Improving Land and Water Resources Management in the Komadugu Yobe River Basin – Northern Eastern Nigeria & South Eastern Niger

(Phase 1: Improving the Institutional Framework for Water Management in the Komadugu Yobe Basin)

FMWR-IUCN-NCF Komadugu Yobe Basin Project MID-TERM PROJECT EVALUATION REPORT

By

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Abstract

The Komadugu Yobe Basin (KYB) Project is about the "improving land and water resources management in the KYB – northern Nigeria and south Niger" which is implementable in Phases. The first phase of two years and three months is on the improving the institutional framework for water management in the Basin. In which case the Project is to help in improving consultation mechanisms among main stakeholders (including regulators), facilitating their participation in the development of key principles for the management of water in the Basin. It is the policy of the World Conservation Union (IUCN) to internally and externally evaluate the performance of its projects within temporal scale with the objective of providing an important organizational learning tool, and to help build confidence in the way the Union works and in the way it is regarded by its member, partners and funding agencies. Partners for the Project include the Nigeria (FMWR); and have the endorsement of the Lake Chad Basin Commission. Funds for the implementation of the Phase are to be contributed by IUCN-WANI (USD 500,000), FMWR (USD 200,000) and other complementary sources (USD 608,368).

This is an external mid-term evaluation report on the first Phase covering period May 2005 – February 2006. It evaluates the project performance through answering the questions the Project's of relevance, efficiency, effectiveness, sustainability and impact. Through these, lessons learnt have identified, presented and discussed. These were achieved mainly through discussions with Project's staff, literature search and purposive visits and discussion with some stakeholders and/or project partners. Major findings of the exercise include

- a. the non-availability and non-usability of basic meteorological data. Moreover, information of stream gauging is also not in useable form.
- b. Due to the problem as in (a) above, there is presently the problem of improper water management system. However, some of the key stakeholders are beginning to take cure.
- c. Cases of conflicts between and among stakeholders over shared resources are very eminent, most of which erupt due to inadequate information and incomprehensible land use legislation.
- d. There is an invasive spread of typha grass which, by now, has not shown any potential economic or social value. Its presence is causing tremendous drop in the potentials of agricultural land in the basin. However, discussions at the stakeholder have helped in bringing some understanding and cases of conflicts are now dropping.
- e. It has also been found that floods are caused significantly due to the presence of the typha grass, which also leads to lower water/river discharges in the natural river courses.

It is to these that the evaluation exercise concludes that the Project is relevant to the needs of the people and environment within the Basin. Considering the focus and the activities so far carried out and ones highlighted, the Project is as well effective. Moreover, resource use is truly cost effective, only that more funds are needed for the timely execution of some of the activities proposed. Although the Project is still at its infancy, it is evident that the activities are having some positive impact as cases of conflicts are now significantly reducing. Moreover, water audit exercise is about to be concluded which will give scientific means by which water management will be devised. With these achievements through the participation of all, most of the stakeholders may come to imbibe the culture which of course will lead to the sustainability of the gains of the Project.

Lessons learnt so far indicates that participatory approach through stakeholder involvement is a viable vehicle for sustainable development as decision-making is made simplified and acceptable/implementable. Of course, there is the need for the Project to maintain the tempo and for the funds to be improved upon.

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1.0 Introduction

The Komadugu-Yobe Basin (KYB) with a combined catchment area of 84,138 Km² is one of Nigeria's principal surface and groundwater basins which offers considerable development potentials (Tanko, 1999). It drains in a north-easterly direction from the Jos Plateau and about 10 percent of the inflow discharges into the Lake Chad (Carter, 1992). Geographically, it is located approximately between latitude 10°N and 13°20'N and 7°25E and 11°E. The Hydrological boundaries of the Basin traverse the States of Kano, Jigawa, Bauchi, Yobe and to a lesser extent, Plateau and Borno.

The KYB is one of the Nigeria's most important agricultural basins and currently produces such food and cash crops including sorghum, rice, millet, groundnuts, wheat, cowpeas and vegetables under both upland and irrigated farming. The farming system in, especially the high population density zones of the basin including the Kano-Close-Settled Zone (KCSZ) is being described as very intensive use of the agricultural land. This involves the production of more food on land already under cultivation (Harris, 1996; Tanko, 1999). In addition to these, there are also the productions of livestock, trees which yield fruits, edible leaves silk cotton and firewood. Fishing is also an important activity of the people in the basin. Of course the system supports over 10 million people who live in the basin. Part of the basin is the Hadejia Nguru Wetlands which for many years were the pride and joy of the north-eastern part of Nigeria.

