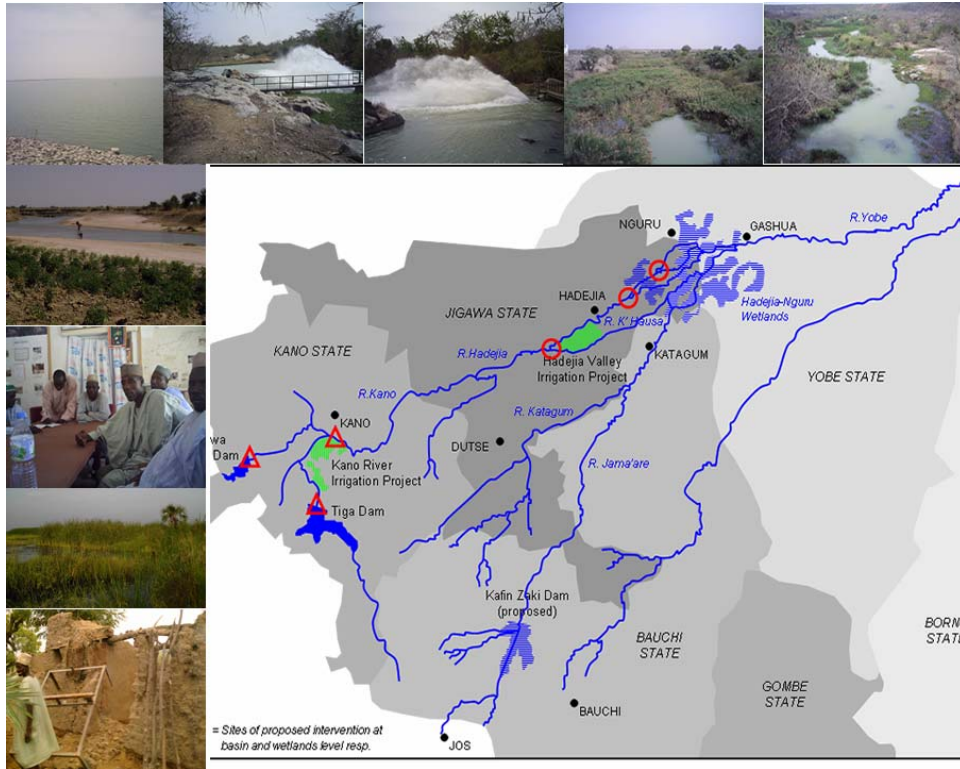


# THE FMWR-IUCN-NCF KOMADUGU YOBE BASIN PROJECT FOR IMPROVING LAND AND WATER RESOURCES MANAGEMENT

(Phase I: Improving the Institutional Framework for Water  
Management in the Komadugu Yobe Basin)



## End of Project Phase Evaluation Report

By

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## **Acknowledgement**

The map on the cover page is by courtesy of the DFID-JWL Project.

## **Executive Summary**

The Komadugu Yobe Basin (KYB) project is a joint initiative of the then Nigeria Federal Ministry of Water Resources (now the Nigeria Federal Ministry of Agriculture and Water Resources) the World Conservation Union and Nigerian Conservation Foundation aimed at improving equitable and sustainable management of land and water resources in the KYB. Phase 1 of the project with duration of 2 years and three months has the main aim of improving the institutional framework for managing water resources in the basin. This phase of the project has the following main components: (a) establishment and sharing of a sound knowledge base to facilitate stakeholder negotiations and inform decision-making; (b) pilot-testing of improved water management interventions in selected sites in the basin; (c) development of a Catchment Management Plan; (d) adoption of a water management charter and establishment of the appropriate institutional framework for implementing agreed management principles; and (e) effective management of the KYB project.

This report is the result of an external evaluation exercise commissioned by the Project Management Unit (PMU) of the KYB project at the end of phase 1 of the project to assess the relevance, effectiveness, efficiency, impact, and sustainability of the project activities and results. The assessment was carried by reviewing reports and documents produced during the course of the lifetime supplemented by interviews with the project stakeholders. Major findings of the exercise show that:

- The basin has until now been characterized by growing tension and risk of conflict, uncoordinated development, inequitable access to water resources, unclear and fragmented regulatory responsibilities, and environmental degradation.
- There were huge knowledge gaps and lack of information with respect to many environmental, social, and economic aspects of the basin.
- The project was welcomed enthusiastically by most stakeholders and interest groups in the basin because it sought to address issues of common interest.
- A broad spectrum of stakeholders and interest groups were involved in the KYB project in a participatory manner and the project sought to effectively exploit the areas of strengths the stakeholders built on previous successes.
- Right from infancy the project faced funding constraints, despite which all the major project deliverables were achieved.

The project evaluation team concluded that the project was effectively and efficiently managed and the project design and approach was relevant in addressing the identified needs, issues and challenges facing the people and the environment in the KYB. The team recommended that the achievements made should be consolidated immediately by following-up with the second phase of the project.

## Abstract

**Title, author and date of the evaluation report:** Improving the Institutional Framework for Water Management in the Komadugu Yobe Basin : End of Project Phase Evaluation Report by J. M. Jibrin, May 2007

**Objectives of the project or the programme:** (a) establishment and sharing of a sound knowledge base to facilitate stakeholder negotiations and inform decision-making; (b) pilot-testing of improved water management interventions in selected sites in the basin; (c) development of a Catchment Management Plan; (d) adoption of a water management charter and establishment of the appropriate institutional framework for implementing agreed management principles; and (e) effective management of the KYB project

**IUCN area of specialisation:** ?????

**Geographical area:** The Komadugu Yobe Basin ( north-eastern Nigeria and south-eastern Niger)

**Project duration:** May 2005 to June 2007

**Overall budget of the project or programme:** Initially \$1,308,368 but revised to \$751,307

**Donors:** WANI/DGIS, FMAWR and LCBC/GEF Project

**Objectives of the evaluation:** to judge the relevance, effectiveness, efficiency, impact and the sustainability of the project activities and their results in line with IUCN evaluation policy. The outcome of the evaluation will also serve as an input in the planning of the subsequent phase of the project.

**Type of evaluation:** Final (End of Project Phase)

**Period covered by the evaluation:** May 2005 to April 2007

**Commissioned by:** Project Coordination Unit (PCU) of the KYB project

**Audience:**

**Evaluation team:** External  Internal  Mixed external/internal

**Questions of evaluations:** (reference to TORs)

**Relevance:** Establish whether or not the project design and approach was relevant in addressing the identified needs, issues and challenges facing people, and the environment?

To what extent does the project contribute to overall Key Results and strategies of IUCN?

**Efficiency:** Were the resources efficiently managed and utilised? (Finances – procedures ; Assets - use)

Were the Outputs generated as expected (in quality and time)?

Were there any unforeseen problems, how well were they dealt with?

**Effectiveness:** To what extent did the outputs (planned & unplanned) contribute to the Overall Objectives? Why? Why not? (Capacities of project partners, Availability & use of resources, etc)

**Sustainability:** Was the approach used likely to ensure a continued benefit and/or use of the outputs and outcomes after the end of the project? Why/ Why not? (Established structures, mechanisms, financial resources, materials; Levels of stakeholder participation; Levels of partners & stakeholder engagement)

**Impact:** What impacts did the project have on: a) The people (Income, Equity (gender, etc.), participation in decision making processes); b) the Environment (Species and Ecosystem Health?). Were there any unintended positive or negative impacts arising from particular outcomes? c) Socio economic aspect (poverty reduction etc.)

**Methodology used:** Reviews of reports and documents produced in the course of the project lifetime supplemented by interviews with the project stakeholders. Interviews with the stakeholders were undertaken using open and semi-open questioning techniques.

**Findings:** (1) The project has fostered strong linkages especially with the Federal and State Ministries as well as other projects and institutions in the basin, and this was one of the strengths of the project (2) All the key deliverables envisage in the project document have been delivered or are about to be delivered fully (3) The implementation of the project was participatory with the involvement of a broad spectrum of stakeholders and interest groups in different levels of the project activity and implementation. This will ensure ownership of outputs and outcomes (4) The project was effectively and efficiently managed and the project design and approach was relevant in addressing the identified needs, issues and challenges facing the people and the environment in the KYB

**Recommendations:** (1) the achievements made should be consolidated immediately by following-up with the second phase of the project. (2) In future IUCN and its partners should ensure that all needed funds are secured before the commencement of the project so as to improve the efficiency and timeliness of project implementation.

