

FIG 7.2-12 Water Consumption by Category and Region in 1998

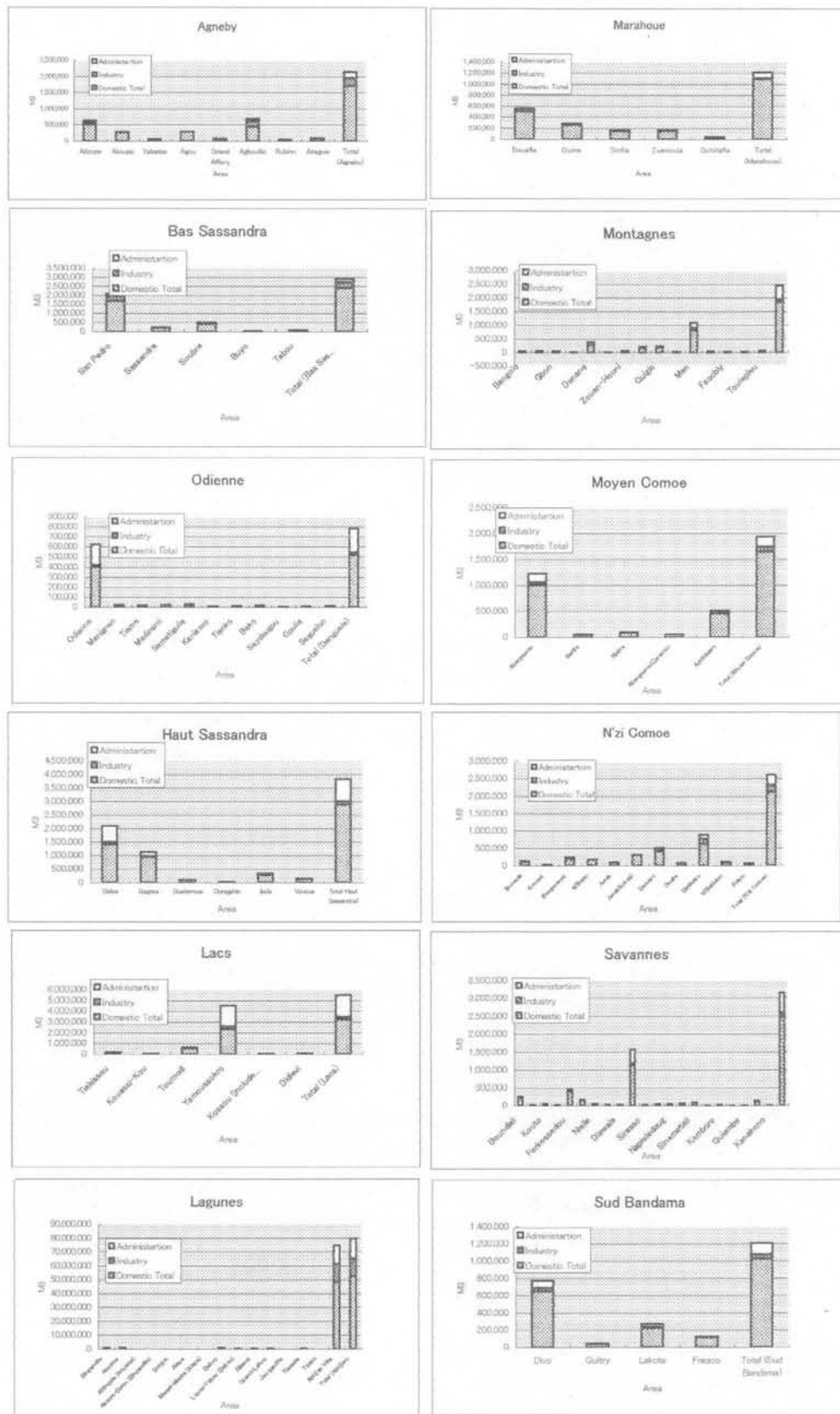
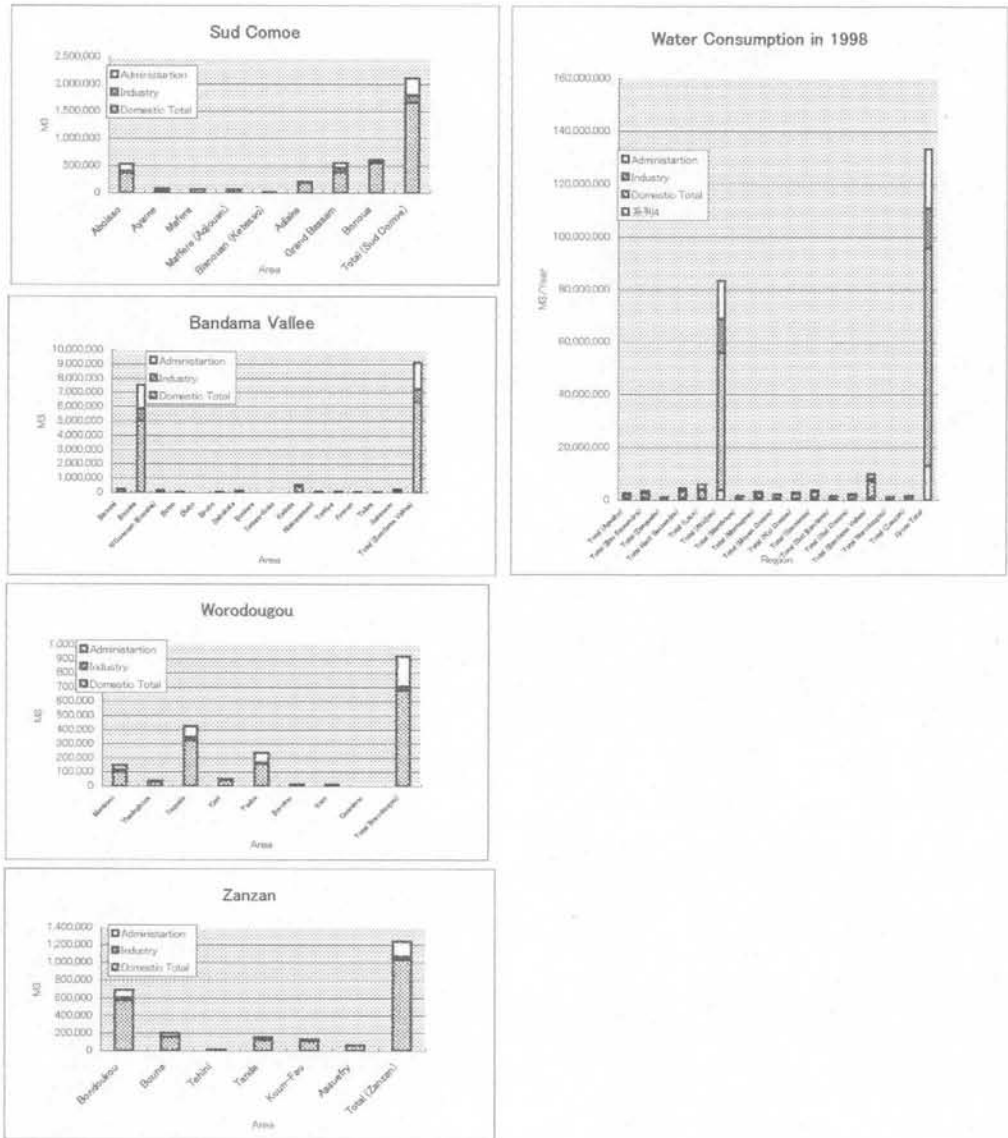