In the early 1970s, dams were constructed on the up-stream locations, mainly in Kano State. Two of these dams, i.e. the Tiga and Challawa Gorge Dams are classified as large-scales. For instance Tanko (1999) has given the features of the former Dam as follows:

- a. catchment size, 6,641km²,
- b. total and active storage capacities, 1,968.0 Mm³ 1,845 Mm³ respectively.
- c. surface area of the reservoir, 7,200ha
- d. Emergency spillway, 200m

Of course, when it was noticed that there was the drying out of the downstream environment, the spillway of the Dam was lowered by 3.5 in 1992 which affected the total storage in the reservoir to fall to 1,400M³, a reduction of about 568 Mm³. Even with these, the people at the downstream locations keep agitating for more water. This is as there has been a reduced wet season flood flow which has deprived much of the communities of their annual water needs. Indeed with potential and effective water demand of the Kano city water supply (now put at 400-700 M litres per day), the Kano River Irrigation Project (KRIP) which covers about 15,000ha and the Hadejia Valley Project (HVP) of about 12,500 ha, more than half of the estimated long term annual yield of the reservoirs are already consumed.

1.1 The Background to KYB

By whichever standard, it is obvious that the water resources of the basin are already stretched and, with the potentially large and increasing demands, these will need to be wisely apportioned among the competing users. Proper management of the water resources in the Basin becomes a major area of challenge and a source of concern. Of course the May 2005 Version of the KYB Phase 1 Document (Appendix II) has enumerated and explained the "threats and challenges facing the Komadugu Yobe Basin". These included, fast-growing water demand, reduced river flow due to climate variability and change, fragmented regulatory responsibilities, uncoordinated development interventions etc. Thus, a joint initiative of the World Conservation Union (IUCN), Nigerian Conservation Foundation (NCF) and the Federal Ministry of Water Resources (FMWR) titled "Improving Land and Water Resources Management in the Komadugu Yobe Basin – Northern Nigeria" began in May 2005.

The Project has the objective of improving land and water management in the Komadugu-Yobe Basin. Secondly it also has the objective of improving the institutional framework for water management in the Basin. These are with the hope of catalyzing some policy and institutional change, leading to the development of agreed water management charter.

The Project which began with an initial phase of two years and three months (inclusive of its Inception Phase of three months) has the objective of improving the institutional framework for managing water resources in the KYB. This is being done through consensus on key water management principles and institutionalized consultations and coordination mechanisms. Thus, by the end of the Phase 1, it is expected that there is established 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.

For the achievement of this, the Project is to facilitate the participation of all stakeholder groups in the development of key principles for the management of the Basin. To achieve this, the Project is to facilitate a process to revitalize the basin-wide stakeholder forum. This forum is to 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. However, as an important Basin, there were a number of institutions and interventions in the Basin that shared common interest, focus and objectives. These included:

a. The Hadejia-Jama'are River Basin Development Authority (H-JRBDA): This is a Nigerian Federal Government agency instituted in the 1970s which was revised by Decree No. 35 of 1987. It came through an idea

- to construct, operate and maintain dams, lakes and all irrigation and drainage systems for the achievement of the authority's functions and to hand over all lands to be cultivated on irrigation schemes to farmers;
- to supply water from completed storage schemes to all users for a fee
- to develop and keep up-to-date comprehensive water resources master plan, identifying all water resources requirements in the basin through adequate collection and collation of water resources, water use, socioeconomic and environmental data of the basin.

b. The Hadejia Nguru Wetlands Conservation Project:

This is an attempt to promote integrated and sustainable use of the extensive floodplains of the Hadejia and Jama'are rivers against pressures of upstream water abstraction, drought and demands for canalization downstream. The Project lasted for a long period of time, but it has folded up. Of course, the Consultant is made to understand that 1999. The Committee, after its first meeting in November 2000 established its Technical Advisory Committee (TAC), which had its first meeting in April 2001.

