



Water Division

Enplan Group



LANDMARKS



Glossary

As	Agricultural Studies	Fs	Feasibility Studies	Pl	Planning & Studies
Cd	Preparation of Contract Documents	Gi	Geotechnical Investigations	Pm	Project Management
CB	Capacity Building	IC	Institutional Capacity	Rd	Re-design
Dr	Design Review	Hs	Hydrologic Survey	Rs	Rehabilitation of Existing Schemes
ESA	Environmental and Sociological Assessment	Ls	Location Survey	Sn	Site Investigation
Es	Economic Studies	M&E	Monitoring and Evaluation	Sp	Project supervision
Fe	Final Engineering	Mp	Preparation of Master Plan	St	Studies
		Pe	Preliminary Engineering	Su	Survey
		PF	Policy, Framework and Legislation		

ENPLAN GROUP

Enplan Group was set up by quality driven professionals who pooled their resources together in 1970. Since then, it has maintained a standard of excellence in all fields of development making it a leading consultants firm.

Enplan Group is a firm of consultants with professional practice embracing the full range of activities in engineering, environmental and rural development. The firm carries out feasibility studies, reviews, investigations, planning, designs and construction supervision, project management of various projects for governments, individuals and bilateral and multilateral institutions.

The firm has a lot of experience in capacity building, institutional development, providing advisory roles to clients and assessing the various modes of operation and maintenance of projects.

The company is divided into 5 main divisions:



ORGANIZATIONAL STRUCTURE

AIM: To create a widely based organization, embracing persons of different backgrounds as an employee owner firm.

SERVICE: To provide excellent services at standards acceptable world wide.

TECHNOLOGY: To provide appropriate techniques and technology indigenous to the area of operation.



LANDMARKS



Irrigation and Drainage

Zobe Irrigation Project
(Dr, Rd, Sp)

Review of Public Irrigation Sector in Nigeria
(Pl, St)

Hadejia Valley Project
(Dr, Rd, Sp)

Savannah Sugar Company Irrigation Project
(Fe, Sp, Pl)

Jibiya Irrigation Project
(Dr, Rd, Sp)

Ibu River Project
(Pl, Fs)

Lake Geriyo Irrigation Project – Drainage
(Su, St, Fe, Cd)

Ukwa Land Reclamation Project - Drainage
(Fs, Dp, As)



Agricultural Development

Commercial Agricultural Development

Programme - Irrigation Component
(Planning & Project Appraisal)

Accelerated Rice Production in Niger River Basin
(Pl, As, Fs, Es)

Small Scale Rice Project in Bida, Niger State
(As, Fs, Fe)



PROFILE

IRRIGATION AND DRAINAGE

Enplan Group had been involved in a wide range of projects in the irrigation and drainage sector and has extensive experience in typically arid, semi arid and wet areas.

In Nigeria, due to the diversity of land forms and farming practices, Enplan Group has gained a lot of experience in projects which have stark variations in climate, soils, culture and type of land tenancy.

The firm had been involved in the detailed design and construction supervision of canal and drainage systems for a large variety of soils requiring different supply systems from unlined canals through clay linings, concrete linings to piped systems and precast forms. Also various manual and automated control structures and canal networks have been designed to suit different requirements in order to facilitate efficient distribution and management of irrigation water.

At Enplan Group, Irrigation and Drainage is viewed as a multi-disciplinary project. Consequently, Enplan Group has integrated Community Awareness and Community Participation into our irrigation and drainage projects. It is our belief that sustainable development can only be attained when the communities are involved. Most projects we have carried out using this approach have been successful.



AGRICULTURAL DEVELOPMENT



The firm's experience in agricultural development has included irrigated agriculture involving the design of gravity canals, piped irrigation systems (sprinklers, drip etc) and flumes (elevated pre-cast canals), etc. Major projects have often necessitated the study and improvement of the agricultural practice within a particular project area.

The agricultural investigations have included detailed studies, survey and sampling of the ecology, agricultural production, identification of crop varieties, yields, production rates, cost of production and income and proposing methods of improving the agricultural output for the different areas encountered.



LANDMARKS

Water Supply and Sewerage



Water Supply and Sanitation Sector Reform Programme
(Pm, Rs, CB, IC, PF, M&E))

Institutional Development Component of the National Water Resources Rehabilitation Project (Technical Services to Ogun, Edo and Kebbi States and Financial Services to Ogun and Niger States)
(IC, Cb)

Water Supply Expansion for University of Makurdi
(Dr, Sp)

Azare Water Supply Scheme
(Fs, Fe, Cd)

Zobe Water Supply Project
(Dr, Sp, Su)

Sanitation and Hygiene Education component of the Katsina First Multi State Water Project
(ESA)

Gboko - Yandev Water Supply Project
(Dr, Rd, Cd, Sp)

Anti Salinity Weir - Lagos State Water Cooperation
(Dr, Sp)