FIG 7.2-12 Water Consumption by Category and Region in 1998

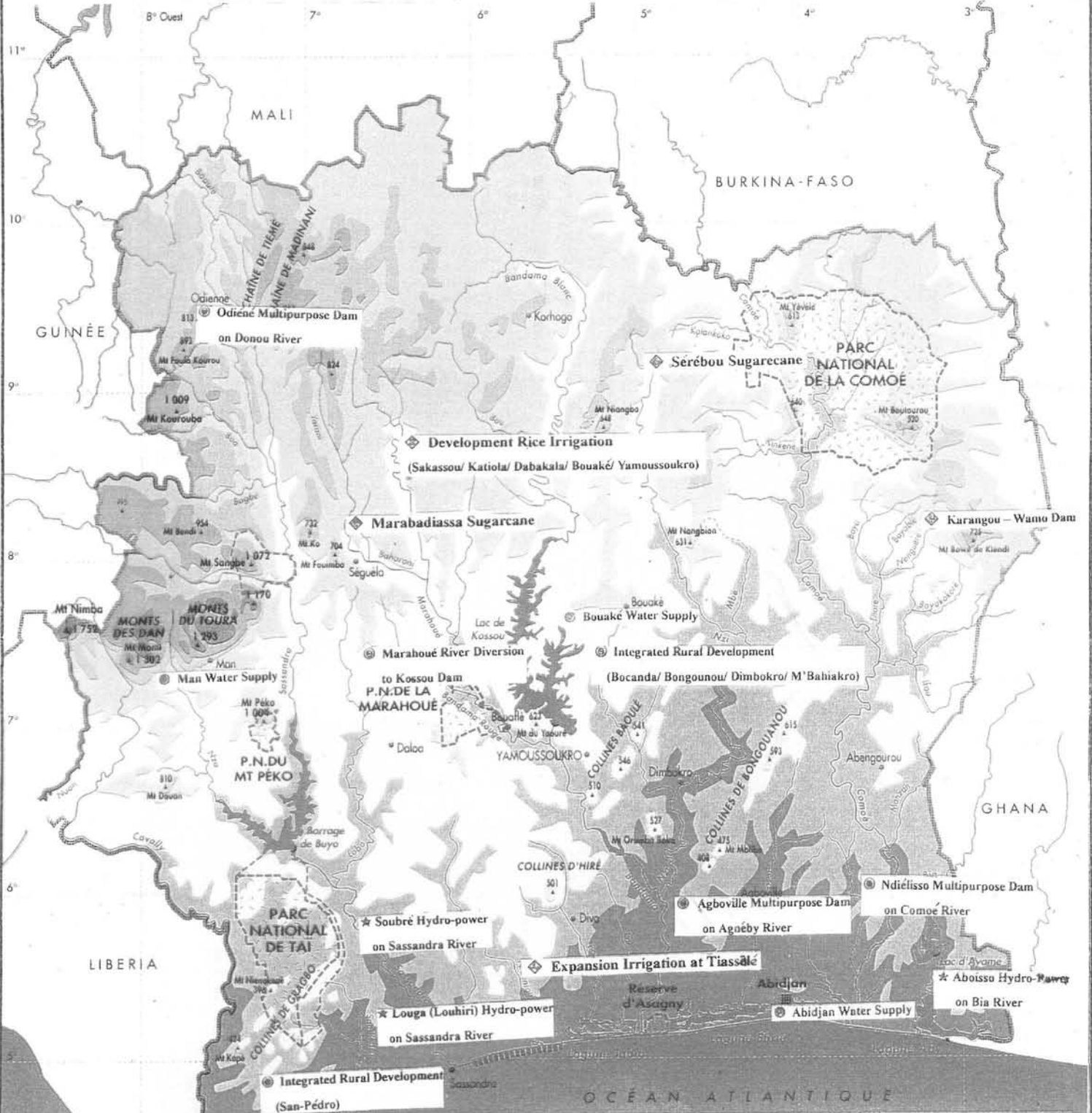


8 WATER RESOURCES DEVELOPMENT PLANS

PLAN D'AMENAGEMENT DES RESSOURCES EN EAU WATER RESOURCES DEVELOPMENT PLAN

- ⊙ : Priority Projects on Integrated River Surface Water Development
- ◇ : Priority Projects on Agricultural Development
- ⊙ : Priority Projects on Domestic Water Development
- ★ : Priority Projects on Hydroelectric Power Development

- Projets Prioritaires Intégrés Pour l'aménagement Des Eaux De Surface Des Fleuves
- Projets Prioritaires Pour L'aménagement Agricole
- Projets Prioritaires Pour L'aménagement d'Eau Domestique
- Projets Prioritaires Pour L'aménagement Des Barrages Hydroélectriques