Formation of a Stakeholder Forum: Through an initiative of the DFID-JEWEL Project, a Stakeholder Forum was formed. This began from 2001 when the first meeting was organised at Dutse. Subsequently, more meetings were held all of which were at the same location. However, following efforts towards the taking up of the KYP Project, UICN in partnership with the NCF initiated another meeting in January 2003. Following the success of the JEWEL Project (now JWL) the same (even though) expanded Stakeholder Forum was invited. The meeting came to be held between 06th and 07th January 2003 with the purposes of:

- a. collectively reviewing the situation in the KYB
- b. brainstorming on various components of sustainable land and water resources development and management strategies in the KYB
- c. presenting and discussing a draft programme on sustainable development of the KYB, and
- d. preparing a comprehensive and collectively acceptable arrangement for contribution and participation of all stakeholders in the programme.

For the meeting, participants¹ were drawn from:

- Federal Ministries of (Water Resources; Agriculture; and Rural Development)
- State Government Ministries in (Yobe, Borno, Jigawa, Kano and Bauchi)
- Federal Government Parastatals (H-JRBDA, CBDA)
- Universities (Maiduguri, Lagos and Bayero)
- NGOs (IUCN, NCF, LCBC)
- International Organisations (FAO; LCBC; DFID)
- Consultants (Afremedev; Hydroterra)
- Private Organisation (Guwori Petro-Allied Services Nigeria Ltd.)

1.3 Activity and Progress Against Deliverables from Inception

From inception to date, the KYB Project has carried out a number of major activities. These included:

- a. Signing of Memorandum of Understanding (MoU) with key partner institutions including the DFID-JWL and LCBC/GEF. Moreover key project staff (including the Project Coordinator and Financial Administrator) were recruited. By May 2005, first year work plans were fully developed and project budget revised.
- b. Formation of Project Management Structure and Linkages with Existing Structures: Within the Project Structure, a 5-member committee forms the Project Management Unit (PMU). These are the Project Director (from the FMWR, thus seconded to the Project on Part-time), Project Coordinator,

¹ List of Participants is Attached – Appendix 1

Project Financial Administrator and three technical staff (who are the legal/social science specialist, water resources expert and a database manager. Within the structure too, there is the Project Steering Committee (PSC)². The Committee is responsible for monitoring project implementation and for ensuring that the Project proceeds in a timely and efficient manner. PSC has the power to approve changes (other than those affecting project budgets) in Project activities which might be recommended to it by the PMU. Where such changes can affect budgets, referrals are necessary to IUCN and the Project donors for approvals.

Within the Hadejia-Jama'are-Komadugu-Yobe Basin (H-JKYB), the Federal Government of Nigeria has already initiated a process that is aimed at

Efforts are currently being made by the KYB to make the membership basinwide relevant.

