lusitu Irrigation Site. As already explained, in the absence of technical details on the scheme and its infrastructure, the exact numbers of affected people could not be determined. However , as per our observation in the field, the following groups might be affected :

- ③ Villagers who are located in areas that will be covered by the proposed irrigation infrastructure,
- ③ Persons who depend on community members and NGOs, such as HIV AIDS affected persons, may be deprived of support as a result of relocation to other sites,
- ③ Persons who will be relocated to pave way for construction or/and rehabilitation of access roads and other service infrastructures to the site.
- ③ Individuals and households who will be affected by land re-distribution which will result from the implementation of the irrigation scheme.
- ③ The local community in Lusitu whose cohesion, social fabric, and economic conditions will be affected by the project activities in the area.

## Asset valuation

This section describes a) methods by which assets will be valued and deemed to be eligible for compensation, and (b) explains methods of inventorying assets and assigning values to each asset.

Property valuation in Zambia is carried out by valuation professionals who either work for the Government Department of Valuations in the Ministry of Local Government and Housing or for private firms. The Government Valuation Department carries out Government evaluations and for the public at a fee, while private practitioners provide valuation services to the general public at a fee.

### VALUATION METHODS IN ZAMBIA

The four methods used to value property in Zambia are:-

- ③ (i) The **Comparative Method**, sometimes called direct comparison method, in which the value of a property is determined by comparing it with similar property being sold in the vicinity.
- ③ (ii) The **Investment Method**, which is mostly applied to the valuation of businesses, using projected future incomes and costs to arrive at a present value of a business.
- ③ (iii) The **Residual Method** of valuation, which takes a hypothetical approach by seeking to predict what the value of a property, will be at some point of time in the future. This method is usually used to value property that is just beginning to be developed.
- ③ (iv) The **Depreciated Replacement Cost** (or contractor's) method of valuation, in which property is valued using the cost of materials and labor. This method is often used to value institutional buildings or buildings used for non-profit making purposes.

### LAND TENURE SYSTEMS AND THE VALUATION OF IMMOVABLE PROPERTY IN ZAMBIA

In Zambia, valuation of immovable assets is closely related to the land tenure systems in the Country. The valuation of a piece of land, or immovable property on that land depends on whether that land is under the 99-year renewable state leasehold, or under traditional authority. Only state land can be valued, while traditional land and the properties on it cannot be valued for purposes of legal transactions, until certain procedures have been fulfilled, as per Zambia's land delivery systems described in the chapter on the Legal Framework. However, by applying one of the valuation methods already described, the value of property on traditional land can be ascertained separately from the land.

As described in the Legal Frameworks section on land delivery, those who want to value and buy traditional land must first obtain a letter from the Traditional Ruler concerned. In essence, the procedures that are followed before traditional land can be valued and sold are as per the land delivery system described earlier as regards transfer of traditional land into state land. As such, it still remains that traditional land cannot be valued until it is turned into leasehold tenure.

## METHODS FOR INVENTORYING ASSETS IN ZAMBIA

In this document, inventorying refers to the listing of assets in order to determine the value of each asset item and, consequently, the total value of assets. In inventorying, it is required that each asset item be expressed in an appropriate unit measure, e.g. *hectare* as a *unit of measure* for agricultural land, *acre* or *square meter* for residential plots and *item count* (each) for buildings and structures. An example of inventorying showing asset category and unit measure is shown in table..

The requirement to express assets in appropriate units for valuation purposes also entails that compound assets are separated and counted or added using appropriate units. An example of a compound asset is a piece of land on which a crop, such as maize, is still standing un-harvested. In this case proper inventorying requires that quantity of land is counted and expressed in its appropriate unit (i.e. hectare) and the quantity of maize crop (expected to be harvested) is also expressed in an appropriate unit (e.g. 50-kilogram bag).

Once the asset listing has been produced, the replacement cost of each unit of asset category is then determined. The unit replacement cost for each asset category is then multiplied by the quantity of asset holding in each category.

**Table 1: Example of Inventorying of Assets in Zambia**

Asset Category	Unit of Measure	Comment
Bare agricultural land	Hectare	
Cleared (improved) agricultural land	Hectare	It is important to treat land that has been improved upon (e.g. through land clearing) separately from land that has not been improved upon as the two categories of land have different values.
Water body (e.g. a dam, a fishpond, etc).	Square meter	
Backyard garden	Square meter	
Un-harvested crop in a backyard garden	Kilogram per Square meter	
Fruit tree	Each	
Fruits on a tree	Kilograms per tree	The yield per tree should be approximated for each production-year lost and expressed in kilograms per tree. The productive years of the trees should, therefore, be approximated in order to calculate the total loss.
Decorative plants (e.g. flowers)	Square meter of land covered	
Water point (borehole, water well)	Each	When producing an asset list for water points, it is essential to take into account the different water lifting technologies used.
Un-harvested crop	Kilogram (or ton) per hectare	For each crop, the unit of measure that is conventionally used should be applied, e.g. for maize it is usually kilograms per hectare.

## OVERVIEW OF WORLD BANK RECOMMENDED VALUATION METHOD

The use of **Replacement Cost Valuation Method** for valuing assets is recommended by the **World Bank Operational Policy 4.12**. In this regard, “**Replacement Cost**” as it relates to agricultural land is defined as the pre-project or pre-displacement, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer taxes which ever is the higher.

For land in urban areas, it is the pre-displacement market value of land of equal size and use, with similar or improved public infrastructure facilities and services and located in the vicinity of the affected land, plus the cost of any registration and transfer taxes.

For houses and other structures, it is the market cost of the materials to build a replacement structure within an area and quality similar to or better than those of the affected structure, or to repair a partially affected structure, plus the cost of transporting building materials to the construction site, plus the cost of any labor and contractors’ fees, plus the cost of any registration and transfer taxes.

The World Bank Policy 4.12 further states that “in determining the replacement cost, depreciation of the asset and the value of salvage materials are not taken into account, nor is the value of benefits to be derived from the project deducted from the valuation of an affected asset and where domestic law does not meet the standard of compensation at full replacement cost, compensation under domestic law is supplemented by additional measures so as to meet the replacement cost standard.”

The following are the basic differences between the Zambian valuation methods and the World Bank recommended valuation methods:-

- ③ (i) The World Bank Operation Policy replacement cost does not take into account the depreciation of the asset whilst the replacement cost method used in Zambia takes depreciation into account.
- ③ (ii) The World Bank takes into account transaction costs which is not the case with Zambian valuation practice.

## RESETTLEMENT POLICY FRAMEWORK ASSET VALUATION GUIDELINES

In this RPF, the term asset is defined as an advantage or resource that is available to an individual or household classified into the following five categories: - .

- ③ Natural assets e.g land and water,
- ③ Material assets such as household assets, storage, processing equipment etc.,
- ③ Financial/Business assets, e.g main income, supplementary income and informal and formal credit and business enterprise,
- ③ Human assets such as labour availability, and access to education and skills; and
- ③ Social assets, which include informal support networks, support and interest groups, ability to participate in grassroots democracy and, social services such as schools, health clinics, or religious and cultural affiliated assets.

As loss of access to human assets, social assets and some types of natural assets such as a nearby forest where people gather fruits, is not amenable to monetary valuation, the following asset valuation guidelines which take into account the type of asset under each category and type of valuation characteristics peculiar to it, are recommended in the implementation of this RFP and RAPs:-



Qualified valuation professionals should undertake the valuation of assets, while the subproject proponent should bear the cost of valuation. Currently the valuation fees for a professional valuator is negotiable, and ranges between ZMK 500,000 and ZMK 5,000,000, depending on the value of the property and its location. The valuation fees for properties in urban areas are generally higher than in rural areas.

Valuation of assets should be at replacement cost plus transaction costs, as already recommended, while depreciation of structures and assets should not be taken into account.

Cash compensation levels should be sufficient to replace the lost land and other assets at full replacement cost in local markets.

On traditional land, assets should be valued at replacement cost separate from the land. Valuing traditional land using the replacement cost method presents unique challenges as it has no recognizable 'market value'. WB OP4.12 provides that payment of cash compensation for lost assets may be appropriate where the following circumstances obtain:-

- ③ (a) livelihoods are land-based but the land taken for the project is a small fraction of the affected asset and the residual is economically viable,
- ③ (b) existence of active markets for land, housing, and labor used by displaced persons and where there is sufficient supply of land and housing; and
- ③ (c) livelihoods are not land-based.

With regard to traditional land,(b) above does not apply as already explained unless the procedures of transferring traditional land into state land are entered into as already outlined. If scenario (a) and (c) arose, then the value of traditional land taken would be the cost of finding alternative land and bringing it to the productive level similar to the lost land. The cost of finding alternative land will include search costs, including travel and other expenses.