Altitudes	Paysages	
1 752 m	Chaînes et hauts sommets	Buttes tabulaires
700	Hauts plateaux du Nord	Dômes granitiques
500	Bas plateaux du Sud	Cours d'eau permanents
400	Plaines alluviales	Barrages et lacs
300	Plaine littorale	Côtes à falaise
200		Côtes rocheuses
100		Côtes sableuses à lagunes
0		Parcs naturels et aires protégées

Échelle : 1/1 084 000
0 50 100 km

8 WATER RESOURCES DEVELOPMENT PLANS

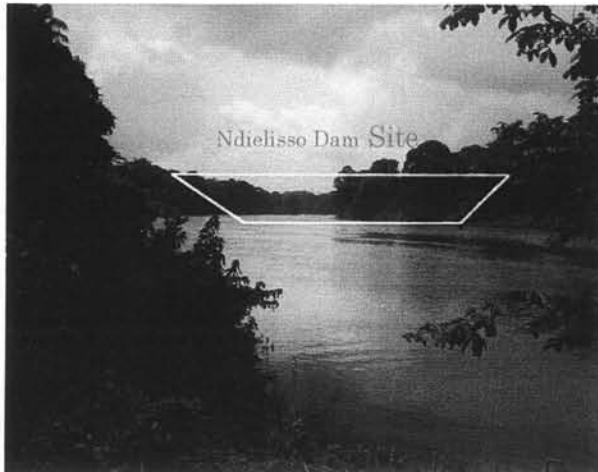
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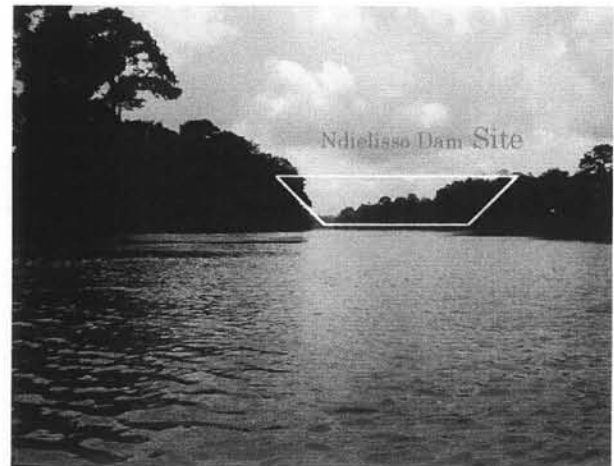
Location Map

CHAPTER 1 OUTLINE OF MAJOR DEVELOPMENT PROJECTS

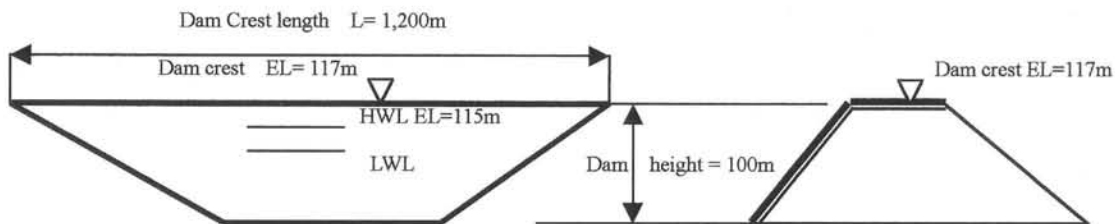
The outline of the three river integrated development projects of Comoe / Agneby / Marahoue and the reservoir plan of these projects are as shown Figure S.11.1-1~3 and attached maps.



Proposed dam site of Ndielisso on Comoe River



Proposed dam site of Ndielisso on Comoe River



Main Dam Profile and Standard Cross Section of Ndielisso on Comoe River

Project Description

COMOE RIVER INTEGRATED DEVELOPMENT PROJECT (NDIELISSO Multipurpose Dam on Comoe River)