Table 1: Detailed Progresses Made for each Defined Activity A

water demand	
1.1.4. Establish a database at	• Introductory letters and questionnaires were
Project office	sent to various organizations across the
	basin
	• Several follow-ups were also carried out to
	all the ministries and stakeholders for data
	collection
	• Some available data in the Project office
	includes:
	1. Substantial hydro-agricultural data and
	hydro-meteorological data with lots of
	gaps in-between
	2. Scanty socio-economic and ecological
	data in some States
	3. Hydro-geological data
	<i>4. Over 60 hard-copies of related literature</i>
	of the basin
	5. Over 50 electronic & grey reports of
	related literature of the basin
	6. Previous consultancy works for the basin
	• The available data set in the Project office
	had been shared with the water audit
	consulting firm
1.2.1. Conduct socio-economic	• A ToR was developed
situation analysis	
situation analysis	• Identification of potential consultants were
	• Identification of potential consultants were presented for the PSC's approval
	 Identification of potential consultants were presented for the PSC's approval Invitation for proposals and submission of
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1.2.2. Conduct an analysis of the state of the environment	 Identification of potential consultants were presented for the PSC's approval Invitation for proposals and submission of technical and financial quotations for selection from consultants were done in November 2005 A consultant was selected and engaged to carry out this activity from December 2005 to January 2006 Commencement of fieldwork was from the first week of December 2005 to mid-January 2006 Review of the progress of the fieldwork was done in the last week of December 2005. This is a mid-term assessment of fieldwork
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1.2.2. Conduct an analysis of the state of the environment 1.2.3. Conduct study on the predictable imposts of water	 Identification of potential consultants were presented for the PSC's approval Invitation for proposals and submission of technical and financial quotations for selection from consultants were done in November 2005 A consultant was selected and engaged to carry out this activity from December 2005 to January 2006 Commencement of fieldwork was from the first week of December 2005 to mid-January 2006 Review of the progress of the fieldwork was done in the last week of December 2005. This is a mid-term assessment of fieldwork Same as above
 1.2.2. Conduct an analysis of the state of the environment 1.2.3. Conduct study on the predictable impacts of water 	 Identification of potential consultants were presented for the PSC's approval Invitation for proposals and submission of technical and financial quotations for selection from consultants were done in November 2005 A consultant was selected and engaged to carry out this activity from December 2005 to January 2006 Commencement of fieldwork was from the first week of December 2005 to mid-January 2006 Review of the progress of the fieldwork was done in the last week of December 2005. This is a mid-term assessment of fieldwork Same as above There was a meeting between the PMU and the consulting firm to carry along attached and in the last week of carry along
 1.2.2. Conduct an analysis of the state of the environment 1.2.3. Conduct study on the predictable impacts of water demand scenarios and planned intermentions 	 Identification of potential consultants were presented for the PSC's approval Invitation for proposals and submission of technical and financial quotations for selection from consultants were done in November 2005 A consultant was selected and engaged to carry out this activity from December 2005 to January 2006 Commencement of fieldwork was from the first week of December 2005 to mid-January 2006 Review of the progress of the fieldwork was done in the last week of December 2005. This is a mid-term assessment of fieldwork Same as above There was a meeting between the PMU and the consulting firm to carry along stakeholders in this activity

1.2.4. Stakeholder workshop on	•	To be combined with Activity 1.1.3
the study results		

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	•	It was done as part of the Project inception workshop in April 2005. List of participants has been provided in appendix 3.
2.5. (tied to Activity 1.1.3.) Organize second forum meeting to review initial results from the various components of the Project and prepare state-level consultations	•	This is tied to Activity 1.1.3
2.6. State-level consultations to review study results and draft water management principles and options	•	Yet to be carried out
2.7. Organize third and final forum meeting to reach consensus on water management principles, and water management options and required institutional changes	•	To be carried out later (getting to end of this phase of the Project)
2.8. Present findings and recommendations from stakeholder forum to: (a) high-level Federal Government officials; (b) legislators in riparian States; and (c) the National Council of Water Resources	•	Initial steps of this task is tied to Activity 2.7 The PMU would be more involved in this task at a later time (getting to the end of this phase of the Project)
3.1. (tied to Activity 2.1. and contribute to Activities 2.2. and 2.4.) Initial stakeholder meetings discuss and agree on types and sites of priority interventions	•	Already done during the Project inception phase It will be strengthened through the LCBC/GEF Project' pilot funding
3.2. Conduct feasibility study	•	Carried out but the report writing is still in progress
3.3. Carry out intervention	•	Expected to start actively by March 2006
3.4. Conduct study to review	•	Yet to start (to start during and after the

results and lessons learned

interventions)

5.7. Organize Project Steering Committee (PSC) meeting	•	Brief report on TAC-HJKYBCC meeting held in June 2005
	•	Minutes of PSC meeting held in September 2005 available

2.0 Evaluation in IUCN

Evaluation has always assumed an important position in IUCN, as it is a vital responsibility of managers at policy, programme and project

Efficiency – It seeks the answer as to whether KYB is using its resources costeffectively. Whether the quality and quantity of results so far achieved justify the resources expended. We venture to see whether there is a more cost effective methods of achieving the particular result.

Impact – The report also tries to measure the positive, negative, primary and secondary

adequate data may not allow for such level of management. In this direction, all establishments are willing to cooperate in the drive towards water audit. This is one of the primary works that the KYB is focusing on.

4.3. Conflicts Between and Among Stakeholders – existence and annual recurrence of conflicts between different stakeholders especially pastoralists and farmers is a reality in the basin. For several years the herding community and the farmers' groups are in serious battle over the communality of the resources (both water and land) available. The understanding of everybody is the Land Use Act (1979) does not adequately cater for the needs of the herding groups, giving a lot to the farmers. Of course, as both groups are always on the field together, conflicts do happen.