Attempts should be made to establish access to equivalent and culturally acceptable resources and earning opportunities in cases of losses which cannot easily be valued or compensated for in monetary terms such as access to public and social services, customers, suppliers, fishing, grazing or forest areas.

## COMPENSATION PAYMENTS

It is recommended in this RPF that the sub-project proponents would value and duly compensate for lost assets and investments, including land, crops, buildings and other improvements according to the provisions of the Resettlement Action Plans.

### COMPENSATION GUIDELINES

As already outlined compensation rates will be at market rates as from the date and time that the replacement is to be provided. The current prices of cash crops would have to be determined. Compensation would be based on valuation at or before the entitlement cut off date. Homestead such as bush is community property. Only structures on the site belong to individuals, while permanent loss of any homestead site will be covered by community compensation which will be in kind only. Compensation for land is intended to provide the affected person whose land is acquired and used for subproject purposes with compensation for land, labour and crops loss.

Where land acquired has a standing crop, the farmer will be compensated in full for the expected market value of the crop plus the loss of investment of labour and purchased inputs for the production year/ season in question.

### Types of Compensation

#### 1.1.1.26 *Cash payment:*

Will be calculated and paid in Kwacha. Rates will be based on market value of land when known or estimated when not known plus compensation of the value of standing crops

#### 1.1.1.27 *In kind compensation:*

My include items such as land, houses, and other buildings, building materials, seedlings agricultural inputs and financial credits for equipments. Other forms of compensation to affected persons would include assistance in terms of moving allowances transportation and labour.

In a country like Zambia, with ample land and labour intensive agriculture, the contribution of land can be imputed at about 25% of the gross market value of output. In this regard, the present value of future income in perpetuity can be discounted back to the present at a discount rate of 12% which amounts to approximately twice the average annual value of output.

Therefore, a person who gives up a parcel of agricultural land for use by a sub-project could be adequately compensated in cash in the amount of twice the average value of gross annual output, plus the additional value of standing crop, if any. Compensation in kind would take the form of provision of alternative piece of land of equal size and quality.

If cash compensation is used, financial institutions should encourage the use of their facilities to reduce loss of livelihood or theft when beneficiaries are compensated in cash. Each recipient in consultation with the project implementation Unit will decide upon the time and place for in kind compensation.

#### 1.1.1.28 *Compensation for Large Fruit and Tree Crops*

A compensation schedule for large trees e.g. mangoes, guavas and bananas which are important sources food for families petty market income and shade, should be developed incorporating the following:-

- ③ Replacement of subsistence mango, guava, and banana production yields as quickly as possible.
- ③ Provision of trees to subsistence farmers to extend the number of months of the year during which fruit tree is produced and can be harvested as supplementary source of food for their families in needy times.
- ③ Provision of opportunities for the farmers to have additional income from trees bearing more valuable fruits at off-season periods.
- ③ Provision of cash payments to farmers to replace pre-subproject income derived from the sale of excess production until replacement trees produce the equivalent (or more) in-project cash income.

Individuals who own wild tree(s) located on land they own or allocated to them by a traditional authority will be compensated for the loss of the tree(s), while the community (village, ward or chiefdom) will be compensated for the wild trees which have to be removed to give way for project activities if they occur in the true bush as opposed to fallow land.

### **COMPENSATION CALCULATIONS FOR BUILDINGS, STRUCTURES AND OTHER ASPECTS**

Compensation for buildings and structures will be paid by replacing structures such as huts, houses, farm buildings, latrines, and fences on alternative land provided as in-kind compensation.

According to World Bank OP4.12, cash compensation will be available as preferred option for structures, while the on-going market prices for construction materials will be determined. Alternatively, compensation will be paid in-kind for the replacement cost without depreciation of the structure.

Compensation will be made for structures which are abandoned because of relocation or resettlement of an individual or household or directly damaged by construction activities of the project

Calculations of replacement values of assets will be based on the related structures and support services, while average replacement costs of different types of homestead and structures will be based on collection of information or numbers and types of materials such as bricks, rafters, bundles of straw, doors, etc. used to construct different types of structures. Prices of these items collected in different local markets, costs of transportation and delivery of these items to the required/replacement land or building site should be estimated together with the construction of new building including the required labour.

Compensation for sacred sites, tombs and cemeteries is not permitted under this project.

Replacement costs for vegetable gardens and bee hives are to be calculated, based on the local market rates for these products at the time.

If beehives placed by individuals in various locations in the bush are disturbed, if the sub-project activities disturb or deny bee keepers access to bee hives placed by individuals in various locations in the bush, bee keepers can move them to new locations where bees can be adapted in the new environment. Activities of beekeepers will be valued and compensated based on the value of the season's production cost of honey for each hive, together with any reasonable costs associated with moving the bee hives to the new sites..

## Eligibility

This section provides a guide for determining the cut off dates and eligibility criteria for compensation and other resettlement assistance for displaced persons. According to World Bank OP 4.12, the following persons will be eligible for compensation if they are affected by project activities:-

- ③ (a) Holders of formal rights to customary and state land,
- ③ (b) Those who have claims to land or assets recognised under the Zambian Law or recognised through the project resettlement or compensation identification process, even if they don't have formal legal rights to the land; and
- ③ (c) Those occupying or using land without any claim to it.

Those under (a) and (b) are to be provided with compensation for land they lose and other assistance as per the World Bank OP 4.12. Those falling under category (c) are to be provided with resettlement assistance in lieu of compensation for land they occupy or use. Other necessary assistance will be rendered as per the World Bank OP 4.12., provided they occupied or used the land before the cut-off date agreed by relevant authorities including the World Bank. No new cases will be entertained from affected persons after the cut-off date.

As already stated in this RPF, the displacement of persons through involuntary resettlement results in relocation or loss of shelter, loss of assets or access to assets, loss of income sources or means of livelihood, whether or not the affected persons must move to another location or not. Displaced persons are classified as those persons who, as a direct consequence of IDSP subproject activity would either: (a) physically relocate or lose their shelter, (b) lose their assets or access to assets, or (c) lose a source of income or means of livelihood, whether they physically relocate to another place or not.

### ELIGIBILITY CRITERIA AND CUT-OFF DATE

Fixing eligibility criteria for entitlements purposes are very essential for resettlement/rehabilitation process and payments of compensation. It is in this regard that: property inventories with other relevant socio – economic surveys and fixing a cut off date after proper consultation and announcement are very critical if unnecessary claims of compensation are to be avoided.

When the need for involuntary resettlement in an IDSP subproject has been determined, the project proponent will carry out a census to identify the persons who will be affected by the subproject activity. This exercise will help the subproject proponent to determine who will be eligible for compensation and assistance before the implementation of the project commences. It will also help to prevent an inflow of ineligible people living outside the subproject area who might want to take advantage of claiming assistance from the project. The cut-off date will be the date of the completion of the census. Those coming into the area after the cut-off date will not be eligible for compensation.

Depending on the type of rights the displaced persons have to the land they occupy, the displaced persons maybe classified in one of the following three (3) groups namely:-

- ③ (a) Those who have formal legal rights to land, according to Zambia's land tenure system described in the legal framework . This group consists of two types, those with a 99-year renewable leasehold of state land, who have title deeds, and the land they own has legally recognizable commercial value, and those who occupy land under the customary land tenure system. This land is controlled and allocated to them by traditional authorities (chiefs). The owners of this land do not have title deeds but they have a 'customary' legal claim to it. They may not involve themselves in land transactions without the consent of the chief.

- ③ (b) Those who do not have formal legal rights to land at the time the census begins but have a claim to such land or assets. This group of people mostly comprises those who have bought land or other immovable property but have not yet completed the process of acquiring title deeds. The other group consists of those in legally established voluntary resettlement areas who have not yet reached the retirement age at which point they become eligible for title deeds<sup>1</sup>.
- ③ (c) Those who have no recognizable legal right or claim to the land they are occupying. These are mostly encroachers into state land or those who might occupy customary land without permission or recognition by the local authority (chief).

### PRINCIPLES FOR DEVELOPING ELIGIBILITY CRITERIA

The subproject proponent is required to develop a procedure, satisfactory to MACO and the World Bank, for establishing detailed criteria by which displaced persons will be deemed eligible for compensation and other resettlement assistance. In developing such a procedure, the subproject proponent should follow the following principles:

- ③ (a) Development of a process and procedures which must include provisions for meaningful consultations with affected persons and communities, Local authorities, Non-Governmental Organizations (NGOs), and other key stakeholders as appropriate.
- ③ (b) Provision of compensation for the loss of land and other assistance where necessary, for those who have formal legal rights to land, and those who do not have formal legal rights to land at the time the census begins but have a claim to such land or assets. Other assistance to these displaced persons which should be provided where necessary includes:-
  - (i) Support after displacement, for a transition period, based on a reasonable estimate of the time likely to be needed to restore their livelihood and standards of living; and
  - (ii) Development assistance such as land preparation, credit facilities, training, or job opportunities in addition to compensation measures.
- ③ (c) Provision of resettlement assistance in lieu of compensation for the land they occupy and other assistance as necessary, for those who have no recognizable legal right or claim to the land they are occupying if they occupied the project area prior to the cut-off date. In this regard resettlement assistance may, as appropriate to the World Bank OP4.12, consist of land, other assets, cash, employment etc.; and
- ③ (d) Provision of compensation for loss of assets other than land, impact on livelihoods, as well as costs involved in resettlement actions to all persons who qualify for compensation.