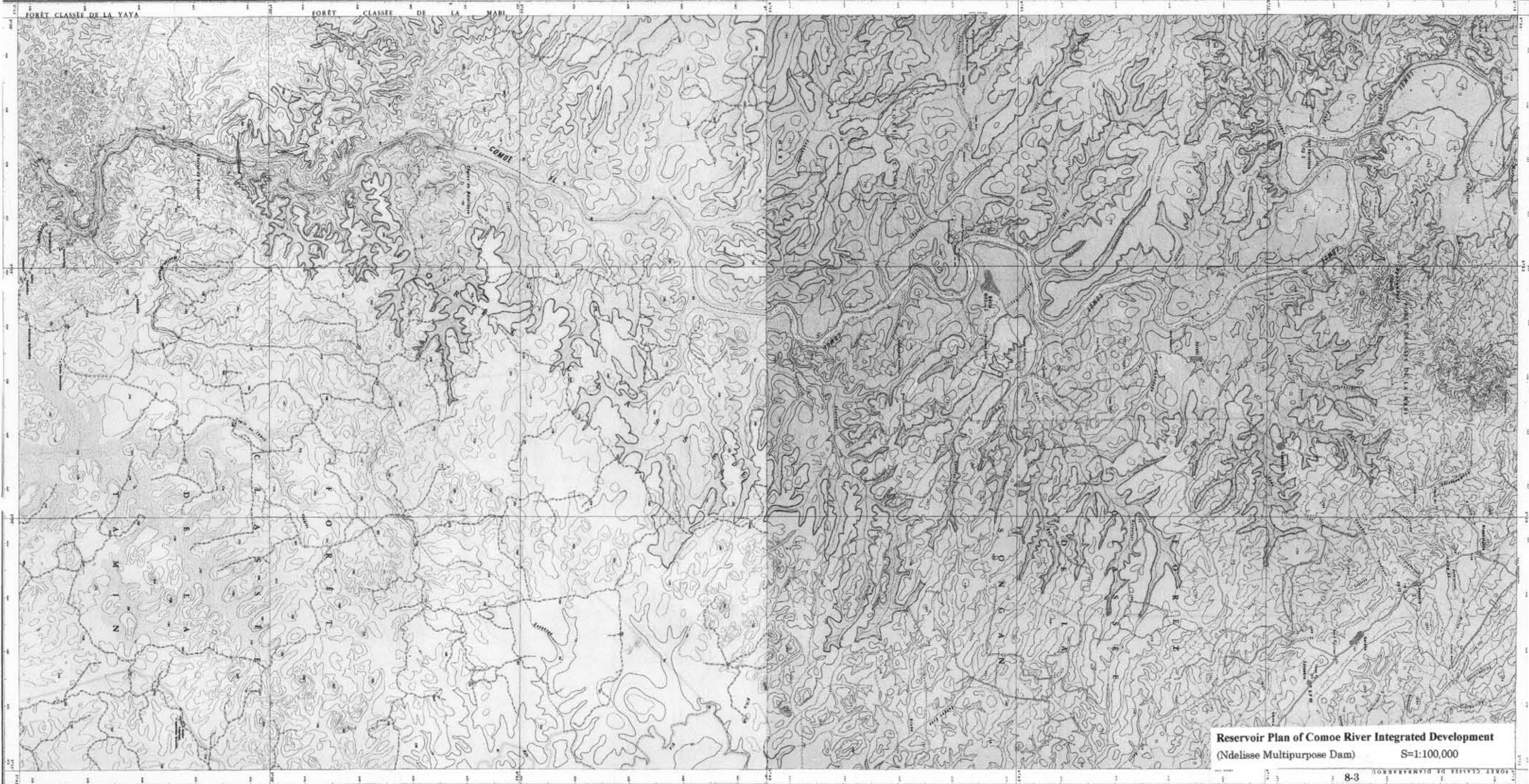
Purpose: Hydropower/ Urban Water Supply/ Irrigation/ Prevention of river mouth clogging / Prevention of sediment in Lagoon • Maintaining Normal Function of River(E.C.)

Production from the project :

- Hydropower : Main : $P_{max} = 200 \text{ MW}$ / Energy production 600 GWH
 Re-regulating : $P_{max} = 24.5 \text{ MW}$ / Energy production 215 GWH
 Total : $P_{max} = 224.5 \text{ MW}$ / Energy production 815 GWH
- It is possible to supply continuously a water of 111 m³/s for:
 - Abidjan water supply in future
 - Irrigation in downstream area of the proposed dam site
 - Prevention of river mouth clogging
 - Prevention of sediment in Lagoon
 - Maintaining Normal Function of River(E.C.)

