


RESUME CAPABILITY STATEMENT Adama NOMBRE	
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Name of the Consultant : NOMBRE Adama
Profession : Civil Engineer, Dams and Hydraulics Structures specialist
Date of birth : 1956 January 06
Marital status : Married, father of four children
Address : 01 BP 5687 Ouagadougou 01, tel: 226 70 24 43 85
E-mail: nadama@fasonet.bf - BURKINA FASO
Nationality : Burkinabè

AFFILIATION TO PROFESSIONAL ASSOCIATIONS:

- Founding Member of the Civil Engineers and Technicians Association of Burkina Faso. (A.I.T.B.).
- Founding Member of the National Committee of Large Dams of Burkina Faso
- Chairman of the National Committee of Large Dams of Burkina Faso
- Past Vice President of the International Commission on Large Dams (ICOLD)
- Past Chairman of the Africa Australasia Association of ICOLD
- Member of several Technical Committees of ICOLD;
- Vice president for the question 86, ICOLD Congress, Barcelona 2006
- Chairman of ICOLD AD HOC Committee on Capacity Building since 2009
- Member of the international steering committee of the International Conferences on Hydropower and Dams organised by H&D and Networks Events Ltd

AREAS OF EXPERTISE:

(3) Water resources management, (4) irrigation systems, (5) water supply and sanitation. Sub sectors include:

- Design, supervision and control of dams and hydraulic structures
- Dams construction monitoring and safety assessment with suggestions
- Dams and Hydraulics structures projects assessment
- Water resources development and management
- Contracts management for design and implementation according to the local and international regulations

TRAINING:

Institution :	International Institute for Water and Environment study (2IE) – BURKINA FASO
Date :	1980 - 1983
Degree(s) :	Civil Engineer option Hydraulic and rural equipments (June 1983)

Institution :	Institut Universitaire de Technologie (IUT) of Belfort, University of Franche Compté, Besançon- France
Date :	1977- 1979
Degree(s) :	University Technology degree in Electrical Engineering (June 1979)

Institution :	FAO
Date :	1984
Degree(s) :	Certificate of training in hydraulics projects appraisal

Institution :	IWACO (Rotterdam)
Date :	1989
Degree(s) :	Certificate of training in Geographical Information System, ARC INFO

PROFESSIONAL EXPERIENCE:**Professional positions :**

- Since May 2000** : Independent Consultant in Dams and Hydraulic Structures and Water Resources Management owner of the IFEC Engineering and consultancy firm
- 1998 – 2000** : Technical Adviser of the Bagré Dam Authority (MOB)
- 1995 – 1998** : Chief of the Technical Division of the Bagré Dam Authority
- Detailed study and tender documents supervision and control for the 2100 ha irrigation scheme and associated infrastructures of the Bagré Irrigation Project
- 1990 – 1995** : Chief of Civil Works of the Engineering Division of the Bagré Dam Authority
- Supervision and control of the detailed study of dam modifications. The Bagré dam is a multipurpose dam (hydropower and irrigation development with a height of 40m and a storage capacity of 1.7 billions m³. The irrigation potential is 30 000 ha and the capacity of hydro-power generation is 45 Gwh yearly);
 - Supervision of the constructions works and quality control for the dam implementation from initial work to the commissioning;
 - Monitoring of the first reservoir impoundment
 - Monitoring and surveillance of the dam during the first year and elaboration of the first year annual report on dam safety.
- 1988 – 1990** : Design Engineer in the Ministry of Water Resources of Burkina Faso
- Supervision and control of the feasibility study for 35 small dams and irrigation schemes totalising 1000 ha in the central and southern Burkina Faso
 - Supervision and control of the implementation of 700 ha of irrigation schemes in The Sourou Valley – Burkina Faso funded by the European Community Fund and the West African Bank for Development (FED and BOAD)
 - Technical assistance to local communities for small dams and water structures including the Wahablé Dam (10m height and the Sarma dam of 6m high)
- 1986-1988** : Design Engineer for the Engineering Consulting Firm SERAGRI
- Design of the Niofila Irrigation Scheme downstream of the Douna Dam with an irrigated area of 500 ha funded by the European Union Fund (FED)
 - Feasibility studies for the Comoé Dam (height of 25 m and storage capacity of 38 millions of m³)
 - Design and studies for the Danfina, Tô and Sala dams in the Sissili Province of Burkina Faso (height ranging from 6 to 10 m) for the Canadian Micro Project agency.
 - Detailed study of the Zoungou Dam (height of 14m and a storage capacity of 5 millions m³) in the Ganzourgou Province of Burkina Faso
 - Detailed study of the Koulniere Irrigation Scheme in Burkina Faso (irrigated area of 40 ha) for the NGO SOS SAHEL.
- 1984 – 1986** : Design Engineer for the Office of Dam and irrigation Ministry of Water, Burkina Faso

- Design study of the Wahablé Dam (height of 10m) in the Balé Province Burkina Faso
- Hydrological studies for the rehabilitation of Ouagadougou Dams
- Detailed study of the rehabilitation of the Pouytenga Dam in the Kouritenga Province, Burkina Faso.