### ENTITLEMENTS RELATED TO ADDITIONAL IMPACTS

Entitlements for compensation related to additional impacts will be based on the eligibility criteria for the various categories of losses already identified, while payment of compensation and other entitlements and assistance will be made to PAP households and individuals according to the following principles:

- ③ Compensation shall be paid prior to displacement.
- ③ Compensation will be at least full displacement value and the compensation policy and its processes shall be perceived by the PAPs as being full, fair and prompt.
- ③ Preference will be given to persons whose livelihoods are land based.
- ③ Where sufficient land is not available at reasonable price, non-land based options centered on opportunities for employment or self employment should be provided in addition to cash compensation for land and other assets lost.

- ③ Taking of land and related assets may take place only after compensation has been paid; and resettlement sites, new houses, related infrastructure, public services and moving allowances have been provided to displaced persons.
- ③ In addition to these entitlements, households which are found in difficult situations, and are at greater risk of impoverishment such as widow/ widower households, households without employment, single parent households etc., as identified by the census, will be provided with appropriate assistance by the Government.
- ③ Assistance may be in the form of food, temporary accommodation, medical assistance, employment referrals or priority employment in project activities. The assistance is meant to help them cope with the displacement caused by the programme.
- ③ Compensation and other assistance to be provided prior to displacement preparation and provision of resettlement sites with adequate facilities.

## ENTITLEMENTS AND COMPENSATION MATRIX

For ease of reference, a matrix of entitlements and compensation showing a summary of all the assets that a PAP is entitled to shall be prepared by the proponents of IDSP subprojects. The entitlements and compensation matrix will follow the eligibility criteria already outlined for compensation and or/ resettlement / rehabilitation assistance, for losses of different types of assets for all project affected person's categories, as shown in table 2.

**Table 2: Broad Summary of Entitlements and Responsible Authority**

<b>Type of loss</b>	<b>Category of PAP</b>	<b>Proposed entitlement</b>	<b>Responsibility/ authority</b>
Agricultural land	Land owner	Affected households to be compensated according to the Land Acquisition Act.	Project management
		As the compensation under this framework will have to be at replacement cost, an additional allowance will be provided to cover the gap between market value and actual reparations given under the Land Acquisition Act.	Steering committee of the project
		Provision of land for those who become landless.	MACO, Local Authority, Commissioner of Lands
Agricultural crops (perennial/ annual crops)	Land owner, tenant	Give advance notice, allow harvesting if possible	Local Land, Project Office and the relevant District/ Municipal Council
		Compensation as per the agreement between user's organizations and PAP or the relevant council committee	
		Rehabilitation support to non-title holders using relevant NGO's and Council.	MACO Local Project Office using relevant NGO's and Councils.
Occupied land	Encroachers	Encroachers/ squatters are not legally entitled to compensation.	Local Project Office/ District Council
Public land	Squatters	But are entitled to resettlement as a vulnerable group to restore / retain their livelihoods.	MACO Project Office with Council and NGO's
House or other Property	Property owner, Non-title holder (squatter/ encroaches)	<ul style="list-style-type: none"> <li>- Compensation at replacement cost or as settled by the users, organizations and PAP or committee under the relevant council.</li> <li>- Non- title holders (squatters) will not be entitled to any compensation for their affected unauthorised/ illegal extensions over public land but will be provided with cost compensation to structures at replacement value without depreciation deduction.</li> <li>- Resettlement assistance will be provided to the most vulnerable groups to restore their livelihoods to pre-dip placement levels.</li> </ul>	

<b>Type of loss</b>	<b>Category of PAP</b>	<b>Proposed entitlement</b>	<b>Responsibility/ authority</b>
Community building or structure, irrigation, drinking water, schools, churches, etc.	Local community	Re-construct or re-establish lost community resources, facilities like churches and other cultural structures or provide alternatives in consultation with affected communities.	Local Project Office.
Business / commercial establishment, shops, water mills, etc.	Title-holders	Compensation for re-establishment / transition allowance in consultation with affected families.	Local Project Office
Temporary losses	Title holders (affected families)	Cash compensation/ transit allowance.	Project Office at District level.
Demolition of structures	Residential houses	Alternative shelter to be provided.	Local Project Office at District level to provide alternative shelter with sufficient infrastructure supply to PAPs.
Income	PAP losing income resulting from sub-project activities.	Facilitation to have alternative job training and other incentives	All PAPs should benefit from some kind of income (restoration to at least pre-project levels).



## Organisational procedures for the delivery of entitlements

Organizational procedures for delivery of compensation will be closely aligned with the organizational implementation arrangements for the Irrigation Development Support Programme (IDSP). In this regard resettlement and compensation activities will be funded like any other programme activity eligible under the IDSP. Funding will be processed and effected by MACO, preferably directly to the beneficiaries as per the approved RAPs provisions, through the structure created for the implementation of the project.

Compensation will be integrated into the costing and finance payments of the project, and made available to communities and farmers through the usual funds flow mechanisms while sub-projects compensation payments, monitoring activities will include confirmation by entitled beneficiaries of receipt of the payments.

The compensation process which would be in accordance with the sub-project resettlement plans will include a number of steps which include the following:

### PUBLIC PARTICIPATION

At the conception stage of the project, local communities will initiate the appropriateness of the compensation, while invitations will be extended to affected individual households to become involved in the design activities of the sub-project.

### NOTIFICATION

Affected individuals and households will be identified while thenon owners of property (renters) will be informed through a formal notification in writing and delivered by verbal notification in the presence of a village headman or his representative in case of illiterates. With the help of the village headman and the community, the census team will accompany individuals to restricted areas where they control wild trees, fishing sites or beehives.

### DOCUMENTATION OF HOLDINGS AND ASSETS

Meetings with the affected households and individuals will be arranged by the District Liaison Officer in the DACO's Office to discuss the compensation process.

The DACO's office will complete a comprehensive document containing necessary personal information on each affected individual or household and its members, total land holdings, inventory of assets affected and information for monitoring their situation in future. The village headmen and the RDC/Ward Development Committee and Some DDCC members will witness the information. These documents which should be kept current will include a record of surrendered land and all assets and claims.

### ARRANGEMENTS ON COMPENSATION AND PREPARATION OF CONTRACTS

The DACO should draw up contracts listing all property and land to be surrendered and the types of compensation selected i.e. cash and/or in kind, after all options have been clearly explained to those affected. The contract is read aloud in the presence of village headmen and members and other local leaders before the agreements are signed.

## COMPENSATION PAYMENTS

All payments and transfers in kind will be witnessed by representatives from traditional authorities and the DACO's office. Community compensation payments will be in kind only, for a community as a whole, in the form of replacement facilities constructed to at least the same standard or better than the existing ones. In this regard, community compensation includes storage warehouse, road, school building (public), public toilets, well or pump and market place.

## **PROGRAMS to improve or restore livelihoods and standards of living**

One paramount principle of the World Bank Safeguards is that where people are negatively affected by project activities, they should be no worse off, if not better off after the resettlement has taken place.

Where impact on land use is such that the sustainability of people's livelihoods may be affected, preference will be given to land for land solutions rather than cash compensation, in conformity with the Zambian legal framework and World Bank OP 4.12.

This also applies to people who are not necessarily physically displaced but who are negatively affected by loss of land. Where necessary, affected people will be monitored in the rehabilitation of their livelihood, during and after the transition period. Livelihood restoration measures will be assessed in the RAPs depending on the situation on the ground. They may include micro financial support and skills development and training.

### **MICRO-FINANCIAL SUPPORT**

Some could be provided with soft loans to purchase agricultural inputs, or to start up microenterprises that will link up with planned project activities. Micro-enterprises should be encouraged that will create synergies with ongoing activities and exploit existing and evolving markets.

### **SKILLS DEVELOPMENT AND TRAINING**

The displaced people could be employed in road and irrigation infrastructure construction works. Those still land based after resettlement could be trained in better farm management to produce higher output of high value crops, thereby increasing their income.

IDSP will identify associations/ service providers that could be contracted for work on sub-project activities.