**Language of the evaluation:** English

**Available from:** ????

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## List of Acronyms

BRAO	West Africa Regional Office (Bureau Régional pour l’Afrique de l’Ouest)
CMP	Catchment Management Plan
DFID	Department for International Development of the United Kingdom
FMWR	Federal Ministry of Water Resources
GEF	Global Environment Facility
HJKYBCC	Hadejia-Jama’are-Komadugu-Yobe Basin Coordinating Committee
HJRBDAA	Hadejia-Jamaare River Basin Development Authority
HNWCP	Hadejia Nguru Wetlands Conservation Project
HNW <sub>s</sub>	Hadejia Nguru Wetlands
HVIP	Hadejia Valley Irrigation Project
IUCN	The World Conservation Union
IWRM	Integrated Water Resources Management
JWL	Joint Wetlands Livelihood
KCWS	Kano City Water Supply
KRIP	Kano River Irrigation Project
KYB	Komadugu Yobe Basin
LCBC	Lake Chad Basin Commission
MoU	Memorandum of Understanding
NCF	Nigerian Conservation Foundation
NGOs	Non-Governmental Organizations
NIFA	Nguru Integrated Farmers Association
PMU	Project Management Unit
PSC	Project Steering Committee
PTF	Petroleum (Special) Trust Fund
SIWRMCs	State Integrated Water Resources Management Committees
TAC	Technical Advisory Committee
ToR	Terms of Reference
UNDP	United Nations Development Programme
WDI	Wetlands Development Initiative

## **1.0 Introduction**

The project for improving land and water resources in the Komadugu Yobe Basin (KYB) is a joint initiative of the then Nigeria Federal Ministry of Water Resources (FMWR) and now merged to be the Nigeria Federal Ministry of Agriculture and Water Resources, the World Conservation Union (IUCN), and the Nigerian Conservation Foundation (NCF). The FMWR-IUCN-NCF KYB project (hereafter referred to as KYB project) started with an initial phase of two years and three months with the main objective of improving the institutional framework for managing water resources in the KYB. The objective is to be achieved by building consensus on key water management principles and institutionalized consultation and coordination mechanisms. This phase of the project has the following main components: (a) establishment and sharing of a sound knowledge base to facilitate stakeholder negotiations and inform decision-making; (b) pilot-testing of improved water management interventions in selected sites in the basin; (c) development of a Catchment Management Plan; (d) adoption of a water management charter and establishment of the appropriate institutional framework for implementing agreed management principles; and (e) effective management of the KYB project.

The phase I of the project officially ends in June 2007, and in line with IUCN policy and the planned activities of the KYB project an external evaluation is required to assess the progress of the project to date as against the project's planned activities. In line with this the Project Monitoring Unit (PMU) of the KYB project commissioned this evaluation in order to judge the relevance, effectiveness, efficiency, impact and the sustainability of the project activities and their results. The outcome of the evaluation will also serve as an input in the planning of the subsequent phase of the project. The Terms of Reference (ToR) for the evaluation is presented in Appendix 1.

## **1.1 Project Background**

### **1.1.1 The Komadugu Yobe Basin**

The Komadugu Yobe Basin (KYB) covers a total area of about 148,000 km<sup>2</sup> in north-eastern Nigeria (comprising about 57% of basin area) and south-eastern Niger (constituting the remaining 43%). The basin is drained by two main river sub-systems. The first sub-system, the Yobe River, is formed by the Hadejia and Jama'are tributaries, which create the Hadejia Nguru floodplain at their juncture. The second sub-system is the Komadugu Gana (or Missau) River. Historically, it is a tributary of the Yobe River. The Nigeria portion of the basin contributes more than 95% of the basin's water.

The network of river systems and wetlands that compose the KYB support a wide range of ecological processes and economic activities, including recession agriculture, pastoralism, forest regeneration, fish breeding and production, drought-fall-back security, and tourism potential. Based on these activities, several centers of development, trading and administration have cropped up along river courses and on floodplains within the basin, constituting relatively high population concentrations in a dryland region, which is characteristically sparsely populated. Today, the livelihood systems of the over 10 million people who live in the basin, both in Nigeria and Niger, depend almost exclusively on these activities. The Komadugu-Yobe River is the life-wire of these communities.



The wetlands of the KYB host biodiversity of global significance. In addition to providing fire-wood and grazing in the dry season, there are also about 100 species of fish, about five of which are endemic. There are also some endemic plant species of agronomic importance, which are threatened with extinction. An important example is a variety of rice that is found in the Gashua to Geidam stretch. In addition, over 370 species of birds have been inventoried in the basin, with 33% of them being migratory.

The KYB is considered to be of strategic national and international importance. The basin is an area of relatively dense population concentration in a dryland region, with the population critically and increasingly dependent on scarce water resources. It is the source of internationally shared water whose management in Nigeria has an important bearing on diplomatic relationships between Nigeria and four countries (Niger, Chad, Cameroon and Central African Republic). These countries share the larger Lake Chad Basin in which is located the KYB. The KYB contains very important wetlands with immense local, national and international economic and ecological importance, in particular the Hadejia Nguru Wetlands (HNWs), Nigeria's premier Ramsar site.

### **1.1.2 Problems of the Komadugu Yobe Basin**

The KYB project inception document has highlighted some very serious problems facing KYB in recent years. The basin is threatened by escalating and unsustainable pressures from fast-growing populations and cities as well as expanding agricultural and other activities. This is particularly true since the 1970s as the general climate context face chronic variability and deficits in rainfall and surface water resources. In the push for accelerated economic growth, many basin and national water policies show clear limitations in their ability to promote equitable and sustainable resource use. Some of the threats and challenges facing the KYB as highlighted in the project document include:

*Fast-growing water demand:* Due to the semi-arid conditions, which are prevalent in the basin, scarcity of water has been, and continues to be, the major stimuli of the major development initiatives, which has placed the integrity of the KYB at risk. Presently, substantial proportions of the available water sources that can possibly be economically exploited have already been developed or are in the process of being developed.

*Reduced river flow due to climate variability and change:* The pressure on the basin water resources is accentuated by climate change and variability. Recent climate patterns show a general decline in average annual rainfall and river discharge, leading to numerous second-order impacts. For example, as a result of a decrease in wet season water flow, silt and weed blockages, and impoundments in the upper basin, the Komadugu tributary no longer reaches the Yobe River, which in turn only contributes about 1% of the total water inflow to the Lake Chad.

*Fragmented regulatory responsibilities:* The acute scarcity of water notwithstanding, water resources development in the basin still remains generally

fragmented, with ill-defined and often conflicting responsibilities between government agencies and stakeholders concerning all aspects of land and water management. The presence of two River Basin Development Authorities (RBDAs) with responsibility for water management in the basin but with little or no co-ordination illustrates this institutional caveat. The situation is made worse by lack of reliable hydro-meteorological information on the basin, as the monitoring network, which used to be effective up to the late 1970s is no longer there.

*Uncoordinated development interventions:* Consequent to the above, the hydro-agricultural development initiatives in the basin are uncoordinated. This is in terms of the small-scale irrigation activities, which have been stimulated throughout the basin as well as dam construction leading to the progressive expansion of large-scale irrigation schemes.

*Inequitable access to water resources:* Many of these development initiatives have taken place in the upper reaches of the basin and have often penalised inhabitants of lower reaches of the basin, whose productive systems are highly dependent on the river flow. For example, the communities downstream of Hadejia town, in the HNWs, along the river banks, as well as the adjoining shores of Lake Chad, are more dependant for their livelihoods on flood and recession farming than on rain-fed farming. This is because rainfall is too low and unreliable in these areas. Against this background, the Hadejia River system is more than 80% controlled by Tiga and Challawa Gorge dams. These two dams, completed respectively in 1972 and 1992, feed the Kano River Irrigation Project (KRIP), the Hadejia Valley Irrigation Project (HVIP) and the Kano City Water Supply (KCWS). The process of rehabilitating KRIP-Phase 1 and the expansion of HVIP has just started. While these plans are moving toward implementation, earlier agreements to guarantee certain amounts of flow from the Hadejia River system for the downstream communities, somehow, are not being actualised. Furthermore, although the Jama'are River system, which presently meets the needs of the downstream communities, is so far uncontrolled, and plans exist to complete a dam at Kafin Zaki.

*Growing tensions and risks of conflicts:* The lack of co-ordination in management and utilisation resulted in higher demand over available water, which leads to a tenuous competition for water between sectors (irrigation, domestic and industrial water use, traditional food production systems, the ecosystem, etc.), and the regions (upstream and downstream states and communities, including south-eastern Niger). This is culminating in several instances into conflicts. The best illustration of this is the dogged opposition of the downstream states of Yobe and Borno to the construction of Kafin Zaki Dam. Even the incessant conflicts between farmers and pastoralists are explained, to a large extent, by lack of access to water for pastoralists.