One basic understanding of the cause of this is the fact of lack of adequate information during all times. Of course, should there be a forum at which all issues are spelt out clearly and discussed, then informed decision would be taken. Thus, the formation and strengthening of the stakeholder forum is an important area of the KYB.

4.4. Typha Invasion – The invasive spread of typha grass (known locally as "Kachalla") over the last 20 years along the water courses and subsequently the floodable lands (fadama) has been the single greatest threat to the

reason that the water audit exercise is given a lot of prominence in the works of the project.

4.5. Flood occurrence due to blockages of natural water/river courses – consequent to the presence of the typha in water courses

It needs to be indicated that consultancies are expensive activities in Nigeria, and for this reason, the Project has been having difficult times negotiating with the consultants. This causes a lot of delays when it comes to the execution of jobs.

Assets as vehicles, offices and housings, are being used efficiently, each for the purpose meant. So far all Project staff are recruited and each is drawing salary as in the budgetary

making. This must have accounted for the achievements highlighted above. It will certainly be even more with more time.

One major environmental problem that has been there within the past 20 years is to do with water management and the growth and invasion of typha grass, leading to diversion of river/stream flows and floods. Although the Project has not, as yet presented the result of water audit, there is a strong indication that with better water management system, the environmental situation/conditions will improve. Scientific means of addressing the siltation and typha invasion will be addressed. Free flows of the river natural systems will resume and human use of the nature in a more acceptable manner will also resume.

5.5. Sustainability: By design the Project is a participatory scheme. Groups are to be brought to the understanding of natural provisions and thus the utilizations of such resources should be within what they discuss and agree. Where this principle is accepted, group formations are concluded, strong sustainability scheme is, therefore, implanted. The difficulty might be the sustainability of meetings and the executions of meeting resolutions. It is in this respect that the different committees on Integrated Water Management need to be drawn strongly into the system.

It has been clearly indicated that the different state government ministries and parastatals are keen and have shown some levels of commitments to the Project. This is to be encouraged and strengthened.

6.0 Lessons Learnt

6.1 Project Structure

Existing project structure is built in a way that it will collaborate/link with the Nigeria water agencies (at the Federal, States and Local Councils) and stakeholder forum (made up of key project partners including the DFID-JWL, LCBC etc.). From information gathered both from the existing documents and field, it is important to state that the Project has gained tremendously that participatory approach is a viable vehicle for grassroot sustainable development. In which case, people come collectively to discuss openly their problems and especially feelings. Amicable positions are presented and informed decisions are made. This has been pointed out especially at the stakeholders meetings before the Project and as well as during its inception. Similarly, it is the opinion of many that the political class (at all levels) needs to be adequately mobilized and/or sensitized if meaningful achievements are to be made. It is the opinion of some of the people consulted that workshops targeting the two objectives of mobilization and sensitization be organised regularly. Of course, this group has been identified (in the structure) to provide consultations. Doing exactly what the people suggest is not demanding for something new.

Decision making is made simplified and scientific. Inputs are received from all levels of the existing structures – governors of riparian states, key parastatals of the federal, and states' water ministries, whpD0.0S38.6(a)70.4(re to) \mathbf{T} r

Although it has not been deeply looked by the Consultant, existing Project reports suggest that the processes of monitoring, reporting and assessment is very credible. Project Coordinator who reports to both the Project Direct

connected to the problem of inhibited water flow within the natural water course, causing more blockages, more typha and more flood. The water management charter within the basin is one key management tool that needs to be completed and tested in good time. Many of the stakeholders are looking forward to the draft and they all indicated their

Appendices

Appendix 1: List of Participants at First Stakeholder Workshop (5 – 6, January,

Haruna Abubakar	Kano Min. of Agric., Kano
Mohammed B. Saidu	Kano Min. of Agric., Kano
Engr. I.K. Musa	I&D-FMWR, Abuja
Mrs. Helen Eweka	I&D-FMWR, Abuja
Sani Bala	I&D-FMWR, Abuja
Nathan A. Song	I&D-FMWR, Abuja
S.I. Ogunlaja (Mrs)	I&D-FMWR, Abuja
Engr. Danladi Mohammed	HJRBDA, Kano
Salisu U. Kofar-Wambai	HJRBDA, Kano
Abdulsalam I. Yaroson	HJRBDA, Kano
Mohammed Haruna	HJRBDA, Kano
Mohammed J. Chiroma	HJRBDA, Kano
Dr. Hassan Bdliya	JEWEL
William A. Oladele	FMA, Kano
Veronica N. Muthui	IUCN