## RESETTLEMENT ACTION PLAN PREPARATION AND APPROVAL PROCESS

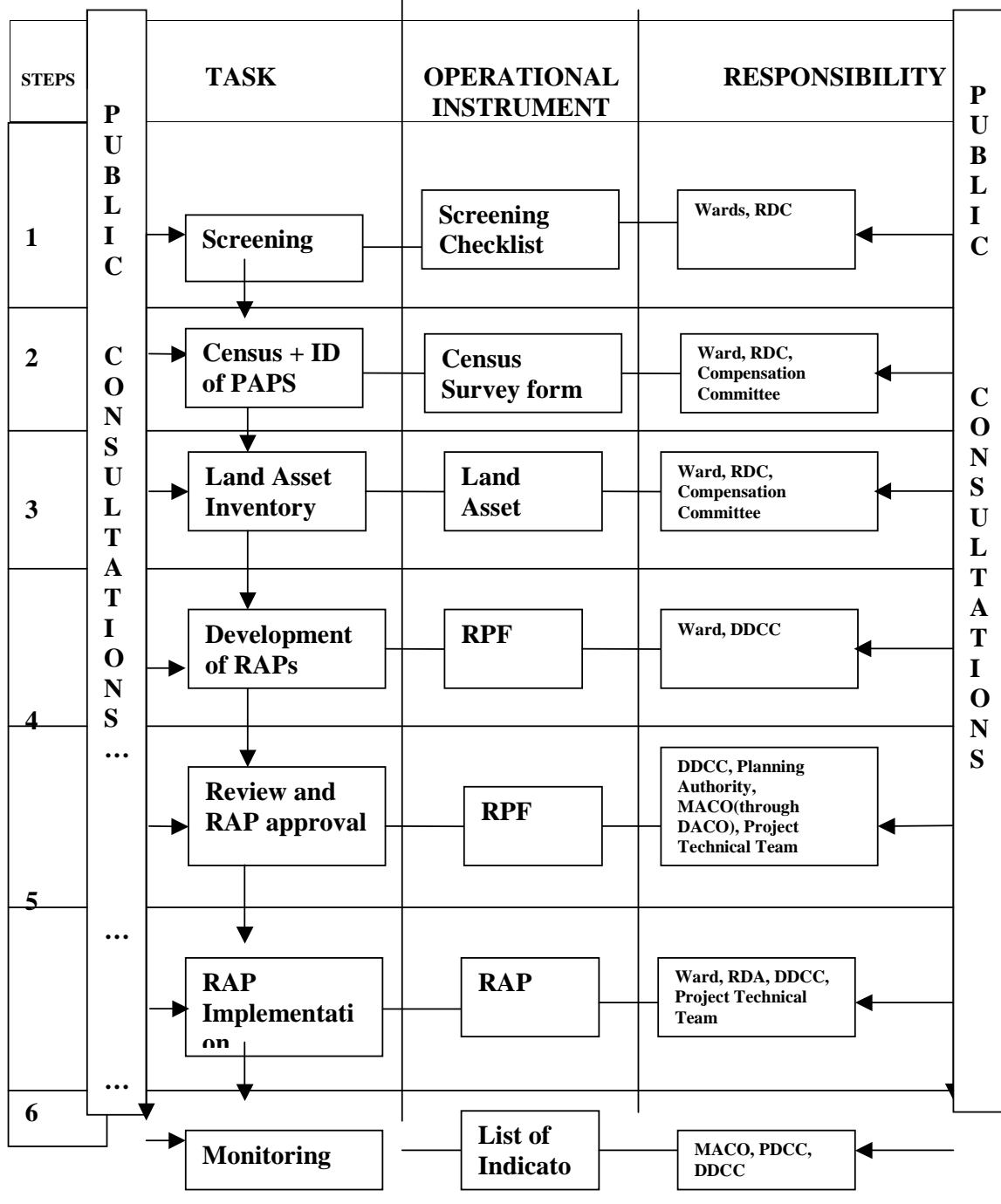
The process of preparing and approval of the Resettlement Action Plan is outlined in the following table.

### COMPLIANCE WITH WORLD BANK SAFEGUARD ASSESSMENT

According to the World Bank Operational Policies on involuntary resettlement, preparation of a resettlement instrument is a condition for appraising projects involving involuntary resettlement.

In case of programs/projects with sub-projects, the Bank requires that a satisfactory resettlement plan or an abbreviated resettlement plan that is consistent with the provisions of the policy framework be submitted to the Bank for approval before the subproject is accepted for Bank financing (WB OP 4.12). Where implementation of a project displaces less than 200 people, an abbreviated Resettlement Action Plan is required. Otherwise, a comprehensive Resettlement Action Plan is required.

**Table 3: RAP Preparation and Approval Process**



According to World Bank OP 4.12 and this RPF, people who are affected and are eligible will have to be compensated before any implementation is commenced. The acquisition of land and the related assets may take place only after the displaced persons have been paid compensation; and resettlement sites and moving allowances, where applicable, provided. It is also a requirement of the WB OP 4.12 policy that measures to assist the displaced persons be implemented as per the sub-project's resettlement plan of action, where there is loss of shelter and need for relocation.

Resettlement Action Plans which would be prepared for each sub-project involving compensation or resettlement shall include measures to ensure compliance with this policy directives. Furthermore, the implementation schedule of these policy measures should ensure that no individual or affected household would be displaced by sub-project's civil works activity before compensation is paid and resettlement sites with adequate facilities prepared and provided to them.

### **COMPLIANCE WITH ZAMBIAN PLANNING AND RESETTLEMENT LEGAL FRAMEWORKS**

The Town and Country Planning Act provides for the control of Development and subdivision of land in state land areas. It therefore follows that if the RAPs are to be planned and implemented on state lands, then the provisions of this Act would have to be complied with.

### **SCOPE OF RESETTLEMENT ACTION PLANS**

Overall responsibility for preparing a resettlement action plan for each sub project will lie with the Ministry of Agriculture and Cooperatives (MACO). The MACO shall ensure that a Resettlement Action Plan that conforms to this RPF and to the requirements of the World Bank OP 4.12 is prepared. The RAP is a detailed time bound plan of action plan outlining the following among others :- resettlement objectives, strategic options, responsibilities, approvals, entitlements, actions; and monitoring and evaluation. The process to be followed in preparing a RAP shall involve several steps as outlined in the following sections.

### **Preliminary Assessments of a Sub-project**

The proponent of a sub project shall examine whether any environmental study is required for the type of sub project being proposed. The initial assessments and surveys at this stage should include (i) potential social impacts, (ii) direct consultations with individuals and groups who are expected to be directly affected by the sub-project activities; and (iii) identification of the major population groups that may be affected by the proposed project. These surveys and assessments at this preliminary stage would form the basis for preparing the terms of reference for the RAPs Social Assessment Component.

### **Preliminary Information**

Preliminary information is required to be provided to MACO (or anybody designated by MACO), by the proponent of the sub-project on the proposed project as early as possible. The required information shall include a description of the nature, scope and location of the proposed sub project, accompanied by location maps and any other details as may be required by the MACO. If the preliminary information submitted to MACO should indicate that the project has potential involuntary resettlement, such as involving taking of land which might result in physical displacement of persons, loss of assets, loss of livelihood or restriction of resource use, then this RPF is triggered and a RAP needs to be prepared.

### **Socio-economic Baseline Census**

This shall be carried out to provide baseline data on various factors including the following:-

- ③ **(i) Identification of current occupants of the affected area**, to establish the basis for the design of the resettlement program and to exclude subsequent inflows of people from eligibility for compensation and resettlement assistance;
- ③ **(ii) Standard characteristics of displaced households**, including a description of production systems, labor, and household organization; and baseline information on livelihoods (including, as relevant, production levels and income derived from both formal and informal economic activities) and standards of living (including health status) of the displaced population;
- ③ **(iii) The magnitude of the expected loss** of assets, total or partial, and the extent of displacement, physical or economic;
- ③ **(iv) Information on vulnerable groups** or persons for whom special provisions may have to be made;
- ③ **(v) Land tenure and transfer systems**, including an inventory of common property natural resources from which people derive their livelihoods and sustenance, non-title-based usufruct systems (including fishing, grazing, or use of forest areas) governed by local recognized land allocation mechanisms, and any issues raised by different tenure systems in the project area;
- ③ **(vi) The patterns of social interaction** in the affected communities, including social networks and social support systems, and how they will be affected by the project;
- ③ **(vii) Public infrastructure and social services** that will be affected; and
- ③ **(viii) Social and cultural characteristics of displaced communities**, including a description of formal and informal institutions (e.g., community organizations, ritual groups; and Non Governmental Organizations (NGOs) that may be relevant to the consultation strategy and to designing and implementing the resettlement activities.

The preliminary assessments and information and the socio-economic baseline census will assist in determining the cut-off date, period of registration of claims and valuation of land and immovable assets.