- 1983 – 1984** : Design Engineer for the Western Regional office of water resources department Burkina Faso
- Feasibility Study of the Loropéni dam in the Poni Province of Burkina Faso
 - Monitoring and quality control of water supply works for the City of Bobo-Dioulasso in Burkina Faso

Consultancies:

Project Title	COMOE Dam
Subsectors	Water Resources Management and Water Supply and Sanitation
Location	BURKINA FASO
Duration	Since September 2010
Client	AGETEER
Responsibilities	- Team Leader for the TA to AGETEER for the investigations and repair works of the dam

Project Title	Samendéni Dam Project
Subsectors	Water Resources Management and Water Supply and Sanitation
Location	BURKINA FASO
Duration	Since June 2010
Client	Programme de développement Intégré de la Vallée de Samendéni (PDIS) – BOBO Dioulasso Burkina Faso
Responsibilities	- Member of the international Board of Experts (earth dam expert) for the safety of the Samendéni Large dam with a storage capacity of 1 billion m ³ , a height of 30 m above the river bed and 1,8 millions m ³ of earthfill

Project Title	Detailed design and Tender documents Elaboration for the dams of Gourgou and Ziou
Subsectors	Water Resources Management and Water Supply and Sanitation
Location	BURKINA FASO
Duration	From February 2010 to June 2010
Client	Projet ALG III Liptako Gourma
Responsibilities	- Lead a multidisciplinary team and conduct Detailed design and tender documents elaboration for the Ziou and Gourgou dams and irrigated perimeters

Project Title	Annual inspection of height dams for the Burkina Faso Water supply Company ONEA
Subsectors	Water Resources Management and Water Supply and Sanitation
Location	BURKINA FASO
Duration	From January 2010 to March 2010
Client	Office National de l'Eau et de l'Assainissement - Ouagadougou
Responsibilities	- Lead a multidisciplinary team and conduct detailed inspection, assessment of the the safety of the, Itengué, Ouahigouya, Tandjari, Loumbila, Ouaga 1 &2, et Koudougou dams including the large dams of Ziga and Yakouta

Project Title	Ouagadougou dams emergency repairs
Subsectors	Water Resources Management and Water Supply and Sanitation
Location	BURKINA FASO
Duration	October 2009 to May 2010
Client	Agence d'exécution des Travaux Eau et Equipement Rural (AGETEER)

Responsibilities	Emergency evaluation of the dam damage after September first floods and define the emergency repairs and conduct the repairs works for the Ouaga dam n°3.
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Project Title	MOZAMBIQUE COMPACT DEVELOPMENT
Subsectors	Water Resources Management and Water Supply and Sanitation
Location	MOZAMBIQUE
Duration	Since June 2008
Client	Millennium Challenge Corporation (MCC- USA)
Responsibilities	<ul style="list-style-type: none"> - Review of the TOR for Feasibility and Detailed Studies for the Nacala Dam Rehabilitation and heightening for Water Supply of the city of Nacala - Travel into Mozambique for nacala dam site inspection and for the kick off meeting - Review the Nacala dam FS and Detailed design studies

Project Title	BURKINA FASO COMPACT DEVELOPMENT
Subsectors	Water resources management and irrigation systems
Location	BURKINA FASO
Duration	Since September 2007
Client	Millennium Challenge Corporation (MCC- USA)
Responsibilities	<ul style="list-style-type: none"> - Assessment of the Léry Gates and associated infrastructures - Review of the Léry project studies - Review of the due diligence studies - Water resources assessment of the Mouhoun - Sourou Rivers system - Water resources assessment of the Comoé River - Comoé dam , Toussiana and Lobi assessment and heightening possibility investigations - Member of Burkina technical negotiations team with MCA, Burkina Faso - Contribution to the elaboration of the Compact documents such as the Investment Memo - Review of the TORs for the procurement of Water Management and the irrigation project manager and detailed studies for the Léry gates and Di irrigation scheme. - Review of the Léry gates and associated works and Di feasibility studies - Assist and support the Water and irrigation team of the MCA-BF as MCC independent engineer - Participate in various work shops, work session with the stake holders - Etc.