Ikeduru Dam and Water Supply Project
(Fs, Fe, Cd, ESA)



Groundwater Development

Federal Rural Water Supply Project in Sokoto, Katsina, Zamfara and Kebbi states
(Sp)

Hydrological Mapping of Nigeria covering Hydrological Area 1 (HA 1)
(Hs, Gi, Ls, Mp)

Monitoring and Management of Hydro-meteorological Stations, Boreholes and Wells in Anambra and Imo River Basins.
(Hs, Ls, M&E)



WATER SUPPLY AND SEWERAGE

PROFILE

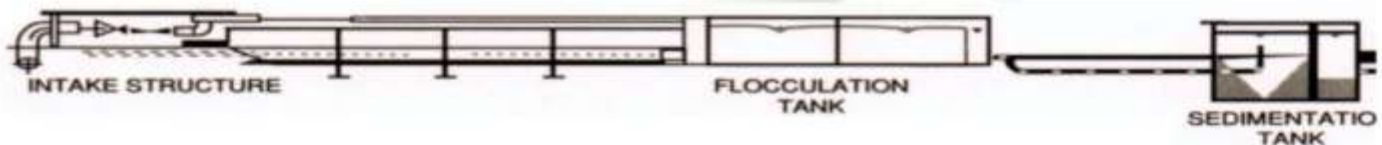
The firm provides a comprehensive consultation service in all aspects of water supply both for the urban and rural sectors. The firm has gained experience and developed expertise in sanitation and public health engineering including the distribution of potable water both for urban and rural communities, institutional development, economic, optimization and management studies of water supply systems.

The Firm has been involved in the investigation, survey, planning and engineering designs of a number of water supply and sewerage schemes.



The scope of works carried out have Included:

- Water resources investigation and development;
- Population: studies and demand forecasting;
- Geophysical and geotechnical survey;
- Engineering design of intake works, treatment works, transmission and distribution systems, storage works and pumping stations;
- Planning and design of sewerage schemes;
- Financial, administrative, legal and training components.



GROUND WATER DEVELOPMENT

Enplan Group has been involved in many groundwater development projects. The Firm has helped in advancing groundwater development, modern techniques and practice especially in the Northern Arid Zone of Nigeria.

The group has been involved in:

- The interpretation of geophysical surveys;
- Groundwater development planning;
- Water sampling;
- Hydrological data collection and mapping;
- Borehole drilling and washbores development;
- Litho-logical logging of boreholes.





LANDMARKS

Dams and Hydropower



Kashimbilla/Gamovo Buffer & Multipurpose Dam
(Fs, Fd, Ps)

Middle Gurara Hydropower Dam
(Hs, ESA, Fs)

Sabke Dam
(Pl, Fs, Su, Gi, Fe, Cd)

Jibiya Dam
(Dr, Rd, Gi, Sp, PM)

Kiri Dam
(Pl, Fs, Su, Gi, Fe, Cd, Sp, PM)

Ibu Dam
(Pl, Fs, Su, Gi, Fe, Cd)

Lower Gurara Hydropower Dam
(Fs)

Mambilla Hydropower Dam
(Fs, Gi, Sp)

Ikedurn Dam
(Pl, Fs, Su, Gi, Fe, Cd)

38 Small Earth Dams in Katsina State
(Pl, Fs, Su, Gi, Fe, Cd, Sp)



River Basin and Water Resources

Niger River Valley Basin Studies
(Pl, Fs, As, Pm)

Jare River Basin Studies
(Fs, Su, Fe, Cd, Sp, PM)

National Water Resources Inventory Survey of the National Water Resources Master Plan
(Pl, Mp)

Pre-feasibility Study of the Cross River Basin
(Pl, Mp, As, Es, Pe)

Imo River Basin Pre-feasibility Studies
(Pl, Mp, As, Es, Pe)

Hydro-Network in Cross River Basin
(Hs, Mp)



DAMS AND HYDROPOWER

Since inception in 1970 Enplan Group has undertaken numerous dam and hydropower projects. The first major dam design by Enplan Group was the Kiri Dam at Numan, Gongola State for the Savannah Sugar Company.

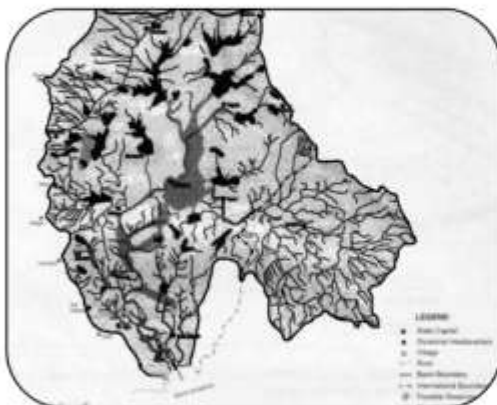
The firm had been responsible for a large number of projects involving all kinds of dams. Typical of the firm's experience is the feasibility studies, detailed design, and contract documentation and construction supervision for 38 small earth dams located in different parts of Katsina State in Nigeria.