## DEVELOPMENT OF THE RESETTLEMENT ACTION PLANS (RAPs)

If the preliminary assessments (coping and screening exercises) indicate the need for involuntary resettlement, then a RAP shall be prepared in accordance with this Resettlement Policy Framework, World Bank Safeguard Policies and the relevant Zambian legal requirements as outlined in this RPF. The preparation of the RAP may be outsourced to a specialist by MACO, who should in that case prepare the terms of reference for the preparation of the RAP.

### Resettlement Action Plan Types and Contents

The RAP's scope and level of detail will vary. Two types may be identified, depending on the magnitude and complexity of the resettlement issues involved namely a full resettlement action plan and an abbreviated resettlement plan.

#### 1.1.1.29 *Full (comprehensive) Resettlement Action Plan*

This applies to any project or sub project that involves involuntary resettlement. Ideally, two to three months should be planned for consultants to prepare the RAP before the sub-project activities are commenced.

#### 1.1.1.30 *Abbreviated Resettlement Action Plan*

An abbreviated RAP is an alternative to a full RAP. It shall be prepared where impacts on the entire displaced population will be minor, or fewer than 200 project-affected people will be displaced, or less than 10% of assets are impacted.

## Resettlement Action Plans Contents

If more than two hundred people are affected then the RAP preparation will include the following:

- ③ Definition and public disclosure of cutoff date,
- ③ Provision of project information to affected people,
- ③ Census of affected people and affected assets,
- ③ Identification of policy entitlements related to impacts through the census and surveys and presented in a sub-project specific entitlement matrix,
- ③ Development of the RAP including time-bound implementation plan, costs and budgets,
- ③ Consultation with the affected community and approval of the RAP by the Zambian Authorities,
- ③ Presentation of the RAP to the World Bank by the Zambian Authorities; and
- ③ Implementation of the RAP once approved by the World Bank.

## RESETTLEMENT ACTION PLAN APPROVAL PROCESS.

MACO or its delegated agency shall ensure that the draft RAP is made available at a place accessible to displaced persons, local NGOs, and other interested parties in a form, manner and language that are understandable to them once a draft RAP has been prepared.

The Draft RAP shall be transmitted to the World Bank for appraisal and review at the same time. The World Bank shall also make the RAP available to the public through its Info-Shop. The World Bank and MACO shall disclose the RAP again in the same manner. RAP implementation will commence once the World Bank is satisfied with the public disclosures and has approved the RAP.

## RESETTLEMENT ACTION PLAN'S IMPLEMENTING AGENCIES

The overall responsibility of monitoring and evaluating the RAP activities shall lie with MACO, while the World Bank shall periodically supervise the Resettlement Action Plan activities to ensure compliance with the RAP provisions.

The Resettlement Specialist/ Environmentalist at MACO HQ shall be responsible for the overall smooth implementation of the RAPs, while Human Settlements Planners based in PACO Offices at the Provincial level and DACO Office at District level shall be responsible for the smooth implementation of RAP's in their areas.

## RESETTLEMENT ACTION PLANS MONITORING

There shall be both internal and external monitoring of the RAP activities. Internal monitoring of the day-to-day operations of the resettlement program shall be done by the implementing agency whilst external monitoring shall be done by the monitoring agency designated under IDSP to carry out external monitoring of IDSP.



## Grievance redress mechanisms

It is anticipated that land acquisition would be avoided or at least minimized, thereby reducing complaints arising from loss of land or resources as a result of implementing any sub-project activities. However, should a complaint arise it shall be addressed as follows:

### GRIEVANCE REDRESS METHODS

#### Provincial and District Administration Method

- ③ (i) The local community or Village Development Committee (VDC), Ward Development Committee or Farmer Group Sub-project Committee would discuss the complaint and try to resolve the matter.
- ③ (ii) The discussion should be reported to the relevant committee of the Local District Council for action.
- ③ (iii) If the District Council cannot resolve the matter then it can be referred to the District Development Coordinating Committee who should make a decision on the matter.
- ③ (iv) If the DDCC cannot resolve the matter then it can be referred to the PDCC for action.
- ③ (v) If the matter cannot be resolved at the PDCC then it should be referred to the local magistrate.
- ③ (vi) If the local magistrate cannot resolve the matter, then it shall be referred to the high court whose decision on the matter shall be final.

#### The Ministry Of Agriculture and Cooperatives and the Local Courts Systems Method

MACO and the Local Court System in the sub-project areas shall deal with all grievances concerning levels of compensation, and non-fulfillment of contracts.

Affected individuals and households should be informed and be made familiar with the local courts grievance redress process well before the individual compensation and Resettlement Action Plans are approved and individual contracts signed.

Valid claims shall be compensated after verification by the DACO's office (MACO), and the Village Headman/Ward Councilor.

The Local Court's shall deal with cases of rejected complaints if the matter cannot be resolved at local community level. Unresolved cases should be referred to the Local Magistrate Court, and if not resolved at that level then they shall be referred to the High Court for final decision on the matter. Courts of law should be the last resort, triggered only if amicable resolution of the grievances cannot be obtained at community level.

#### Local Government Organs Method

To facilitate amicable resolutions on local conflicts, the grievance redress mechanisms shall make provisions for the following:-

- ③ Formation of complaints committee at the sub-project level under the chairmanship of the Ward Councilor. whose membership should consist of representatives of the affected persons, local NGO's, the Chiefs representative and the DACO's office. The committee shall be established as soon as RAP preparations start, in order to cater for claims at an early stage because disputes can arise from any census operation.

- ③ Any complaint can be submitted to the committee. After verification of the complaint by field visit, the concerned parties should be brought together to resolve the matter amicably. If not resolved, either the administrative or local courts system already described can be applied.

As most of the affected people in the project area are poor and un-educated, the grievance procedures should be simple, accessible, flexible, just, fair and capable of being administered properly with minimum delay. In this regard, the MACO representative, the Lands Department, The District Commissioner's office and the Local Authorities in the area shall keep updated records of entitlements and compensation claims in the project areas, which records shall be consulted to validate claims.

The grievance procedure shall give the affected people up to the end of the next full agricultural season after surrendering their assets, to set-forth their cases.

Community Representatives and affected peoples' representatives will be part of the contracts to be signed by the affected persons, and all complaints of non fulfilment of contracts, levels of compensation and seizure of assets should be addressed to the Local and District Authorities in the area either in person or in writing.

Given the participatory process in which this RPF has been prepared, it is expected that the affected individuals, households and communities associated with the conception, design and location of the sub-project activities would have expressed their grievance or dissatisfaction to the relevant authorities prior to the RAP's approvals. In this regard, it is also expected that MACO would sensitize the affected persons and communities on Zambia's grievance redress mechanisms which incorporate two integrated approaches namely the District and Provincial Administrative structures; and the Local Government structures, Ward/Village Council, Organisational Structures including laid down Committees as already explained.

Aggrieved parties can air their grievances through the District, Provincial Local Government organs; through Local Government organs such as Village, Wards, and Chiefdoms or through IDSP institutional structure. The grievances shall be transmitted to the District Project Office/DACO, facilitation team, District Commissioner, or to the District Provincial or national steering committee of the project.

## **RESETTLEMENT ACTION PLANS IMPLEMENTATION ARRANGEMENTS**

### **PROJECT IMPLEMENTATION**

MACO will have overall oversight of project implementation. The Department of Agriculture within MACO will lead implementation and will be responsible for implementation of the Pre-investment component (Component 1). The Investment Component (Component 2) will be contracted out to a site developer and other consultants through partnership agreements. A Transaction Adviser will be recruited to support processes to establish Irrigation Development Contracts and Special Purpose Vehicles.

## IMPLEMENTATION ARRANGEMENTS

A national steering committee chaired by the PS in MACO will be established. Other members of the committee will include Directors of Agriculture, Agribusiness & Marketing and Policy & Planning within MACO; and representatives from MEWD, the PPP unit of MFNP and ZNFU. Representatives from site specific committees will participate as observers. The steering committee will meet at least quarterly to approve work plans, provide no objection to formalization of contracts, provide general guidance on project implementation and resolve any emerging policy issues in the course of project implementation. The steering committee will be advised on institutional matters by a technical advisory committee to be chaired by ZNFU and including NCC, UNZA, BAZ, MEWD, PPP unit of MFNP and Engineering Institution of Zambia (EIZ) as members.

The National Coordinator under the Director of Agriculture is responsible for overall coordination of the project. S/he will be assisted by an Irrigation Engineer, Agribusiness Specialist and Office Assistant. A technical team comprising relevant Department of Agriculture staff and other implementing agencies including Ministry of Energy and Water Development (MEWD), Road Development Agency (RDA) and Zambia Electricity Supply Corporation (ZESCO) will be constituted to assist with project supervision, as and when required. The National Coordinator will also work closely with the PPP unit in the Ministry of Finance and National Planning (MFNP). At each site, a liaison officer within the DACO's office will supervise the project on a day to day basis.