*Environmental degradation:* Dam operations, which are essentially uncoordinated with water needs of other sectors and regions in the basin, led to rainy season

flows in channels, which used to be essentially perennial. This has created a conducive condition for *Typha*, an invasive weed, to invade and occupy river channels and floodplains. *Typha* is a major impediment to water flow, fishery and residual moisture cultivation in the basin today. The channels are also getting silted as a result of several factors, including dam operations. Likewise, the recent floods, which devastated several communities, have been attributed to several factors, among which are irregularities in dam operations. The presence of *Typha* in the channels, as well as siltation, has resulted among other things in a marked reduction in the contribution of flow into Lake Chad by the Yobe River. It has also reduced the flow of the Yobe downstream of Gashua, from where it becomes an international watercourse. There is a general environmental degradation in the basin, characterised by the draining of wetlands and a consequent loss of biodiversity, as well as a general disappearance of the seedlings of large trees in the rangelands of the basin.

If the current trends - in terms of demands, uncoordinated interventions, among others - continue unchecked, the ecological integrity of the basin may be compromised to the extent that it would fail to provide the necessary goods and services to support human development and ensure environmental conservation. The current situation in the basin therefore calls for a fair, judicious and sustainable allocation of water resources among competing sectors (irrigation, domestic and industrial water use, traditional food production systems, the ecosystem, etc.), and among the constituent regions (upstream and downstream states and communities, including south-eastern Niger), such allocation will have to be based on an improved understanding of hydrological and socio-economic parameters, if dire consequences are to be avoided. It also calls for an integrated management of the land, water and living resources of the basin so as to promote their sustainable use, conservation and equity in access to them.

There have been several past and ongoing interventions in the KYB that address one or more dimensions of the threats and challenges highlighted above, these include:

*Establishment of a Basin Coordination Committee:* One of the most significant initiatives targeting the basin is the establishment of a basin coordination committee by the Federal Government of Nigeria, which was a recommendation of a workshop jointly organised few years earlier by the IUCN-Hadejia Nguru Wetlands Conservation Project (HNWCP) and the National Institute for Policy and Strategic Studies. Indeed, in response to conflicting water demands and growing tensions in the KYB, especially between upstream and downstream States, the Federal Government of Nigeria has decided to take the lead in tackling the issues in the basin. In this regard the Nigerian National Council on Water Resources established a Hadejia-Jama'are-Komadugu-Yobe Basin Coordinating Committee (HJKYBCC) in 1999, which in turn established a Technical Advisory Committee (TAC). The HJKYBCC met for the first time in November 2000 and the TAC held its first meeting in April 2001.

*Recent studies:* The latest comprehensive study of the KYB was carried out in the late 1990s as part of the *Regional Land and Water Resources Development Study* commissioned by Nigerian Federal Government through the Petroleum (Special) Trust Fund. Largely based on this study, the TAC drafted a *Basin Management Plan* for the Coordinating Committee. One of the major findings is that there is no clear assessment and understanding of the status of water resources availability in the Hadejia-Jama'are-Komadugu-Yobe Basin. On the basis of this finding, a water audit was recommended, and would consist in assessing available water in the basin (both surface water and groundwater) and estimating water demands from the various sectors, and the various spatial units in the basin. The intention was that the water audit would be a step toward developing a participatory and an all-inclusive Catchment Management Plan for which the previous drafted Catchment Management Plan developed as part of the above-mentioned *Regional Land and Water Resources Development Study* will be used as input.

*UK's Department for International Development intervention:* The Department for International Development (DFID) of the UK Government is supporting a livelihood intervention in the basin through a project called the Joint Wetlands Livelihoods (JWL) Project. The goal of the project is to sustainably enhance the livelihoods of rural poor people dependent on common property resources in the Hadejia-Jama'are floodplain and more widely in Nigeria. It also has purpose that organizations and individuals with formal and informal power better manage common property resources in the Hadejia-Jama'are floodplain through using more sustainable and equitable processes. The project has been around for the past four years or more.

*Lake Chad Basin initiative:* The Lake Chad Basin Commission (LCBC), in collaboration with the World Bank and United Nation Development Programme (UNDP), is implementing a Global Environment Facility (GEF)-supported programme for the "Reversal of Land and Water Degradation Trends in the Lake Chad Basin". One of the components of this programme is a pilot project on the integrated management of the KYB, with a component focusing on the wetlands of the basin.

### **1.1.3 Goal and Objectives of the KYB Project**

The long-term goal of the project is the equitable and sustainable use of land and water resources of the Komadugu Yobe Basin through improved management. The purpose of phase I of the project is to contribute to this goal by helping establish a framework for broad-based and informed decision making process based on agreed principles for equitable use and sustainable management of the Komadugu Yobe Basin.

The project will help improve consultation mechanisms among main stakeholders groups, including regulators (such as the Federal Government of Nigeria, Niger Government, the Lake Chad Basin Commission, riparian States, River Basin agencies, etc.), user groups (municipalities, irrigators, rural communities, etc.), and other interest groups (research institutions, environmental NGOs, etc.).

The project will also facilitate the participation of all stakeholder groups in the development of key principles for the management of the Komadugu Yobe Basin. To achieve this it will facilitate a process to revitalise the basin-wide stakeholder forum. This forum will be used to ensure that the various stakeholders, interest groups, water user groups and basin states take part in the discussions on water allocation and water sharing arrangements, and that their views and needs inform the overall decision-making process.

The project will support and complement the current institutional framework, which revolves around the HJKYBCC. All States in the basin are represented in this Committee as well as the Federal Ministries responsible for Water Resources, for Environment, for Health and for Agriculture. The Committee is chaired by the Federal Minister responsible for Water Resources. The Committee established a TAC. The Consultative Committee met for the first time in November 2000 and the TAC held its first meeting in April 2001.

Specific objectives of the project:

- i. To build decision-support knowledge base so that water management options and other resources management decisions are taken on the basis of up to date information on water audit, socio-economic and ecological conditions.
- ii. To pilot-test improved water management field interventions so that efficient and sustainable water utilisation techniques and approaches are demonstrated in downstream areas.
- iii. To help establish a legal and policy enabling environment through the adoption and implementation of a water charter and supporting basin-level consultation and coordination mechanisms.
- iv. Develop a catchment management plan using participatory approaches and on the basis of the results of knowledge, policy and pilot activity components of the project. This will also build on the existing draft Catchment Management Plan.
- v. To ensure that the project is effectively managed, monitored and evaluated, so that lessons on managing river basins are learned and disseminated to benefit similar initiatives.

## **2.0 Methodology**

### **2.1 The Evaluation Mission**

The evaluation exercise was undertaken from the 26<sup>th</sup> to the 30<sup>th</sup> of March 2007 by a team comprising of Dr Jibrin M. Jibrin (Consultant, Team Leader), Mrs Ibronke Olubamise (NCF), Engr Dickson Ahagbuje (FMWR), and Dr François-Corneille Kedowide (IUCN-BRAO). The evaluation team assessed the performance of the KYB project from inception in May 2005 to date by reviewing reports and documents produced in the course of the project lifetime supplemented by interviews with the project stakeholders. Interviews with the stakeholders were undertaken using open and semi-open questioning techniques. The stakeholders interviewed were:

- Staff at the KYB project office (Kano)
- Joint Integrated Water Resources Management (IWRM) Committee
- HJRBDA staff at Tiga Dam
- Fishing community at Allah-Magani Village, Tiga
- HJRBDA staff at Kano (Headquarters)
- Kano State Ministry of Water Resources
- Nguru Integrated Farmers' Association (NIFA), Yobe State
- Wetlands Development Initiative
- DFID-JWL project
- Bauchi State IWRM committee

Stakeholders in Borno and Plateau States could not be visited within the short duration of the evaluation exercise. List of people interviewed from the various stakeholder organizations is presented in appendix 2.

### **2.2 Evaluation Criteria**

The evaluation placed emphases on the appraisal, analysis, and the determination of the quality of the project activities and their results. The main criteria used (in line with IUCN project evaluation criteria) were:

*Relevance:* Assessment of the relevance of the project design and approach in addressing the identified needs, issues and challenges facing the people and environment within the KYB, as well as the extent to which the project contributes to the strategic direction of IUCN.

*Effectiveness:* Assessment of the extent to which planned and unplanned outputs and outcomes contribute to the overall project objectives.