Project Title	DIAMEL DAM RECONSTRUCTION PROJECT
Subsectors	Water Resources Management and Irrigation Systems
Location	REPUBLIC OF SENEGAL
Duration	October 2003 to November 2007
Client	SAED
Responsibilities	<ul style="list-style-type: none"> - Assessment and establishment of the causes of the dam failure - Elaboration of the detailed design and specifications for the reconstruction of the Dam

Project Title	ZIGA DAM PROJECT
Subsectors	Water resources management and water supply and sanitation
Location	Burkina Faso
Duration	November 1996 to October 2006
Client	ZIGA DAM AUTHORITY – ONEA (Burkina Faso)
Responsibilities	<p>Team member of an International Board of Experts including International experts (Late Prof Victor DE MELLO from Brazil; Prof Raymond LAFITTE from Switzerland and Gabriel JORGE from France):</p> <ul style="list-style-type: none"> - Review of the design of the Ziga Dam (with a height of 30 m above the foundations and a storage capacity of 200 millions m³) - Project implementation oversight and monitoring - surveillance and monitoring supervision of the Dam - Dam safety assessment after the first impoundment

Project Title	BURKINA FASO NORTHERN WATER RESOURCES DEVELOPMENT
Subsectors	Water resources management and irrigation
Location	Burkina Faso
Duration	November 2006 – June 2008
Client	PROJET DE VALORISATION DES EAUX DU NORD (PVEN) Ministry of Agriculture, Hydraulic and Fisheries, Burkina Faso
Responsibilities	- Design and Studies of the Liptougou Dam (7m high and 50 millions m ³ of storage capacity) the Pensa dam (6m high and 15 millions m ³ storage capacity) and Andékanda Dam (20 m high and 8 millions m ³ storage capacity) in the Northern and Eastern region of Burkina Faso

Project Title	AGRICULTURAL DEVELOPMENT DOWNSTREAM OF SMALL DAMS IN THE EASTERN REGION OF BURKINA FASO
Subsectors	Water resources management and irrigation
Location	BURKINA FASO
Duration	November 2000 – June 2006
Client	PROJET PETITS BARRAGES DE L'EST (PPB EST) Ministry of Agriculture, Hydraulic and Fisheries, Burkina Faso
Responsibilities	- Design and Study of the Zanré dam (8m high and 3 millions m ³ of storage) - Review the studies for six small dams in the eastern and southern regions of Burkina Faso

Project Title	GUITTI DAM PROJECT FOR WATER SUPPLY TO THE CITY OF OUAHIGOUYA, BURKINA FASO
Subsectors	Water Resources Management and Water Supply and Sanitation
Location	BURKINA FASO - Northern Region
Duration	September 2004
Client	COWI CONSULT - DENMARK
Responsibilities	Provide technical assistance and quality assurance for the feasibility study of the Gutti dam (height 10m and a storage capacity of 40 millions m ³) for the water supply project of the city of Ouahigouya

Project Title	YAKOUTA DAM PROJECT
Subsectors	Water resources management and Water Supply and Sanitation
Location	BURKINA FASO – Sahel Region
Duration	September 2002 to April 2004
Client	DIRECTION GENERALE DE L'APPROVISIONNEMENT EN EAU POTABLE - Ministry of Agriculture, Hydraulic and Fisheries, Burkina Faso
Responsibilities	- Review of the feasibility study for the Yakouta dam (height of 10m and a storage capacity of 26 millions m ³) - Hydrological studies and design of the dam - Engineering control of the dam implementation - Control and safety assessment after the first year of impoundment

Project Title	SAMENDENI DAM PROJECT- BURKINA FASO
Subsectors	Water resources management hydro-power and irrigation systems
Location	BURKINA FASO – HOUET PROVINCE
Duration	JUIN 2003 to December 2006
Client	PROJET DE DEVELOPPEMENT DE LA VALLEE DE SAMENDENI - Ministry of Agriculture, Hydraulic and Fisheries, Burkina Faso
Responsibilities	- Review of the Feasibility and detailed studies in the framework of a board of International Experts of the Samendéni dam (height of 20m, storage capacity of 1 billion m ³ , hydro-power capacity of 12 Gwh and a planned irrigation scheme of 1500ha) - Feasibility study of the river banks protection and reclamation downstream