At each site, a Liaison Officer within the DACO's office will supervise the project. Development committees will be set up to interact with consultants and provide feedback to MACO.

The National Coordination Office (NCO) of the Agricultural Development Support Project will support implementation of the IDSP by disbursing project funds, maintaining all project documentation and providing safeguards. The NCO will also be responsible for the M&E function of the project and establishment of an information management system.

The Safeguards officer within the NCO will be responsible for the implementation of the RFP and the RAP and will be assisted by the District Liaison Officer at each site. Local development committees will be engaged at the local level to contribute to the RAP planning and implementation processes.

The above is the project's suggested mode of operation for implementation of IDSP activities, including the implementation of RAPs. The modalities do not outline clearly the roles or involvement of the decentralized structures of government including the Wards and Development Committees.

Apart from MACO, the Department of Water Affairs in MEWD, the RDA and ZESCO will be involved to oversee dam construction, rehabilitation/ construction of feeder roads? And connection to the national electricity grid.

## RAP IMPLEMENTATION SCHEDULE.

It is essential in the implementation of RAPs to have individual time frames and schedules which are linked to those of the IDSP. In this regard RAP implementation activity schedules as agreed between the Project Management Unit and PAPs, should include the following if the desired results are to be realized:

- ③ Start and completion dates of civil works; and
- ③ Time table for completion of civil works and transfer to PAPs.

## MECHANISMS FOR CONSULTATION IN PLANNING, IMPLEMENTATION AND MONITORING OF THE RAP

This RPF regards public consultation and participation as essential because they afford potentially displaced persons the opportunity to contribute to both the design and implementation of IDSP project activities, in order to promote local ownership of the project for it to be successful. Furthermore, the local community have invaluable local knowledge about conditions needed for the project's successful design and implementation. This RPF advocates for extensive public consultation and participation of affected individuals/households in the planning and implementation of the RAP. Consultation should be a continuous process throughout all stages of the project cycle namely:-

- ③ Project inception and planning, involving choices of alternative designs;
- ③ Screening process and feasibility study, involving assessment of project impacts etc.;
- ③ Preparation of sub-project designs involving resettlement strategies and options, choice of resettlement sites and timing of relocation;
- ③ Planning of resettlement and compensation packages involving decisions on compensation rates, eligibility, entitlements, etc.;
- ③ Drafting and reading/signing of the compensation contracts;
- ③ Payment of compensations; and
- ③ Resettlement activities involving the development of opportunities and initiatives, development of procedures for grievance redress as well as mechanisms for monitoring.

This RPF further recommends that public consultation and participation shall take place through various forms and media, including meetings, radio, television, request for written proposals/comments, completion of questionnaires/application forms and explanations of the project ideas and requirements by stakeholders at national, Provincial and District levels. This shall be handled by the Project Implementation Unit.

### CONSULTATIONS DURING RESETTLEMENT ACTION PLANNING, IMPLEMENTATION AND MONITORING

Consultations with the stakeholders including the affected people will be an integral part in the RAPs preparation, implementation and monitoring processes at all stages as follows:

#### Screening and Preliminary Assessments

People affected will be consulted and participate in the required assessments once the proponent of a sub-project has identified the need to undertake an environmental study. In this regard meetings will be held with stakeholders including affected groups to discuss potential resettlement issues.

#### Social and Economic Baseline Census

The affected community members and other interested parties will be involved in the planning and implementation of social and economic studies needed for the preparation of the RAPs.

## Preparation and Implementation of Resettlement Action Plans

In the process of preparing and implementing the RAPs, representatives of the affected people will input their concerns in the processes through discussions on the potential costs of implementing the planned activities, enforcing the RPF provisions, mitigating impacts, rescheduling where necessary, and timing of RAP activities.

### Monitoring

To be effective, the implementation of this RPFs provisions will require the involvement of the affected communities in the discussions on the development of the necessary measures needed to deal with identified problems and implement the planned activities. In this regard community members shall be involved in the monitoring of the project's activities throughout its planning cycle starting from inception through to impact assessment.

### ARRANGEMENTS FOR MONITORING

Monitoring and evaluation are important in the implementation of a project because they provide feedback needed to detect success challenges and opportunities in the development process. In the case of this RPF, monitoring would ensure compliance with the RAPs provisions. In addition, monitoring would provide regular feedback, from stakeholders such as management staff and beneficiaries, needed for the efficient and effective management project activities. Furthermore, responses to RAP implementation challenges would be timely if feedback is received regularly.

However, for RPF and RAPs to be implemented efficiently, effectively and to be responsive to issues raised in the feedback meetings, reports etc., a cost effective monitoring system with adequate human, financial and material resources needs to be put in place in order to successfully improve the implementation of sub-project activities.

### Scope of monitoring

Depending on the complexity of the RAPs sub-project activities, the monitoring systems to be used in the implementation of the RPF and the RAPs needs to consider the following if the desired project objectives are to be realised:

- ③ Availability of the resources and expertise for monitoring; and
- ③ The degree of stakeholders' and cooperating partners' willingness to be involved and participate in the monitoring arrangements.

### Performance monitoring

To enable the sub-project proponents to measure progress against set targets, performance monitoring will be carried out as an internal function by the organization(s) responsible for implementing the RAPs. In this regard performance monitoring reports will be prepared at monthly, quarterly, half yearly and yearly intervals depending on the issues to be monitored. Performance targets in this regard will include:

- ③ Public meetings held,
- ③ Compensation disbursed,
- ③ Census surveys completed,
- ③ Assets inventories and socio-economic studies completed,
- ③ Proportion of displaced people relocated; and
- ③ Income restoration and development activities initiated.

If the volume of work involved in performance monitoring is beyond the capacity of the RAP's implementing organization to carry out, then the monitoring function could be sub-contracted to a consultant.

### **Impact monitoring**

Impact monitoring to be undertaken by the sub-project proponent, or an independent agency, will provide assessments of the effectiveness of the RAP strategies in meeting the affected populations needs. Quantitative and qualitative indicators will be used to compare the effects of the RAPs activities with the baseline conditions of the affected populations before and after the resettlement exercises. The satisfaction of the affected population with the resettlement initiatives will be assessed for their adequacy or deficiency, while the census assets inventories and socio-economic studies will constitute the baseline for the affected population, for the purpose of evaluating impact assessment.

### **External Monitoring/ Completion Audit**

Completion audit(s) shall be carried out after the completion of all RAP inputs. The main aim of the completion audit or external monitoring is to assess how far the sub-project proponents' efforts have gone in the restoration of the living standards of the affected population; and also assess whether the strategies for the restoration for the living standards of the affected people have been properly conceived and implemented.

The following are some of the several issues which need to be verified in the external monitoring:

- ③ Physical inputs committed in the RAPs
- ③ Delivery of services provided in the RAPs
- ③ The effects of Mitigation measures prescribed in the RAPs
- ③ The affected populations and host populations social economic status after displacement measured against the baseline conditions after the exercise.

## **cost estimateS and funding arrangements**

The four categories of resettlement costs that must be estimated when developing Resettlement Action Plans budget once the impacts have been identified and located are:- administrative, compensation, land acquisition (surveying, resettlement planning and valuation), and Monitoring and Evaluation costs.

### **ADMINISTRATIVE COSTS**

These include salaries for staff, transportation, office administrative costs (stationery, electricity, water, rentals, communications etc), operating supplies and other miscellaneous costs.

### **COMPENSATION COSTS**

These are to be estimated by determining the number of persons, type and value of assets likely to be affected by project activities.

## **RAPs, PLANNING AND IMPLEMENTATION COSTS**

The following costs will have to be estimated under this category when the relevant information is available after the conclusion of site specific socio-economic studies including information on specific impacts, individual and household incomes and numbers of affected persons. Relevant costs are those for inventory assessments, land acquisition, preparation and implementation of Resettlement Action Plans, surveying and valuation of properties and resettling people on alternative lands, buying land and developing it into a habitable settlement. should be determined as well. Also to be budgeted for are community development activities such as provision of public services, access roads, markets, etc.

## RAPs MONITORING AND EVALUATION COSTS

These costs relate to planning and implementation of monitoring and evaluation activities. Table below shows the tentative budget for implementing the RAP.