*Efficiency:* Assessment of the cost-effectiveness of resource use, i.e. analysis of the extent to which the relationship between resource use and results is reasonable.

*Impact:* Analysis of the short- and long-term direct and indirect consequences of the project on the people (in terms of income, gender equity, etc.) and the environment.

*Sustainability:* Assessment of the extent to which the results and the processes initiated by the project can be sustained beyond the period of the project life.

### **3.0 Results of the Evaluation**

#### **3.1 Log-Frame Analysis**

Assessment of the *ex-ante* and *ex-post* indicators is one of the best ways of determining the worth, value and quality of projects. The KYB project log-frames set out a number of indicators and deliverables against which the project performance can be assessed. Table 1 below gives the level of achievement made in terms of implementation for each of the five components of the project.

##### **3.1.1: Component 1- Decision Support Knowledge Base**

The first component of the project seeks to achieve an improved understanding of the dynamics of water demand and supply in the basin and the socio-economic and environmental conditions of the people. Although there were some delays all the key activities and deliverables in this component have been realized. A pre-water audit was concluded in November 2005 which identified gaps in the data and information needed for a comprehensive water audit. Based on the recommendation of the pre-water audit report, PMU carried out discharge measurements and reactivated the daily height gauges at some selected locations. Some technical staff of the basin state ministries were trained by PMU and involved in the measurement as a way of providing motivation to the state authorities concerned and also ensuring sustainability. The outcome of the pre-water audit also provided input for the ToR of the comprehensive water audit and the socio-economic and environmental studies which were later carried out by consultants in 2006. The results of the water audit and the socio-economic and environmental studies were thoroughly discussed at a stakeholders' meeting in May 2006. The outputs of the water audit include a hydrological decision support system with manual. The PMU has also built a computerized database for the basin from information gathered from previous studies as well as data collected from stakeholders. The database is probably the most comprehensive collection of information on KYB available.

##### **3.1.2: Component 2- Review of Policy and Institutional framework**

The focus of the second component of the project is to establish a legal and policy-enabling environment that will support the institutionalization and implementation of a water management charter acceptable to all major stakeholders in the basin. Initial progress in this component was quite slow and the time lines were not met. Although a multi-stakeholder task team to lead the charter formulation process was not set as planned in the log-frame, a legal consultant was contracted who thoroughly consulted the various stakeholders and interest groups in the basin and reviewed the legal and institutional framework before coming up with a draft water charter. The charter is now ready for signing by the parties concerned.

##### **3.1.3: Component 3- Pilot Interventions**

The pilot activities are being jointly carried out with DFID-JWL project with funding from the LCBC/GEF project. One of the key criteria for the pilot intervention is that the project should be community driven. Based on this 33 community proposals were assessed out of which 11 were earmarked for implementation, however due to funding constraints only 3 are being implemented at the moment. The three pilot interventions being implemented are:



- i. One and half (1.5) km of channel clearance and 2.3 km of embankment along main river course at Rantan (Tiga Dam outlets) at an estimated cost of =N= 7,927,500, of which =N= 3, 795, 000 (approximately USD 29,192) is being granted by the LCBC/GEF project and the rest being the community's contribution in both cash and in-kind.
- ii. Five (5) km of channel clearance and 500 m of bank stabilization of the Miga/Kafin Hausa River at an estimated cost of =N= 7,592,500, of which =N= 3,795,000 (approximately USD 29,192) is being granted by the LCBC/GEF project and the rest being the community's contribution in both cash and in-kind.
- iii. Twelve (12) km of channel clearance along the main river course of the old Hadejia River (i.e. from Magujin Idi to Dagona) at an estimated cost of =N= 8,097,000, of which =N= 3,795,000 (approximately USD 29,192) is being granted by the LCBC/GEF project and the rest being the community's contribution in both cash and in-kind.

Studies to review the results and lessons learnt from the intervention as planned in the project log-frame are yet to be commissioned.

#### **3.1.4: Component 4- Catchment Management Plan**

A CMP was developed and adopted within a relatively very short time because the project had the good fortune of coming across a previously existing draft CMP<sup>1</sup> which was developed in 1998 by the consultant who carried out the water audit. The consultant was therefore asked to review and refine the old CMP and make it more participatory by holding adequate discussions and consultations with the various stakeholders in the basin. The main aim of the CMP was to propose an action plan, targeted at resolving identified water problems and challenges as well as instituting integrated natural resources management instruments in the basin, to achieve equity of allocation, efficiency of use and overall sustainable development in the region. The reviewed CMP was discussed and adopted at a stakeholders' workshop in May 2006. At a summit of the Executive Governors of the KYB states in June 2006 at Damaturu the CMP was approved. Already as a result of the adoption and approval of the CMP, the KYB States Governors have decided to set up a Trust Fund in partnership with the Federal government which will be used to implement the strategic actions in the CMP and other activities to be identified in future that are in line with IWRM principles.

#### **3.1.5: Component 5- Effective Project Management**

Although the project faced serious funding constraints all the key activities of this component were carried out as scheduled and the necessary reports produced as at when due. All necessary MoUs with key partners have been duly signed; key project staff members were recruited as scheduled; work plans were developed; and the necessary project audits and evaluations were duly carried out. At least 5 supervisory/monitoring and evaluation missions from IUCN-BRAO were received by the project since May 2005. The project also appeared to be very transparently managed as all the relevant

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<sup>1</sup> The consultant had previously developed a CMP for the basin through the Petroleum (Special) Trust Fund (PTF) for the Regional Land and Water Resources Development Planning Study (RLWRDPS), however the basic flaw of that CMP was that most of the stakeholders were not involved in its development.

information (including financial information) were up to date and made available to the review team. Perhaps one of the most important indicators of the nature of the project management is the ability to achieve most of the deliverables in the log-frame despite the serious funding constraints faced by the project.

Table 1: Level of achievement made in project implementation

Project Component	Activity	Products (Deliverables)	Level of Achievement
<b>Component 1:</b> Decision-Support Knowledge Base (Improved understanding of the dynamics of water demand and supply in the basin and the socio-economic and ecological condition of the people and other resources)	<i>1.1 Water Audit</i>		
	a. Initial consultant review of the nature and quality of the information base	Reports (including state of information base and recommendations) ToR for activity 1.1b	<ul style="list-style-type: none"> <li>• Pre-water audit was commissioned in August 2005 and final reports of the exercise submitted in November 2005. The exercise was able to identify the gaps in the datasets needed for a comprehensive water audit</li> <li>• ToR for a comprehensive water audit and for socio-economic and environmental studies were developed based on the pre-water audit report</li> <li>• Based on the recommendation of the pre-water audit report, PMU carried out discharge measurements and reactivated the daily height reading at some selected locations. Technical staff from the basin states were also trained to collect water discharge information</li> <li>• A comprehensive water audit has been conducted and the results of the audit discussed at a stakeholders meeting in May 2006</li> <li>• A computerized database has been developed by PMU to serve as a decision support tool</li> </ul>
	b. Conduct a comprehensive water audit (including projected water availability and demand)	Consultant report, maps	
	c. . Organize stakeholder meetings on the results of water audit and projected water demand	Minutes of meetings	
	d. Establish a data base at project office	Computerized database with all data from studies carried out	
	<i>1.2 Socio-Economic and Environmental Studies</i>		
	a. Conduct socio-economic situation analysis	Study Report	<ul style="list-style-type: none"> <li>• A socio-economic and environmental studies covering the entire basin was carried out and the final report ready by April 2006</li> <li>• The final report of the studies was subjected to scrutiny at a stakeholders' workshop in May 2006</li> </ul>
	b. Conduct an analysis of the state of the environment		
	c. Conduct study on the predictable impacts of water demand scenarios and planned interventions		
	d. Stakeholder workshop on the study results	Proceedings of the workshop	
	<i>1.3 Development of Water Management Options</i>		
	a. Develop models for future water availability scenarios	Documents containing the models of the various management options in order of priority	<ul style="list-style-type: none"> <li>• A decision support model with its' manual was one of the products delivered by the consultant that carried out the water audit</li> </ul>
	b. Develop water management options		
	c. Analyze dam operation procedures		
	d. Analyze advantages and disadvantages of options including cost and benefit sharing		
e. Recommend management options in order of priority			

Table 1: Level of achievement made in project implementation (cont'd)