- Catchment area = 74,610 km²
- Dam (H×L):
 - Main dam = 100m × 1,200m
 - Re-regulating dam = 42m × 300m
- Reservoir:
 - Surface area :
 - Main = 730 km²
 - Re-regulating = 2.7 km²
 - Total Capacity :
 - Main = about 22,000 MCM
 - Re-regulating = 40 MCM
 - Effective capacity :
 - Main = about 3,500 MCM
 - Re-regulating = about 13 MCM
 - HWL = Ma/ Re(117m/ 40m)
 - LWL = Ma/Re(112m/ 35m)
- Available develop. Discharge=111 m³/s
- Construction cost = 279,100 MF CFA
 - Main dam : 243,100 MF CFA
 - Re-regulating dam: 36 MF CFA
- Power kwh cons. cost : 342 FCFA/KWH
- Power KW cons. cost : 1,243 US\$/KW
- Project process
 - Development study (F/S): 1.5-2 years
 - Detailed design (D/D): 1.5-2 years
 - Construction: 5-6 years

Figure S.11.1-1
Outline of Comoe River Integrated Development Project
 (Ndielisso Multipurpose Dam on Comoe River)



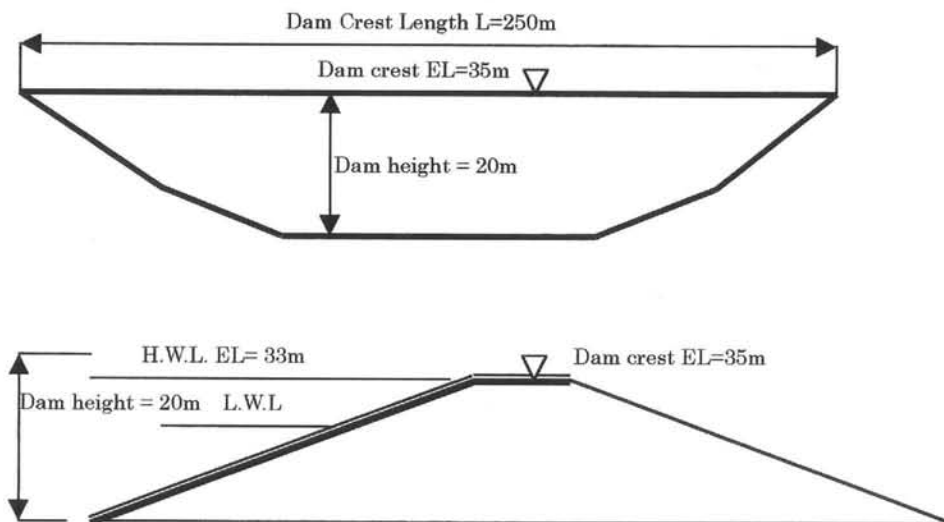
Reservoir Plan of Comoe River Integrated Development
(Ndelisse Multipurpose Dam) S=1:100,000



Agboville Existing Dam on Agneby River



Proposed Dam Site on Agneby River



Project Description

AGNEBY RIVER INTEGRATED DEVELOPMENT PROJECT

Purpose: Flood Prevention/ Urban Water Supply/ Irrigation/ Small hydro electric Power / Maintaining Normal Function of River(E.C.)

Production from the project :

- Flood Prevention : Available flood reduction (50 years) \cong 230 m³/s
- Urban water supply : Available intake discharge \cong 1.5 m³/s
(For Agboville & Abidjan cities) (130,000 m³/day)
or For irrigation in area of downstream of proposed dam site
- Hydropower: Small hydropower: P_{max} =160 KW/Energy production=1.34 GWH