Project Title	LOUMBILA DAM REHABILITATION AND UPGRADING PROJECT – BURKINA FASO
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Sub sectors	Water resources management and Water supply and Sanitation
Location	BURKINA FASO – OUBRITENGA PROVINCE
Duration	November 2002 to May 2004
Client	OFFICE NATIONAL DE L'EAU ET DE L'ASSAINISSEMENT (ONEA)
Responsibilities	<ul style="list-style-type: none"> - Feasibility studies and tender documents for the rehabilitation and upgrading of the Loubila dam (height of 12 m and storage capacity 40 millions m³) - Assistance for the selection of Contractors - Supervision and quality control of the works

Project Title	OUAGADOUGOU AND BOBO-DIOULASSO DRAINAGE MASTER PLAN IMPLEMENTATION DESIGNS
Sub sectors	City Drainage
Location	BURKINA FASO
Duration	January 2002 to April 2002
Client	PROJET D'AMELIORATION DES CONDITIONS DE VIES URBAINES (PACVU)- BURKINA FASO
Responsibilities	<ul style="list-style-type: none"> - Elaboration of an implementation Plan for the master plan of Drainage of the two large cities of Burkina Faso (Ouagadougou and Bobo Dioulasso)

Project Title	PRIVATE IRRIGATION DEVELOPMENT – BURKINA FASO
Sub sectors	IRRIGATIONS SYTEMS
Location	BURKINA FASO
Duration	January to February 1994 and April 1995
Client	REGIONAL OFFICE OF WORLD BANK – BURKINA FASO
Responsibilities	<ul style="list-style-type: none"> - Irrigations systems performance evaluation - Review of technology and techniques used by private developers in irrigation - Elaboration of policy framework for the development of Private irrigation systems - Participation in Worksoop with stakeholders for the policy validation

Project Title	DIAPAGA DAM
Subsectors	Water Resources Management
Location	BURKINA FASO
Duration	January to September 2000
Client	District of Diapaga – Burkina Faso
Responsibilities	<ul style="list-style-type: none"> - Assessment of the causes of the dam failure - Definition of responsibilities of parties and arbitration for the dispute

Project Title	BURKINA FASO WESTERN WATER RESOURCES MANAGEMENT AND DEVLOPMENT
Subsectors	Water Resources management
Location	BURKINA FASO
Duration	February to May 1998
Client	PROGRAMME RESO – BOBO DIOULASSO BURKINA FASO
Responsibilities	<ul style="list-style-type: none"> - Surface water resources assessment and strategic plan elaboration as a basis for the elaboration of Water Resources Management and Development Plan

Project Title	PROJET ALG II
Subsectors	Water resources management and irrigation systems
Location	BURKINA FASO
Duration	November 1997 to January 1998
Client	PROJET ALG II è Burkina FASO
Responsibilities	<ul style="list-style-type: none"> - Assessment of the irrigation system studies, implementation and operation - Assessment of institutional framework for operation and maintenance - Formulation of recommendations for deficiencies and defects correction and operational improvement

Project Title	BOULIGNOUDI DAM PROJECT
Subsectors	Water resources management and irrigation systems
Location	BURKINA FASO
Duration	April 1999
Client	PROGRAMME SAHEL BURKINA GERMAN COOPERATION
Responsibilities	Elaboration of TORs for the design and ESA studies of the Boulignoudi Dam

Project Title	OUAGDAOUGOU URBAN MASTER PLAN DEVELOPMENT
Subsectors	Water resources management and housing
Location	BURKINA FASO
Duration	February to July 1997
Client	PROJET VILLAGE CENTRE BANLIEU DE OUAGADOUGOU (PVCBO)- BURKINA FASO
Responsibilities	<ul style="list-style-type: none"> - Water resources assessment of the Massili river - Water resources planning and requirements for the city development - Coordination of the multidisciplinary experts team

Project Title	SMALL DAMS PROJECT OF WESTERN BURKINA FASO
Sub sectors	Water resources management and irrigation systems
Location	BURKINA FASO
Duration	April 1997 to September 1997
Client	PEBASO – GERMAN COOPERATION
Responsibilities	<ul style="list-style-type: none"> - Survey and description of small dams and irrigation schemes features in Burkina Faso with reservoir holding capacity up to 3.5 million m³

Project Title	INTEGRATED RURAL DEVELOPMENT PROJECT – BURKINA FASO
Subsectors	Water resources management and irrigation systems
Location	BURKINA FASO
Duration	March 1996
Client	PDRI/HKM – FRENCH COOPERATION FUNDED PROJECT
Responsibilities	<ul style="list-style-type: none"> - Feasibility study of the second phase of the project of water resources management and wet lands reclamation and development in the Houet, Kossi and Mouhoun Provinces of Burkina Faso within a framework of an integrated rural development Project.