**Table 4: BUDGET ESTIMATES FOR IMPLEMENTING THE RAPs.**

Annual Amount in US \$ '000						
Item	1	2	3	4	5	TOTAL
<b>Musakashi Irrigation Site</b>						
RAP Preparation Irrigation	100					<b>100</b>
RAP Implementation Irrigation	250	100				<b>250</b>
RAP Preparation Dam ??	100	100				<b>200</b>
RAP Implementation Dam ??	100	100				<b>200</b>
<b>Mwomboshi Irrigation Site</b>						
RAP Preparation Irrigation	60					<b>60</b>
RAP Implementation Irrigation	200					<b>200</b>
RAP Preparation Dam	250	250				<b>500</b>
RAP Implementation Dam	200	300				<b>500</b>
<b>Lusitu Irrigation Site</b>						
RAP Preparation Irrigation	80					<b>80</b>
RAP Implementation Irrigation	300	600				<b>900</b>
Monitoring and Technical Assistance	50	50	50			<b>150</b>
<b>Total Resettlement</b>						<b>3,140</b>



**APPENDICES**

## References

### MUSAKASHI

1. The Musakashi Area Brief – MACO, TSB 2009 4 page report.
2. The Commercial Agricultural Project Field Visit Report (FAO), October 2007.
3. Soil survey (reported by MACO office Ndola 2009).

### MWOMBOSHI

1. Socio-economic and technical reports : various and completed by the Mwomboshi Syndicate in response to FAO and World Bank enquires as well as necessary studies for the Water right application.
2. Preliminary engineering design work on several potential dam sites on the Mwomboshi River. John Hart and Rob Baier. 2007.
3. Initial satellite imagery and interpretation 2007. Peter Sheppard.
4. Environmental Impact assessment. K Nyundu, Envøl Consult, Lusaka. 2008.
5. Water right. Approved 2008.

### LUSITU

1. Mid Zambezi Agricultural Water Management for Food Security Programme, Zambia, Zimbabwe and Botswana, Programme preparation Report. 07/001 ABD-RAF, 10th January 2007.
2. Bankable Investment Project Profile. MACO. Date unknown.
3. Initial satellite imagery and interpretation 2007. Peter Sheppard.

### GENERAL

1. Ministry of Agriculture and Cooperatives, Irrigation Development Project. 2009, ESMF & RPF, Terms of Reference, 2009
2. Environmental Project Brief (EPB) approval by the Environmental Council of Zambia (reference ECZ/INS/101/4/1 of 01-07-2008)
3. Food Security Research Program, 2008. Targeting Challenges: *Using Rural Data Sets to Inform the Process of Categorization of Resource Poor Small holder farmers*. A presentation at Kafue Gorge Workshop, August 20-22.
4. Government of the Republic of Zambia. 2006. Vision 2030.
5. Ministry of Agriculture and Cooperatives. 2004. Irrigation Policy and Strategy.

## **APPENDIX 1: Detail of Consultations**

**(being compiled)**

## APPENDIX 2: Elaboration of Legal Framework

<b>Law</b>	<b>Provisions</b>	<b>Relevance to RPF and RAPs Implementation</b>
<i>Constitution of Zambia</i>	<ul style="list-style-type: none"> <li>• Provides for the financial right to property and protects persons from depreciation of the property.</li> </ul>	<ul style="list-style-type: none"> <li>• Fundamental rights to property including land guaranteed.</li> </ul>
<i>Land Acquisition Act</i>	<ul style="list-style-type: none"> <li>• The President of Zambia to compulsorily acquire property in the National Interest.</li> <li>• The Act also provides for compensation for acquired land.</li> <li>• Issue of notice to show the intention to acquire land, notice to shield up property, notice to take up property.</li> <li>• Agreement on the amounts of cash compensation.</li> <li>• Grant land as a form of compensation to be agreed between the president and the president entitled to compensation.</li> <li>• Valuation of the property to be acquired/or to be compensated for</li> <li>• Settlement of disputes relating to the land to be dealt by the High Court.</li> <li>• Establishment of the Compensation Board to advise Minister responsible for lands in the assessment of any compensation payable under the Act.</li> </ul>	<ul style="list-style-type: none"> <li>• Compulsory acquisition of property needed for a project like IDSP.</li> <li>• Payment Of compensation to affected persons.</li> <li>• Affected persons to be given notices before property is assured, and reposed.</li> <li>• Payment of cash forms of compensation to be agreed between the parties for they are affected.</li> <li>• Property to be acquired or compressed to be valued by qualified valuer.</li> <li>• Settlement of disputes to be dealt with by the High Court.</li> <li>• Compensation Board established to advise the committee on compensation matters including assessment and compensation payments.</li> </ul>

<b>Law</b>	<b>Provisions</b>	<b>Relevance to RPF and RAPs Implementation</b>
<i>Agricultural Lands Act</i>	<ul style="list-style-type: none"> <li>• Establishment of Agricultural LOC Board.</li> <li>• Establishment of Tenant farming schemes.</li> <li>• Minister has powers to declare any state land by statutory notice Agricultural Scheme.</li> <li>• Agricultural Board to manage agricultural schemes.</li> <li>• Provision of Arbitration to resolve disputes.</li> </ul>	<ul style="list-style-type: none"> <li>• A RAP ore can be declared a farming scheme to be managed by the Agricultural Lands Board by the Minister responsible for Agriculture</li> </ul>
<i>The Public Roads Act</i>	<ul style="list-style-type: none"> <li>• Provides for entry upon any land by the RDA to extract road building materials .</li> <li>• Provides for notification by the owner/ tenant of the property before the said entry into a property.</li> <li>• Compensation to be paid to the affected land owner/ occupier.</li> <li>• Affected persons to submit.... . the report to RDA for loss encountered as a result of Land appreciation.</li> <li>• In case of disagreement between RDA and property owner the matter should be referred to ....</li> </ul>	<ul style="list-style-type: none"> <li>• Entry upon any land for road construction and extraction of building materials.</li> <li>• RDA and affected owner to agree on terms and levels of compensation before land is acquired.</li> <li>• Arbitration in cases of land owner/occupier not agreeing with the amount of compensation offered.</li> </ul>
<i>Arbitration Act</i>	<ul style="list-style-type: none"> <li>• Provides for arbitration in cases where the land owner/ occupier does not agree with the offered amount of compensation.</li> </ul>	<ul style="list-style-type: none"> <li>• Arbitration in cases of the amounts of compensation offered during the implementation of RAPs.</li> </ul>
<i>The Local Government Act.</i>	<ul style="list-style-type: none"> <li>• Provides for the system of local administration Council city, municipality and District Council levels.</li> <li>• Exercises several delegated central Government policies at Village, Ward, Constituency and District levels.</li> </ul>	<ul style="list-style-type: none"> <li>• Administration of local governance matters including those related to Traditional Authorities.</li> <li>• In development project activities at District and Local levels i.e. Decentralisation Policy which the GRZ has adopted provides for project administration implementation at Local Levels of the Country's Governance system</li> </ul>

<b>Law</b>	<b>Provisions</b>	<b>Relevance to RPF and RAPs Implementation</b>
<i>Town and Country Planning Act</i>	<ul style="list-style-type: none"> <li>• Provides for the appointment of Planning Authorities in the Country by the Minister , who are charged with the responsibility of preparing and implementing ..... plans for their areas.</li> <li>• Control of use, and change of use</li> <li>• ..... and reservation of land for various purchases.</li> <li>• Regulation of subdivisions for development.</li> <li>• Provides for those affected by planning decision.</li> <li>• Enforcement of planning standards and regulations.</li> </ul>	<ul style="list-style-type: none"> <li>• Need for approval of RAPs by relevant Planning Authorities.</li> <li>• Need for ..... Of planned activities in RAP areas.</li> <li>• The new urban and Regional Planning Legislation will apply in both urban and rural areas and in all development sectors including agriculture.</li> </ul>
<i>Land Conversion of Titles Act</i>	<ul style="list-style-type: none"> <li>• Provides for the alienation, transfer disposition and change of land use.</li> <li>• Provides for compulsory acquisition of state land by the President.</li> <li>• Administration of Land Tenure systems in Zambia.</li> </ul>	<ul style="list-style-type: none"> <li>• Conversion of land from customary to state land if needed for national development and projects.</li> </ul>
<i>Land Survey Act</i>	<ul style="list-style-type: none"> <li>• Provides for the surveying of planned land before demarcation into plots, registered, allocated and given titles.</li> </ul>	<ul style="list-style-type: none"> <li>• Project Planned Land has to be surveyed by a qualified professional surveyor before being registered, allocated and title deeds given to developers.</li> </ul>

### APPENDIX 3: Environmental and Social Screening Form

<b>Sub- project name:</b>			
<b>Sub-project Location</b> ( e.g. region, )			
<b>(Include map/ Sketch):</b>			
<b>Type of activity: ( e.g. new construction, rehabilitation, periodic maintenance)</b>			
<b>Estimated Cost</b>			
<b>( \$ USD )</b>			
<b>Proposed Date of</b>			
<b>Commencement of Work:</b>			
<b>Technical Drawing /Specifications</b>	<b>Circle Answer</b>	<b>Yes</b>	<b>No</b>
<b>Reviewed:</b>			