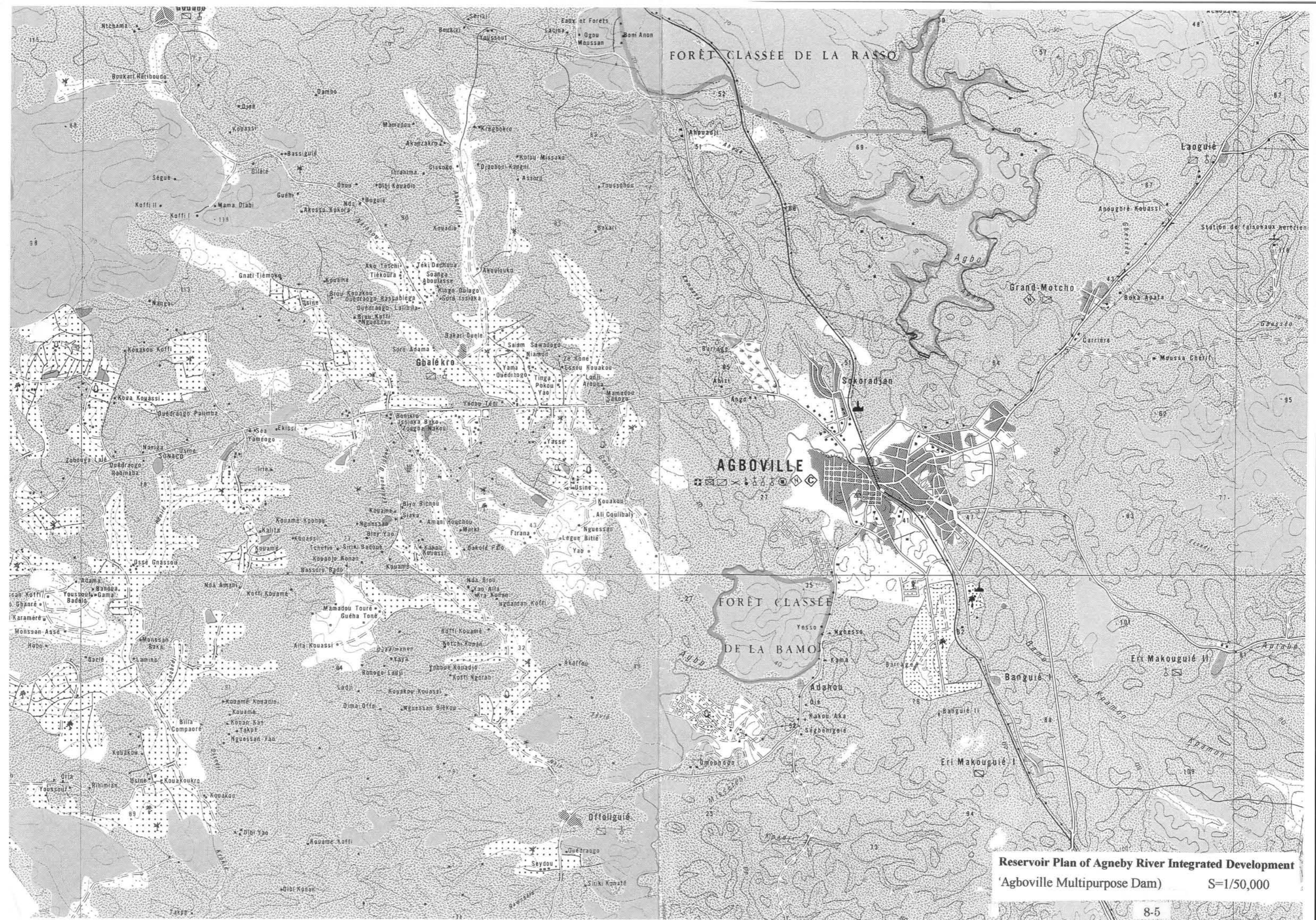
Catchment area = 4,600 km²
 Dam (H×L): 20m × 250m
 Reservoir: Surface Area = 5 km²
 Total Capacity=25 MCM
 Reservoir: HWL=33m/ LWL=28m
 Available Develop. Discharge=1.5m³/s
 Construction cost = 8,830 MFCEA

Project process

- Basic Design (B/D)/ (D/D): 1.5-2 years
- Construction: 2-3 years

Figure S.11.1-2

Outline of Agneby River Integrated Development Project



Reservoir Plan of Agneby River Integrated Development
(Agboville Multipurpose Dam) S=1/50,000