Project Component	Activity	Products (Deliverables)	Level of Achievement
<p><b>Component 2:</b> Review of Policy and Institutional Framework (A legal and policy-enabling environment is established to support the institutionalization and implementation of a water management charter agreed among major stakeholder and interest groups)</p>	2.1 Set in place a multi-stakeholder task team to lead the charter formulation process.	Task team formed and minutes of meeting available	<ul style="list-style-type: none"> <li>• After an initial slow progress in this component of the project, a consultant was contracted to review the legal and institutional framework. A water charter for the basin has been developed and is ready to be signed by the concerned parties</li> </ul>
	2.2 Stakeholder scoping consultations conducted in riparian states and provinces	Stakeholder needs, priorities and aspirations documented	
	2.3a Provide institutional support to the Stakeholder Forum : training in negotiation skills, support for coordination and communication	Stakeholder Forum members learn and agree of basic negotiation principles Stakeholder Forum meets regularly Coordination and communication within Stakeholder Forum improved	
	2.3b commission consultancy study to provide detailed analysis of the legal, policy and institutional context which needs to be reviewed	Report detailing legal, policy and institutional context which needs to be reviewed is produced	
	2.4 Organize a basin-wide Stakeholder Forum meeting to synthesis results of state-level scoping consultations and agree on the scope of the following components of the project: water audit, situation analysis, and needed institutional arrangement and policy review	Stakeholder views, needs, aspirations priorities documented	
	2.5 Organize second Forum meeting to review initial results from the various components of the project and prepare State-level consultations (see 1.1c).	Stakeholder Forum members validate study reports and agree on initial draft of water management principles	
	2.6 State-level consultations to review study results and draft water management principles and options	Stakeholder groups in riparian states are briefed on study results and discuss draft water management principles	
	2.7 Organize third and final Forum meeting to reach consensus on water management principles, and water management options and required institutional changes	Stakeholder Forum members agree on water management principles, on preferred water management options and on needed institutional change for improved coordination at basin level	
	2.8 Present findings and recommendations from stakeholder forum to: (a) high-level Federal government officials; (b) legislators in riparian States; (c) the National Council of States of the Komadugu Yobe Basin	Official endorsement of water charter, management options and coordination structures at Federal and State levels	

Table 1: Level of achievement made in project implementation (cont'd)

Project Component	Activity	Products (Deliverables)	Level of Achievement
<b>Component 3:</b> Pilot Interventions (Reliable, efficient and sustainable water utilization techniques and approaches are available for dissemination among the stakeholders and interest groups)	3.1 Initial Stakeholder meetings discuss and agree on types and sites of priority interventions.	Priorities interventions discussed and selection made of the basis of clear criteria	<ul style="list-style-type: none"> <li>• Feasibility study report for the pilot interventions was produced by August 2006</li> <li>• Thirty-three (33) proposals for pilot intervention were scrutinized out of which 11 were selected for implementation</li> <li>• Out of the 11 interventions only 3 are being implemented at the moment due to funding constraints</li> </ul>
	3.2 Conduct feasibility study	Feasibility study report on two interventions conducted and with final recommendations	
	3.3 Carry out intervention	Target community endorsement and participation Effective implementation as shown in project records	
	3.4 Conduct study to review results and lessons learned	Consultant report documenting process, results, constraints, lessons learned	
	3.5 Present results of study at Stakeholder Forum Meeting	Stakeholder Forum reviews, discusses report and makes recommendation (minutes of Stakeholder Forum meeting)	

Table 1: Level of achievement made in project implementation (cont'd)

Project Component	Activity	Products (Deliverables)	Level of Achievement
<b>Component 4:</b> Catchment Management Plan (Development of a Catchment Management Plan. A Catchment Management Plan that incorporates a ecosystem approach to basin management is agreed by main stakeholder and interest groups)	4.1 Carry out review of existing Catchment Management Plan and develop a new Catchment Management Plan	New Catchment Management Plan by consultant	<ul style="list-style-type: none"> <li>• A catchment management plan has been produced for the basin</li> <li>• The CMP was adopted by stakeholders in May 2006 and subsequently approved by Executive governors of the KYB states at a summit in June 2006</li> <li>• Communication brief of the CMP has been developed and disseminated</li> </ul>
	4.2 Validate Catchment Management Plan by Stakeholder Forum meeting (see activity 2.7)	Stakeholder Forum approval of Catchment Management Plan	
	4.3 Develop and disseminate communication brief of the Catchment Management Plan	Project brief Project records of dissemination	
	4.4 Organise donor roundtable on Catchment Management Plan and on coordination structure	Pledge of donor support evidenced in meeting minutes	

Table 1: Level of achievement made in project implementation (cont'd)

Project Component	Activity	Products (Deliverables)	Level of Achievement
<b>Component 5:</b> Effective Project Management (The project is effectively managed, monitored and evaluated and lessons learned are documented and disseminated)	5.1 Sign necessary MoU with key partner institutions	MoU documents	<ul style="list-style-type: none"> <li>The necessary MoU with key partners have been duly signed</li> <li>Key project staff were recruited</li> <li>Work plans were developed and the necessary project audits and evaluations were duly carried out</li> </ul>
	5.2 Recruitment of key project staff (Project Coordinator and PFA)	ToR drafted Recruitment completed (memoranda)	
	5.3 Develop annual work plans	Documents of work plans	
	5.4 Conduct project audit on a yearly basis	Audit reports	
	5.5 Carry out project evaluation	Evaluation document	
	5.6 Organize supervision missions	Supervision mission reports	

### 3.2 Relevance

The evaluation matrix used in determining the relevance, effectiveness, efficiency, impact and sustainability of the project is given in appendix 3. The purpose of the first phase of the project of establishing a framework for a broad based and informed decision making process based on principles for equitable use and sustainable management of the KYB is quite desirable and relevant in the basin at this point in time. The basin has until now been characterized by growing tension and risk of conflict, uncoordinated development interventions, inequitable access to water resources, unclear and fragmented regulatory responsibilities, and environment degradation. The key objectives and activities of the project will lay the solid foundation needed to address these problems.

The approach of the project of bringing stakeholders together to discuss and agree issues is well appreciated by all the stakeholders interviewed. The project is viewed by the stakeholders as catalyst that is gingering the much needed activities and policy reviews by institutions and stakeholders for sustainable management of the basin.

The water audit as well as the database created by the project are very important tools for making informed decisions on sustainable use of resources in the basin and are highly welcomed by the Federal and State Ministries responsible for water resources and the River Basin Authorities. A clear indicator of the acceptance and relevance of the project objectives and approach is the decision by the KYB States to set up a Trust Fund with a take-off sum of about =N= 750 million which is matched by an equal counterpart fund from the Federal Government. The funds are to be used to implement the activities of the basin's CMP and other activities to be identified in future that are in line with IWRM principles.

The pilot intervention activities being undertaken by the project address critical problems that affect communities and are community-driven.

Although the outputs and outcomes of the project will have direct and indirect impact on both male and female members of the various communities, there is nothing specific in the project design that seeks to address gender issues. However, the project has made

conscious effort to ensure female representation in the various stakeholder committees especially the IWRM committees. This is quite important in an area where women are usually relegated to the background in many major spheres of economic, social and political activities.

### **3.3 Effectiveness**

The partnership between FMWR, IUCN and NCF on one hand, and the KYB project and DFID-JWL and LCBC/GEF projects on the other hand was one of the key recipes for achieving the desired project outcomes. The partnership gave the project the opportunity to build on existing structures and frameworks and to exploit areas where each of the 3 projects has relative strengths. The KYB project has relative strength upstream and in the hydrological aspects of the basin as well as strong links with the FMWR; the DFID-JWL project has relative strength at the midstream area of the basin and is involved in livelihood activities; while the LCBC/GEF project has relative strength at the downstream section and has access to funds. The stakeholder forum developed by DFID-JWL project in 2003 served as the nucleus of the expanded forum which the KYB project assisted in establishing, this provides a good example of the synergies achieved as a result of the partnerships the project entered into.

The project has also facilitated the establishment and supported smooth running of the various states IWRM committees and has signed MoUs with them for effective partnership. The broad composition of the IWRM committees and their involvement in decisions and programmes has helped in ensuring ownership of outcomes of the project interventions. This feeling of ownership was clearly evident during the interaction of the evaluation team with the various stakeholders.

The stakeholder forum which the KYB project facilitated as well as other outputs of the project, especial the water audit report and the draft CMP provided opportunities for the stakeholders to discuss and agree on various issues leading to adoption and approval of the CMP.