Issues	Low	Site Sensitivity Medium	High	Rating
<b>Natural habitats</b>	<b>No natural habitats present of any kind</b>	<b>No critical natural habitats; other natural habitats occur</b>	<b>Critical natural habitats present</b>	
<b>Water quality and Water resource availability and use.</b>				
<b>Natural hazards vulnerability, floods, soil stability/ erosion</b>				
<b>Cultural Property</b>				
<b>Involuntary resettlement</b>				
<b>Indigenous Peoples</b>				

**2. Checklist questions:**

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<b>Physical data:</b>	<b>Yes/ No answers and bullet lists preferred except where descriptive detail is essential.</b>
<b>Site area in ha</b>	
<b>Extension of or changes to existing alignment</b>	
<b>Any existing property to transfer to sub-project.</b>	
<b>Any plans for new construction</b>	

**Refer to project application for this information**

<b>Preliminary Environmental Information:</b>	<b>Yes/No answers and bullet lists preferred except where descriptive detail is essential</b>
<b>State the source of information available at this stage ( proponents report, EIA or other environmental study).</b>	
<b>Has there been litigation or complaints of any environmental nature directed against the proponent or sub-project</b>	

**Refer to application and/ or relevant environmental authority for this information.**

<b>Identify type of activities and likely environmental impacts:</b>	<b>Yes/ No answers and bullet lists preferred except where descriptive detail is essential .</b>
<b>What are the likely environmental impacts , opportunities, risks and liabilities associated with the sub-project?</b>	

**Impact, Mitigation and Monitoring Guidelines**

<b>Determine environmental screening category :</b>	<b>Yes/ No answers and bullet lists preferred except where descriptive detail is essential.</b>
<b>After compiling the above, determine which category the sub-project falls under based on the environmental categories schedule 1,2 or 3</b>	

**Screening and Review Process**



Mitigation of Potential Pollution :	Yes/ No answers and bullet lists preferred except where descriptive detail is essential.
Does the sub-project have the potential to pollute the environment , or contravene any environmental laws and regulations?	
Will the sub-project require pesticide use?	
If so, then the proposal must detail the methodology and equipment incorporated in the design to constrain pollution within the laws and regulations and to address pesticide use, storage and handling.	
Does the design adequately detail mitigation measures?	

**Mitigation and Monitoring Guidelines.**

Environmental Assessment Report or Environmental studies required :	Yes/ No answers and bullet lists preferred except where descriptive detail is essential.
If screening identifies environmental issues that require an EIA a study, does the proposal include the EIA or study?	
Indicate the scope and time frame of any outstanding environmental study.	
<u>Required environmental Monitoring Plan:</u>	
If the screening identifies environmental issues that require long term or intermittent monitoring ( effluent , gaseous discharges, water quality, soil quality, air quality, noise etc), does the proposal detail adequate monitoring requirements ?	

**Impact, Mitigation and Monitoring Guidelines**

Public participation / information requirements:	Yes/ No answers and bullet lists preferred except where descriptive detail is essential.
Does the proposal require, under national or local laws, the public to be informed, consulted or involved?	
Has consultation been completed?	
Indicate the time frame of any outstanding	

<b>consultation process.</b>	
<b>Land and resettlement:</b>	<b>Yes/ No answers and bullet lists preferred except where descriptive detail is essential</b>
<b>What is the likelihood of land purchase for the sub-project?</b>	
<b>How will the proponent go about land purchase?</b>	
<b>What level of type of compensation is planned?</b>	
<b>Who will monitor actual payments?</b>	

<b>Actions:</b>	
<b>List outstanding actions to be cleared before sub-project appraisal.</b>	
<b>Approval/ rejection</b>	<b>Yes/ No answers and bullet lists preferred except where descriptive detail is essential.</b>
<b>If proposal is rejected for environmental reasons, should the sub-project be reconsidered, and what additional data would be required for reconsideration?</b>	

**Recommendations :**

Requires an EIA and/or RAP , to be submitted on date .....

Requires EMP, to be submitted on date .....

Does not require further environmental studies .....

**Reviewer:** .....

**Name:** .....

**Signature:** .....

**Date:** .....



## APPENDIX 4: Census Survey and Land Asset Inventory Form

### Socio- economic Household Datasheet of PAPs

Name of Interviewer		Signature
ID code		
Name of Supervisor		( after verification of interview)
ID code		

Village Name	
ID code	
Number of Concession in Village (GPS coordinates)	

Date.....

Day      Month      Year

Household Interview:														
Name and Surname	Relation to Family	Sex		Place of Birth	Age	Marital Status	Residence Tenure	Ethnic Group	Religion	Educational Level	Income Earner		Economic Activities	
		M	F								Yes	No	Pri	Sec
		1.												
2.														
3.														
4.														
5.														
6.														
7.														

Pr= Primary

Se= Secondary

**Relation to Head of Family :** 1. HOH 2. Spouse of HOH 3. Child of HOH 4. Spouse of child of HOH 5. Grand child of HOH  
6. Parent of HOH 7. 8. 9. Other( specify) 0. No Answer.

**Marital Status :** 1. Married 2. Widowed 3. Divorced 4. Un married 0. No Answer

**Residential Status:** 1.PRP (Permanent Resident): 2. Residential Absent(RA) 3. Member of Non Resident of HH 4. Visitor  
9. Other ( specify) 0. No Answer

**Occupations: -**

**Principal Occupation:** 1. Farmer 2. Household 3. Merchant 4. Religious Leader, Teacher 5.Artisan 6. Transport  
7. Unemployed 9. Other (specify) 0. No Answer

**Secondary Occupations:**

**Educational Level:** 1. illiterate 2. Three Years or less 3. Primary School 4. Secondary School 5. Technical School  
6. Religious school ( Literate in English) 0. No answer

**Religion:** Christian (Specify denomination) 2. Muslim 3.Hindu 4.Animist 9. Other (Specify) 0. No Answer.

## APPENDIX 5: Sample Grievance Redress Form

<b>GRIEVANCE FORM</b>		
Grievance Number		Copies to forward to:
Number of Recorder		Original-Receiver Party
Region		Copy-Responsible Party
Date		
<b>INFORMATION ABOUT GRIEVANCE</b>		
Define The Grievance:		
<b>INFORMATION ABOUT THE COMPLAINT</b>		<b>Forms of Receive</b>
Name- Surname		<ul style="list-style-type: none"> <li>• Phone Line.</li> <li>• Community /Information.</li> <li>• Meetings</li> <li>• Mail</li> <li>• Informal</li> <li>• Other</li> </ul>
Telephone Number		
Address		
Community		
Region		
Signature of Complainant		
<b>DETAILS OF GRIEVANCE</b>		

<p><b>1. Access to Land and Resources</b></p> <p>a) Fishin grounds b) Lands c) Pasturelands d) House e) Commercial Site f) Other</p>	<p><b>2. Damage to</b></p> <p>a) House b) Land c) Livestock d) Means of livelihood e) Other</p>	<p><b>3. Damage to Infrastructure or Community Assets.</b></p> <p>a) Road/ Railway b) Bridge c) Power/ Telephone Lines d) Water sources, canals and water infrastructure for irrigation and animals. e) Drinking water f) Sewerage System g) Other</p>	<p><b>4. Decrease or loss of livelihood</b></p> <p>a) Agriculture b) Animal Husbandry c) Beekeeping d) Small scale trade e) Other</p>	<p><b>5. Traffic Accident</b></p> <p>a) Injury b) Damage to property c) Damage to Livestock d) Other</p>
<p><b>6. Incidents Regarding Expropriation and Compensation (Specify)</b></p>	<p><b>7. Resettlement Process (Specify)</b></p>	<p><b>8. Employment and Recruitment (Specify)</b></p>	<p><b>9. Construction Camp and Community Relations</b></p> <p>a) Nuisance from dust b) Nuisance from noise. c) Vibrations due to explosions d) Misconduct of the project personal/ worker e) Complaint follow up</p>	<p><b>10. Other (Specify)</b></p>



<p>4128 Mwinilunga Road, Sunningdale, Lusaka P.O. Box 320115, Woodlands</p> <p>Telephone: 0211 266 129 Cell: 0978 770 741 - 0966 876 572</p> <p>e-mail: <a href="mailto:niras.zambia@niras.com">niras.zambia@niras.com</a> website: <a href="http://www.niras.com">www.niras.com</a></p>	 <p>1105, avenue Pierre Mendès-France – BP 4001 – 30001 Nîmes Cedex 5 – France</p> <p>Tél. : +33 (0) 4 66 87 50 00 Fax : + 33 (0) 4 66 84 25 63</p> <p>e mail : <a href="mailto:brli@brl.fr">brli@brl.fr</a> website : <a href="http://www.brl.fr">www.brl.fr</a></p>
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