Project Title	COMOE DAM
Subsectors	Water resources management and irrigation systems
Location	BURKINA FASO
Duration	November 1995
Client	SOSUCO
Responsibilities	<ul style="list-style-type: none"> - Diagnostic of the dam foundations leakage and evaluation of dam safety (height of 25m and a storage capacity of 38 millions m³)

PUBLICATIONS:

- Scientific and technical papers:

- Guidelines for the Studies of a dam project – Journal “Civil Constructions” (1990)
- The diversion of Nakambé River during the construction of Bagré dam. Documentation Centre on Water Newsletter (1996)
- Water resources and rivers development in Burkina Faso. Nakambé River case – Journal “Civil Constructions” (1997)
- Current water resources development projects in Burkina Faso – The International Journal on hydropower and Dams – Volume six issue six, 1990
- Harnessing Water resources in Western Burkina Faso : The Samandéni Dam Project – The International Journal on Hydropower and Dams – issue six 2002
- Water resources, Hydro and Sustainable development Challenges in Burkina Faso – Hydropower and Dams Issue Six, 2004

- Water Resources and energy challenges in Burkina Faso. Hydro 2004 Porto Portugal
- The situation of water resources and energy in West Africa. 22nd International Congress on Large dams –Barcelona – Spain June 2006
- The safety works of Ziga dam
First National Congress on Dams Burkina Faso –December 2006
- Les solutions à faibles coûts pour le renforcement des capacités des barrages réservoirs et pour l'amélioration de leur sécurité au 22^e Congrès de la Commission Internationale des Grands Barrages à Barcelone en juin 2006 en collaboration avec Millogo Founémé et Somda Eloi
- Large multipurpose Dams, a tool for Integrated water resources management in the Sahel region of Africa. Symposium on Dams and societies in the 21 century- Barcelona June 2006 With the collaboration of Millogo Founémé
- Water resources and energy resources in West Africa- Africa Australasia Association of ICOLD annual meeting - Barcelona June 2006.
- Dams safety management in Burkina Faso – June 2007 –St Petersburg 75^e Executive meeting of ICOLD
- Capacity Building; a Critical issue in Africa- Hydro 2007 Granada October 2007
- Perspectives of Development of small Hydro in Burkina Faso - Hydro 2007 Granada (Spain)October 2007
- The needs for Hydropower development in Africa – ICOLD 23rd Congress – Brazilia May 2009
- Low cost solution for improving small dam storage capacity and safety- The concrete fuse blocks case of Wedbila dam in Burkina Faso- ICOLD 23rd Congress – Brasilia May 2009

- **Books and booklets :**

- Handbook on Hydraulic design of small dam's spillways in Burkina Faso. 1988
- Dams safety in Burkina Faso. June 1995
- Quality control and supervision of dam's construction. May 2000

PARTICIPATION IN INTERNATIONAL CONFERENCES ON DAMS

- 18th world congress of large dams at Durban in 1994 ;
- 19th congress of large dams at Florence in 1997 ;
- 20th world congress on large dams at Beijing in 2000 ;
- 21st world congress on large dams at Montréal in 2003 ;
- 73rd Annual Conference of ICOLD in May 2005 in Teheran IRAN
- 22nd World Congress on Large dams at Barcelona in 2006
- 75th Annual meeting of ICOLD in June 2007 in St Petersburg in Russian Federation:
- 76th Annual Meeting of ICOLD in June 2008 in SOFIA Rep of Bulgaria
- 23rd ICOLD Congress in May 009 in Brazilia
- 77th Annual meeting of ICOLD In Hanoi Vietnam, May 2010
- 78th annual meeting of ICOLD, Luzern Switzerland May to June 2011
- HYDRO 2004: International Conference on hydro-power at Porto, Portugal in 2004.
- Hydro 2005 : Villach Austria October 2005
- Hydro 2006 : Porto Carras September 2006 Greece
- Hydro 2007 : Conférence Internationale sur l'Hydroélectricité à Grenade en Espagne en Octobre 2007
- Hydro 2008 ; Slovenia
- Hydro 2009 : Lyon in France
- Hydro 2010 : Lisbon in Portugal
- Hydro 2011 : Prague, Czech Republic

LANGUAGE EXPERIENCE:

<i>Foreign Languages</i>	<i>Conversation</i>	<i>Reading</i>	<i>Writing</i>
French	Excellent	Excellent	Excellent
English	Medium	Excellent	Medium
National Languages			
<i>Bisa</i>	<i>Good</i>		
<i>Mooré</i>	<i>Good</i>		
<i>Dioula</i>	<i>medium</i>		