### **3.4 Efficiency**

The efficiency of the project is assessed on the basis of the results achieved with the amount of resources consumed. The details of the project expenditure to date are presented in Appendix 4. Right from inception the project was faced with funding problems because some of the project donors did not release funds on time or did not release the funds at all. Another short-coming of the project design was the fact that the project commenced without all the needed funds and funding sources secured, with the anticipation that proposals would be sent to donors as the project is going on. Because of these problems the project had to revise its total budget from \$1,308,368 to \$1,107,762 even before inception, in November 2005 the total project budget was further reviewed downward to \$751,307. As at February 2007 the project has received €630,771.47 from the donors, out of which €512,662.09 has been expended with a balance of €118,109.48 in the project account.

Despite the funding constraints the project was able to realize virtually all of the products and deliverables set out in the project document, although sometimes with slight delays and/or modification in implementation approach. The only component of the project where achievement is relatively low is in the area of pilot interventions. Out of the 11 pilot projects earmarked for intervention only 3 have been started and this was largely due to non-availability of funds. The 3 interventions started were only possible due to funds secured as a result of the partnership with the LCBC/GEF project.

The project's approach of using local consultants with vast experience within the project area has been an efficient way of delivering results. The project's institutional framework also is an efficient means of involving participation from several stakeholders.

### **3.5 Impact**

Although the project duration is short and the focus of this phase of the project is targeted at institutional and legal frameworks, there are some clear and tangible impacts emanating from the activities of the project. The forum supported by the project has helped to foster understanding and increase participation in decision-making processes by all stakeholders. One of the benefits of this increased dialogue between stakeholders was the decision of the joint meeting of stakeholders to allow Kano State Water Board to construct dykes to improve its water intake. In the past any construction upstream at the Kano end was viewed with suspicion and resisted by states and community at the downstream end of the basin. The involvement of all stakeholders and interest groups in the project activities has impacted positively on conflict resolution especially at the Nguru area. According to discussions with the Nguru Integrated Farmers Association (NIFA), in the past there were at least more than 100 court cases between farmers and cattle rearers annually, but last year there were less than 10 cases because conflicts are now resolved more amicably through dialogue.

Perhaps the most important impact of the project was the sensitization of the political class on the problems of the basin and the need for immediate action. This sensitization has resulted in the setting up of the KYB Trust Fund.

The database developed by the KYB project is the most comprehensive collection of information on the basin available. It will therefore serve as a useful source of information to planners, decision-makers, researchers and students working in the basin.

The pilot activities undertaken by the project, especially at Rantam and Miga have resulted in improved water flow, the impact of which is already felt by some communities and by the Kano State Water Board. According to the Tiga Dam manager, since the clearing of the dam outlet at Rantan the water flow situation has improved and there were no more complaints from the Kano State Water Board to increase water release.

The project has also fixed some damaged gauging stations and assisted and/or trained some state ministries officials in hydrological data collection. The project has also assisted HJRBD in analyzing its raw data. All these have motivated the agencies in



seeking to collect and keep proper records of hydrological and other relevant data. Already as a result of this the Jigawa State Ministry of Water Resources has created a new Department of Hydrology to assist in the collection and management of information.

### **3.6 Sustainability**

The participatory approach of the project will instill the feeling of involvement and ownership of outputs and outcomes, thus ensuring sustainability and continued benefits. However, at this stage most of the grassroots stakeholder organizations and the IWRM committees have weak financial base and also need further capacity-building in terms of group dynamics. The stakeholder forum has so far functioned mainly as a result of the support of DFID-JWL, LCBC/GEF and KYB projects; the forum has limited financial resources. However, it must be noted that some of the state governments have started funding the IWRM committees which constitute nucleus of the stakeholder forum.

The partnership between the KYB project and its sister-projects (the DFID-JWL and the LCBC/GEF projects) was very useful in achieving some of the key successes of this project; however during discussions with DFID-JWL project the evaluation team got the impression of some misunderstanding between the two projects. Whatever misunderstanding there is between the two projects should be discussed and ironed out so that both projects will continue to reap the benefits of their partnership.

The pilot interventions carried out by the project were community driven with the participation of the communities in execution. This will ensure ownership and sustainability. In Bauchi State there is no pilot intervention either on-going or planned, it may make it difficult to convince the state government and the political class in the state to commit resources towards achieving the project goals.

#### **4.0 Conclusion and Recommendations**

Many positive results have been achieved by the KYB project from May 2005 to date despite the difficulties encountered in securing adequate funds. The project has fostered strong linkages especially with the Federal and State Ministries as well as other projects and institutions in the basin, and this was one of the strengths of the project. All the key deliverables envisaged in the project document have been delivered or are about to be delivered fully. The participatory approach of the project and the involvement of a broad spectrum of stakeholders and interest groups in different levels of the project activity and implementation will ensure ownership of outputs and outcomes. It is the opinion of the Evaluation Team that the project was effectively and efficiently managed and the project design and approach was relevant in addressing the identified needs, issues and challenges facing the people and the environment in the KYB.

The first phase of the project has focused on producing key knowledge base documents and the establishment of the right institutional and legal frameworks needed for achieving the overall project goal of equitable and sustainable use of land and water resources of the KYB. It is therefore recommended that the achievements made should be consolidated immediately by following-up with the second phase of the project.

In future IUCN and its partners should ensure that all needed funds are secured before the commencement of the project so as to improve the efficiency and timeliness of project implementation.

## **Appendices**

## **Appendix 1: Terms of Reference**

# **FMWR-IUCN-NCF KOMADUGU YOBE BASIN PROJECT ON IMPROVING LAND AND WATER RESOURCES MANAGEMENT**

## **TERMS OF REFERENCE FOR PROJECT EVALUATION**

### **Introduction**

The network of river systems and wetlands that compose the Komadugu Yobe Basin (KYB) support a wide range of ecological processes and economic activities, including recession agriculture, pastoralism, forest regeneration, fish breeding and production, drought-fall-back security, and tourism potential. Based on these activities, several centers of development, trading and administration have cropped up along river courses and on floodplains within the basin, constituting relatively high population concentrations in a dryland region, which is characteristically sparsely populated. Today, the livelihood systems of the over 10 million people who live in the basin, both in Nigeria and Niger, depend almost exclusively on these activities. The Komadugu-Yobe River is the life-wire of these communities. Moreover, it is the source of internationally shared water whose management in Nigeria has an important bearing on diplomatic relationships between Nigeria and four countries (Niger, Chad, Cameroon and Central African Republic). These countries share the Lake Chad basin in which is located the KYB.

The KYB contains very important wetlands, in particular the Hadejia Nguru Wetlands (HNWs), which has Nigeria's premier Ramsar site, which are of immense local, national and international economic and ecological importance. In addition to providing fire-wood and grazing in the dry season, there are also about 100 species of fish, about five of which are endemic. There are also some endemic plant species of agronomic importance, which are threatened with extinction. An important example is a variety of rice that is found in the Gashua to Geidam stretch. In the early 1990s, IUCN and partners estimated at US\$ 170 per ha the annual economic benefits from overall land-use systems of the Hadejia Nguru wetlands.

### **The Problem**

Despite its importance, the environment and key natural resources in most West African countries are increasingly threatened by escalating and unsustainable pressures from fast-growing populations and cities as well as expanding agricultural and industrial activities. This is particularly true since the 1970s as the general climate context face chronic variability and deficits in rainfall and surface water resources. In the push for accelerated economic growth, many basin and national water policies show clear limitations in their ability to promote equitable and sustainable resource use. The KYB is no exception and this calls for an urgent intervention.

## **The Project Background**

In response to the problems enumerated above, the project for improving land and water resources in the KYB, which is a joint initiative of the then Nigeria Federal Ministry of Water Resources (FMWR) and now merged to be the Federal Ministry of Agriculture and Water Resources, the World Conservation Union (IUCN) and the Nigerian Conservation Foundation (NCF), was initiated. The project that has started with an initial phase of two years and three months, and with the objective of improving the institutional framework for managing water resources in the KYB, which will be done through consensus on key water management principles and institutionalised consultation and coordination mechanisms.

The first phase of the project has the establishment and sharing of a sound knowledge-base to facilitate stakeholder negotiations and inform decision-making as one of its components. To achieve this objective, having a good understanding of the socio-economic as well as the environmental conditions of the basin is quite important as the consultation and dialogue processes of the project will be based on the best available knowledge on the basin, in addition to water audit exercise that had already been carried out. These knowledge-base studies have led to a common understanding of the issues and challenges facing the basin in terms of the land and water resources, and are helping better understand the perspectives and priorities of the basin.

The project had facilitated the participation of all stakeholder groups in the development of key principles for the management of the KYB. This is really facilitating a process of revitalising the basin-wide stakeholder forum. This forum that is being used to ensure that the various stakeholders, interest groups, water user groups and basin States take part in the discussions on water allocation and water sharing arrangements, and that their views and needs inform the overall decision-making process.