Enplan Group was involved in the redesign of the 3.68 km dam at Jibiya under Jibiya Irrigation cum Water Supply Project for the Federal Government of Nigeria. The dam which was the first of its kind in Africa was redesigned incorporating a geo-dam (which comprises geo-membrane composites) on the upstream slope and geo-textiles on the downstream to provide protection to the aeolic sand embankment. The firm has also been involved in dam safety appraisals covering major and small dams all over Nigeria.

PROFILE



WATER RESOURCES AND RIVER BASIN DEVELOPMENT



At Enplan Group River Basin Development is treated in a holistic and involves Integrated Water Resources Management (IWRM). Enplan Group promotes the coordinated development and management of water, land and other resources in order to maximize the resultant benefits.



LANDMARKS



Port development and Marine works

Dredging of the lower River Niger
(St, Hs)

Federal Ocean Terminal One
(Hs, Dr, Fe)

Stubb and Widenham Creeks
(Sn, St)

Ibi River Port Development
(St, Dr)

Development of Naval Base, NNS Akaso
(Fs, Pe, Fe, Mp)

Customs Jetties at Oron, Ikan and Calabar
(Hs, Gi, Fe)

Upgrading of Kidney Island Slipway
(Fe)



Erosion, Flood Control and Land Reclamation

Erosion Project at Obollo-Afor
(Sp)

Erosion Control at Olumbanasa, Anambra State
(Su, Pl, Fe, Cd)

Erosion and Flood Control at Nnewi
(Fs)

Storm Bank Erosion Control at Odekpe
(Su, Pl, Fe)

Storm Water Drainage Onitsha
(Su, Pl, Cd, Sp)

Hadejia Flood Control Project, Jigawa State
(Hs, Fe, Cd)



PROFILE

RIVER STUDIES, PORT DEVELOPMENT & MARINE WORKS

Enplan Group since its establishment has successfully carried out many water engineering and coastal protection projects and has had considerable involvement in river studies, port development and coastal and creeks related works. Since its inception, the firm has also provided expert services for the development of both river and sea ports, navigation canals and other marine works.

Enplan Group in association with international consultants had been actively involved in the studies and design of the Oguta Port including the -Access Navigation Channel, the Aaokuta River Port, Ibi River Port and several other marine works.

Enplan Group is currently carrying out the studies on the development of the River Niger Valley Basin covering the states of Kebbi, Niger, Kogi, Kaduna, Kwara, Benue, Taraba and Adamawa.

Of particular importance is the fact that Rivers Niger and Benue, for instance are the two major rivers in the country which are used for navigation.



EROSION, FLOOD CONTROL AND LAND RECLAMATION



The primary objectives of these kind of assignments are to identify and study the flood processes, within the identified area, and to assess, recommend and design control measures to alleviate the flooding problems.

The firm has been involved in major land reclamation and flood schemes alleviation within Nigeria and has gained a lot of expertise in the design of reclamation works.

RESEARCH AND REVIEWS

Accelerated Rice Production

The Food and Agriculture Organization of the United Nations (FAO) in association with Enplan Group carried out studies to determine means of improving, modernizing and accelerating the production in Nigeria, using the Taba Shonga Scheme as a case study. The study was part of a presidential initiative for Accelerated Rice Production in the Niger River Basin. For more information see www.enplan.org/tadashongarice.pdf

Review Of Public Irrigation Sector In Nigeria

Enplan Group assisted by the Food and Agriculture Organization (FAO) carried out the review of Public Irrigation Sector in Nigeria (ROPISIN). The review comprehensively assessed most of the public sector irrigation schemes all over Nigeria as well as some private schemes. The status report of the review formed the basis for the production of guidelines and strategy by the FAO used for the preparation of the National Irrigation Policy. For more information see www.enplan.org/ROPISIN.pdf.



Head Office:

Enplan Group
2nd Floor, 18, Johnson Street, Ilupeju
P. O. Box 4177, Marina
Lagos, Nigeria
Tel: +234 1 8787 131
Fax: +234 805 801 2349
Email: eg.los@enplan.org

Abuja Regional Headquarters:

Enplan Group
No. 16 Durban Street, Wuse II
P.M.B. 5009 Wuse P.O.
Abuja, Nigeria.
Tel: +234 803 305 9606
Fax: +234 805 801 2349
Email: eg.abj@enplan.org

Enugu Regional Headquarters:

Enplan Group,
2, Ekulu Terrace GRA
P.M.B. 01200 Enugu
Enugu State, Nigeria
Tel: +234 803 312 1890
Fax: +234 805 801 2349
Email: eg.enu@enplan.org

International:

Enplan Group Inc.
1254 Summerside Drive,
Edmonton, Alberta,
T6X 1B1, Canada
Tel & Fax: +1 780 430 6867
Email: EGI@enplan.org