Personalities	Institution
Mr. E.C.J. Okafor	FMEnv
John K. Auta	FMEnv
R.K. Ahmed	FMEnv
Mrs Osusanya	FMEnv
Alh M.M. Umar	FMEnv
Mr. Paul Ibeka	FMWR
Umar Hassan	FMA&NR (NLPD)
M.S. Ahmed	FMA&NR
I.P. Davwet	NPC
Mrs. Joshua	NPC
Engr. Yahaya Dalha Kazaure	H-JRBDA
Dahiru Msheliza	CBDA
Ayoola Muraina	Chad Basin National Park
Alh. Yahaya Abubakar	J-MA&NR
Garba Sabo Abdullahi	J-MA&NR
Dr. Nasiru Musa	J-MA&NR
Musa S. Usman	J-MA&NR
Mohammed DanYaro	J-MEnv
Audu Audu Daya	Yobe State Min. of Agric
Alh. Ahmed Tika	Yobe State Min. of Agric. & Natural Res.
Muhammad I. Machina	Yobe State Min. of Agric & Natural Res.
Mohammed Maina Ibrahim	Yobe State Min. of Agric & Natural Res.
Garba Tahir Usman	Yobe State Min. of Env.
Mr. Absalom Kushi	Bauchi State Min. of Agric & Natural Res.
Mal. Umar Abba Tilde	Bauchi State Min. of Agric & Natural Res.
Alh. Liman Bello	Bauchi State Min. of Agric & Natural Res.
Alh. Muhammadu H. Shehu	Bauchi State Min. of Water Res.
Tsalha A. Zailani	Bauchi State Min. of Agric & Natural Res.
Dr. Dauda Abdullahi	Bauchi State ADP
Muhammadu G. Magaji	Bauchi State ADP
	Borno State ADP
	Borno State ADP
ge	Borno State ADP
Dawha	Borno State ADP
akar	Borno State ADP

Appendix 3: List of Identified Stakeholders (So far)

Mal. Muhammad Nasir Sani	Jigawa State Environmental Protection
Mohammed T. Hussaini	Jigawa State Environmental Protection
Mamuda Musa	Sec. Fadama Users, Nguru
Yau Mohammed	Jigawa State Cattle Breeders Ass.
Ismaila Abdullahi Hadejia	Secco Consultancy Services
Bello Abdullahi B.	Guri LGC
Alh. Musa Hassan Birnuwa	Kirikasamma LGC
Aliyu Musa	HOD Agric, Zaki LGC
Alh. Hassan Gazali	Chairman Caretake, Nguru LGC
Hajja Salamatu Bogo	Women in NEAZDP
Ahmad T. Barde	NEAZDP
Hajjia Hadiza Abdulwahab	Jigawa State Millennium Village Comm.
Furera Abdullahi B.	Jigawa State Min of Women Affairs
Elizabeth E. Dakama	Bauchi State Min. of Women Affairs
Mal. M. Garba	WOFAN
Mrs. Salamatu Garba	WOFAN
Titi Yakubu	DEC, Bauchi
Tasalla Chibok	WDI, Kano
Alh. Abubakar Dogona	Dagona Community Rep.
Alh. Ibrahim Sarkin Ruwa of Bade	Fisher's Association
Ahmad T. Inuwa	NCF, Kano Chapter
Abdullahi Musa I.	CEPSEEA, Kano
Kolawale Adebiyi	S.H.A. Rep., Damaturu, Yobe State
Alh. Grema	A.S.N.E.C. Nguru
Alh. Muhammad Sale – District Head	Bade Emirate Council
Prof. Adeniji	Afromedia/UNIMAID
Dr. Augustine U. Ezealor	Ahmadu Bello Univ, Zaria
Dr. M. Aminu-Kano	Savannah Conservation, Nigeria
Mal. Usman Dukku	ATBU, Bauchi
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