The project is also supporting and complementing the current institutional framework, which revolves around the Hadejia-Jama'are-Komadugu-Yobe Basin Coordinating Committee. All States in the basin are represented in this Committee as well as the Federal Ministry of Agriculture and Water Resources, and Federal Ministries responsible of Environment and of Health.

## **The Project Goal**

The long-term goal of the project is the equitable and sustainable use of land and water resources of the KYB through improved management, and the purpose of phase I of the project is to contribute to this goal by helping *establish a framework for broad-based and informed decision making process based on agreed principles for equitable use and sustainable management of the Komadugu Yobe Basin.*

The specific objectives of the project are as follows:

*To build decision-support knowledge base so that water management options and other resources management decisions are taken on the basis of up-to-date information on water audit, socio-economic and ecological conditions of the basin*

*To pilot-test improved water management field interventions so that efficient and sustainable water utilisation techniques and approaches are demonstrated in downstream areas*

*To help establish a legal and policy enabling environment through the adoption and implementation of a water charter and supporting basin-level consultation and coordination mechanisms*

*Develop a Catchment Management Plan using participatory approaches and on the basis of the results of knowledge, policy and pilot activity components of the project. This will also build on the existing draft Catchment Management Plan*

*To ensure that the project is effectively managed, monitored and evaluated, so that lessons on managing river basins are learned and disseminated to benefit similar initiatives*

The details of these specific objectives and the expected outputs of the Project can be found in the Project document (available at the Project office).

### **Methodology**

A Consultant is being sort who will lead a Review Team (the composition is described below). In addition to other relevant approaches that the Review Team may deem fit, the methods and approaches to be employed should encompasses the following:

**Focus:** The progress of the Project to date as against the Project's planned activities.

**Coverage:** The evaluation should measure the (i) relevance, (ii) effectiveness, (iii) efficiency, (iv) impact and (v) sustainability of the Project to date and what need to be done if improvements are necessary in the future by way of developing an evaluation matrix (see details in the draft Evaluation Matrix attached, which also include a proposed table of contents). This is also the need to help in the identification of gender issue as well as the impact of this Project on poverty reduction.

**Timing:** The second Project evaluation for effective period of May 2005 to date (i.e. the first phase of the Project).

**Responsibilities:** It is the obligation of the Project Management Unit (PMU) to conduct such Project evaluations and this is the second in the series.

**Output-Products:** The Project's second evaluation report is to judge the performance of the first phase of the Project and also to guide the PMU in the effective and successful

implementation of the Project's subsequent activities to achieve and accomplish the Project goal.

**Usage:** To help the PMU and IUCN, in general, in improving its/their activities, contributing the lessons learnt to other similar projects as well as acting as Project accountability to donors.

The Consultant will be given other IUCN evaluation documents to enable him/her have a broader outlook of how the evaluation process should aim at and achieve.

**The Consultant**

The Consultant will undertake the assignment in the accompany of Review Team made up of a representative of the FMWR as a partner cum a donor, a representative of NCF as a partner and a representative of IUCN-WANI (and UICN-BRAO) as a donor. The PMU will provide all the necessary materials as required and/or needed by the Review Team.

The Consultant should be conversant with the study area and must possess adequate facilities to discharge the tasks in terms of logistics and other working equipments. Touring parts of the basin and visiting partners and stakeholders are envisaged in the assignment.

**Reporting**

The Consultant shall submit the final evaluation report to the Project Coordinator of the FMWR-IUCN-NCF KYB Project, after sharing with the Review Team for their inputs, not later than Friday, the 30<sup>th</sup> of March 2007. Reports including the final one will be required in both soft and hard copies. Please find attached to this Terms of Reference an *abstract template* that needs to be filled at the end of the assignment.

**Time Frame**

The contract for this consultancy is expected to be signed by Friday, the 02<sup>nd</sup> of March 2007 and the final report to be submitted by Friday, the 30<sup>th</sup> of March 2007 (please see the Table below for comprehension).

<b>Tasks</b>	<b>Starting</b>	<b>Ending</b>	<b>Duration (expected working days)</b>
Initial contact, discussion and appointment of Consultant	19 <sup>th</sup> Feb. 2007	09 <sup>th</sup> March 2007	19 days
Consultancy contract duration	26 <sup>th</sup> March 2007	30 <sup>th</sup> March 2007	5 days
Submission of final report	-	20 <sup>th</sup> April 2007	-

## Appendix 2: Stakeholders Consulted

Name of Stakeholder	Affiliation	Location
Dr Muslim Idris	IWRM Committee	Jigawa
Engr. Lawal Turajo	HJRBDA	Tiga Dam
Abubakar Adamu	Fisherman	Allah Magani village, near Tiga
Mohammad Sani	Fisherman	Allah Magani village, near Tiga
Mallam Munkailu	Fisherman	Allah Magani village, near Tiga
Hussaini Adamu	Fisherman	Allah Magani village, near Tiga
Alhaji Baffa Bello (Permanent Secretary)	Kano State Ministry of Water Resources	Kano
Engr. Danladi Mohammed	Kano State Ministry of Water Resources	Kano
Engr. Sanusi Danbatta	Kano State Ministry of Water Resources	Kano
Umar Gambo	Nguru Integrated Farmers Association	Nguru
Usman Abdullahi Miyatti	Nguru Integrated Farmers Association	Nguru
Madu Tandari	Nguru Integrated Farmers Association	Nguru
Saadu Garba	Nguru Integrated Farmers Association	Nguru
Lamido Gellele	Nguru Integrated Farmers Association	Nguru
Alhaji Yau Mohammed	Nguru Integrated Farmers Association	Nguru
Garba Wakili	Nguru Integrated Farmers Association	Nguru
Musa Gana	Nguru Integrated Farmers Association	Nguru
Lawan Zanna	Nguru Integrated Farmers Association	Nguru
Khadija Ahmed	Nguru Integrated Farmers Association	Nguru
Maryam Mindaudu	Nguru Integrated Farmers Association	Nguru
Harry Hanson	Nguru Wetland Project	Nguru
Bello Abdullahi Birniwa	WDI	Hadejia
Mamuda Musa Danjaji	WDI	Hadejia
Dr Steve Fraser	DFID-JWL Project	Dutse
Engr. Abubakar Gamawa	Bauchi State Ministry of Water Resources	Bauchi
Mrs Ruth Samson	Rahama Multi-purpose Cooperative (NGO)	Bauchi
Mrs Felicia Isiah	Development Exchange Centre (NGO)	Bauchi
Mrs Ladi Baba Yusuf	Bauchi State Ministry of Women Affairs	Bauchi
Mrs Fatsima Mohammed	Federation of Muslim Women Associations of Nigeria (NGO)	Bauchi
Dr Daniel Yawson	KYB project	Kano
Mallam Hallai Garba	KYB project	Kano
Engr. Peter	KYB project	Kano



### Appendix 3: Evaluation Matrix

ISSUE	QUESTION	DATA SOURCES
<b>EFFECTIVENESS</b>	<ul style="list-style-type: none"> <li>◆ To what extent did the outputs (planned &amp; unplanned) contribute to the Overall Objectives? Why? Why not?               <ul style="list-style-type: none"> <li>◆ Capacities of project partners</li> <li>◆ Availability &amp; use of resources</li> <li>◆</li> </ul> </li> </ul> (Develop matrix of planned objectives, outputs etc.)	<ul style="list-style-type: none"> <li>Ⓡ Project Document</li> <li>Ⓡ Project Reports</li> <li>Ⓡ Partners &amp; Beneficiaries Reports</li> <li>Ⓡ Project Staff</li> <li>Ⓡ Partners</li> <li>Ⓡ Key Stakeholder Groups</li> </ul>
<b>EFFICIENCY</b>	<ul style="list-style-type: none"> <li>◆ Were the resources efficiently managed and utilised?               <ul style="list-style-type: none"> <li>◆ Finances – procedures (reporting &amp; budgeting);</li> <li>◆ Assets - use</li> </ul> </li> <li>◆ Were the Outputs generated as expected (in quality and time)?</li> <li>◆ Were there any unforeseen problems, how well were they dealt with?</li> </ul>	<ul style="list-style-type: none"> <li>Ⓡ Project Document</li> <li>Ⓡ Project Reports</li> <li>Ⓡ Project Staff</li> <li>Ⓡ Partners</li> </ul>
<b>RELEVANCE</b>	<ul style="list-style-type: none"> <li>◆ Establish whether or not the project design and approach was relevant in addressing the identified needs, issues and challenges facing people, and the environment?</li> <li>◆ To what extent does the project contribute to overall Key Results and strategies of IUCN?</li> </ul>	<ul style="list-style-type: none"> <li>Ⓡ Situation Analysis Study (initial and updates)</li> <li>Ⓡ Project Document</li> <li>Ⓡ IUCN Intersessional Programme</li> <li>Ⓡ Project Staff</li> <li>Ⓡ IUCN Staff</li> <li>Ⓡ Partner Organisations</li> <li>Ⓡ Key Stakeholder Groups</li> </ul>
<b>IMPACT</b>	<ul style="list-style-type: none"> <li>◆ What impacts did the project have on;               <ul style="list-style-type: none"> <li>A) The people:                   <ul style="list-style-type: none"> <li>◆ Income</li> <li>◆ Equity (gender, etc.)</li> <li>◆ Participation in decision making processes</li> </ul> </li> <li>B) The Environment:                   <ul style="list-style-type: none"> <li>◆ Species and Ecosystem Health?</li> </ul> </li> </ul> </li> <li>◆ Were there any unintended positive or negative impacts arising from particular outcomes?</li> <li>C) Socio economic aspect (poverty reduction etc.</li> </ul>	<ul style="list-style-type: none"> <li>Ⓡ Project Reports</li> <li>Ⓡ Partners &amp; Beneficiaries Reports</li> <li>Ⓡ Project Staff</li> <li>Ⓡ IUCN Staff</li> <li>Ⓡ Partner Organisations</li> <li>Ⓡ Beneficiaries</li> </ul>
<b>SUSTAINABILITY</b>	<ul style="list-style-type: none"> <li>◆ Was the approach used likely to ensure a continued benefit and/or use of the outputs and outcomes after the end of the project? Why/ Why not?</li> </ul>	<ul style="list-style-type: none"> <li>Ⓡ Project Document</li> <li>Ⓡ Project Reports</li> <li>Ⓡ Partners and Beneficiaries Reports</li> <li>Ⓡ</li> </ul>

	<ul style="list-style-type: none"> <li>◆ Established structures, mechanisms, financial resources, materials,</li> <li>◆ Levels of stakeholder participation;</li> <li>◆ Levels of partners &amp; stakeholder engagement;</li> </ul>	<ul style="list-style-type: none"> <li>Ⓜ Project Staff</li> <li>Ⓜ IUCN Staff</li> <li>Ⓜ Partners</li> <li>Ⓜ Key Stakeholder Groups</li> </ul>
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## Appendix 4: Project Financial Statement

Unless specified, all currencies are in Euros					
Budget Code	Item Description	Budget Estimate in Old Project Document	Budget Estimate in New Project Document	Revised Budget as at November 2005	Actual Total Expenditure as at February 2007
C000	Carried forward from Donor	USD	USD	USD	630771.57
Project personnel					
C001	Project Director	8100	8400	5400	6274.36
C002	Project Coordinator	86400	94534	61534	69129.34
C003	Project Financial Administrator	54000	49465	29465	34664.64
C004	Legal/Social Science Specialist	14400	13200	7200	9666.38
C005	Water Resources Expert	14400	15549	9549	11465.98
C006	Database Manager	38400	28800	16800	20475.58
C007	Hydrologist (International Consultant)	45000	0	0	0
C008	Communication Specialist	9600	9600	6000	0
C009	Administrative Assistant	11050	10080	5880	7312.24
C010	Drivers (Head Driver + Driver)	9600	12370	7320	7445.85
C011	Security staff (through company)	9360	11240	6840	6550.07
C012	Accident and invalidity insurances	10700	4000	2500	3064.43
C013	Hiring costs	10000	6245	6245	4853.9
	Total project personnel	321010	263483	164733	180902.77
Project facilities & equipment					
C014	2 4-Wheel Drive Vehicles	70000	40000	40000	276.82
C015	2 Generators	26700	16000	16000	11936.94
C016	Photocopier	3000	1800	1800	1438.82
C017	Office equipment (computers + software)	20000	19527	17527	15425.23
C018	Technical material and books	3500	2000	1500	153.79
	Total project facilities & equipment	123200	79327	76827	29231.6
Operating costs					
C019	Photocopier and computer maintenance	1500	1100	500	558.69
C020	Vehicle repair and maintenance	8500	10509	5009	2504.29
C021	Vehicle insurance	6200	4400	2000	121.79
C022	Maintenance and repair (other equipment)	1750	1100	500	656.78
C023	Hospitality	1200	1000	500	222.63
C024	Fuel for vehicle (4,000 l/month * 2)	5800	10707	5207	5071.35
	Total operating costs	24950	28816	13716	9135.53
Administration costs					
C025	Office running costs – materials	8000	6304	3304	1828.88
C026	Office running costs – communications	15300	14679	8679	8762.45
C027	Office running costs – miscellaneous	5300	3581	2081	2142.46
C028	Office running costs – cleaning	1500	4045	2045	1264.99
C029	Building maintenance and rental	32500	62048	60048	49916.96
C030	Utilities (electricity and water supplies)	13000	7746	3746	2555.05
C031	Bank charges	9200	6000	3000	1972.03
	Total administration costs	84800	104403	82903	68442.82

Travel costs					
C032	Per diem for project staff	22500	25641	15641	16292.2
C033	Airfares – domestic	20000	17530	7530	1237.24
C034	Airfares – international	14200	23791	18791	1947.5
C035	Taxes and tolls	4500	4000	2000	0
Total travel costs		61200	70962	43962	19476.94
Activities					
(i) Knowledge base studies – Objective 1					
C036	Consultancies	31000	80000	61395	51361.11
C037	Meetings	25000	23000	13000	15447.07
C038	Travel/per diems/communications	17000	17000	12000	9295.3
Total Activity (i)		73000	120000	86395	76103.48
(ii) Review of policy and institutional framework – Objective 2					
C039	Meeting and travel cost of multi-stakeholder task team	7500	7500	2500	0
C040	Stakeholder meetings in riparian states and provinces	48000	44409	24409	27838.38
C041	Training/meetings for stakeholder forum	45000	24000	12000	9426.49
C042	Costs of policy dialogue on charter and options	15000	15000	0	0
Total Activity (ii)		115500	90909	38909	37264.87
(iii) Pilot interventions – Objective 3					
C043	Feasibility studies (consultancy/travel/meeting)	20000	5000	5000	0
C044	Field interventions (equipment, training and others)	155000	60000	60000	387.5
C045	Document lessons learned (consultancy)	10000	10000	10000	0
Total Activity (iii)		185000	75000	75000	387.5
(iv) Development of catchment management plan – Objective 4					
C046	Consultancy (catchment management plan development)	15000	20000	10000	9563.24
C047	Validation of the revised catchment management plan (see under Activity ii)	0	0	0	0
C048	Develop and disseminate catchment management brief	3000	5000	0	226.73
C049	Organize a donor roundtable	10000	15000	0	0
Total Activity (iv)		28000	40000	10000	9789.97
Total activities		401500	325909	210304	123545.82
Communications and steering committee meetings					
C050	Radio and TV programmes	15000	15000	5000	0
C051	Leaflets	2000	2000	1000	0
C052	Other general communication activities	5000	3000	2000	1614.49
C053	Project steering committee meetings	10000	12000	6000	1427.82

	Total communications and steering committee meetings	32000	32000	14000	3042.31
	IUCN and NCF technical support				
C054	IUCN technical support (staff time): BRAO	50000	49021	27021	14395.79
C055	IUCN technical support (staff time): HQ	20000	17894	9894	7943.12
C056	NCF technical support (staff time)	18000	16000	8000	1737.76
C057	Monitoring and evaluation, and audits	30000	30000	10000	3255.79
	Total IUCN and NCF technical support	118000	112915	54915	27332.46
	SUB-TOTAL (lines A – H)	1166660	1017815	661360	461110.25
C058	Contingency	56683	34771	34771	2372.64
C059	Administrative and financial management fees	85025	55176	55176	25931.96
C060	Funds transfer to DFID-JWL Project				23247.24
	<b>GRAND TOTAL</b>	<b>1308368</b>	<b>1107762</b>	<b>751307</b>	<b>512662.09</b>
Note:					
	C014 - FMWR provided two Toyota Hilux 4-Wheel Drive vehicles to the Project				
	C029 of 47,346.94 Euros (equivalent of =N= 7,540,200 @ =N= 159.25/Euro) was in-kind contribution from FMWR during the inception phase				
					118109.48
	WANI = Project Code 80104-030				
	FMWR = Project Code 75999-222				
	Others = Project Code 76681-000 (LCBC/GEF Project)				