

**T h e
EVALUATION
P r o j e c t**

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**Organizational Structure of Family Planning
Service Provision and Cost of Service**

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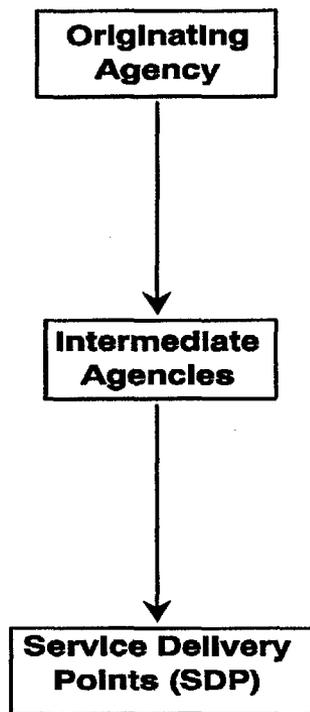
April 1996

Outline

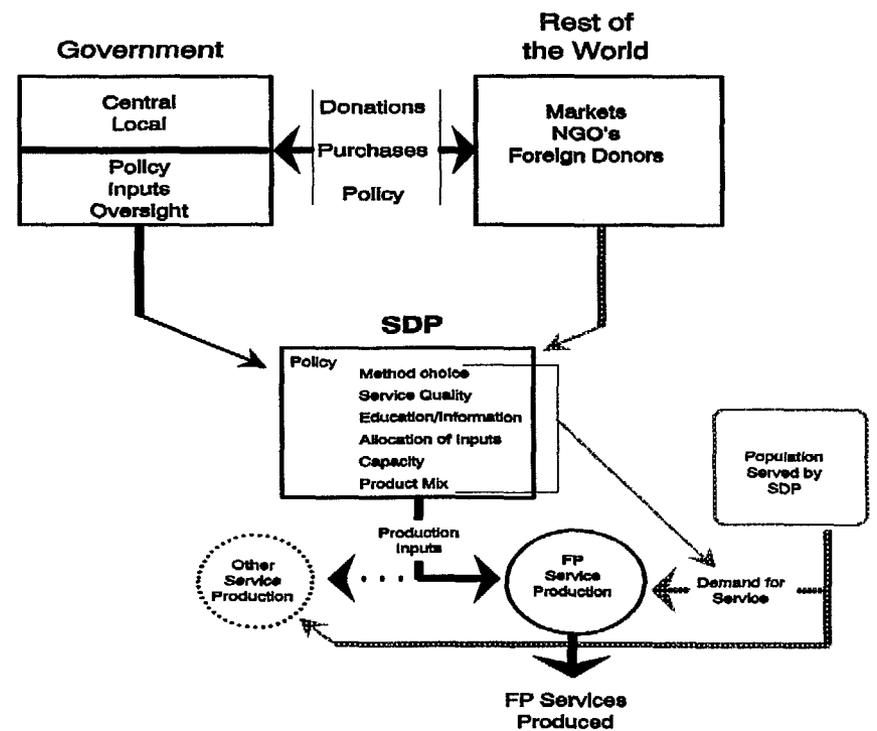
- **Structure of a system of service provision**
- **Design of project**
 - Model of cost
 - Sample design
 - Information collected
- **Potential results**

The Organizational Structure of a Program

- Authority
 - objectives
 - medical policy
 - oversight/evaluation
 - management
- Funding:
 - sources
 - revenue
- Resources
 - personnel
 - supplies
 - facilities



Flows of Inputs, Funds and Policy



Vertical vs. Integrated Program Structure

VERTICAL STRUCTURE

Single Agency:
well defined
limited objectives



Single purpose
facilities

Advantages

Single minded purpose
specialization
flexibility of approach
control of funding
simplified evaluation

INTEGRATED STRUCTURE

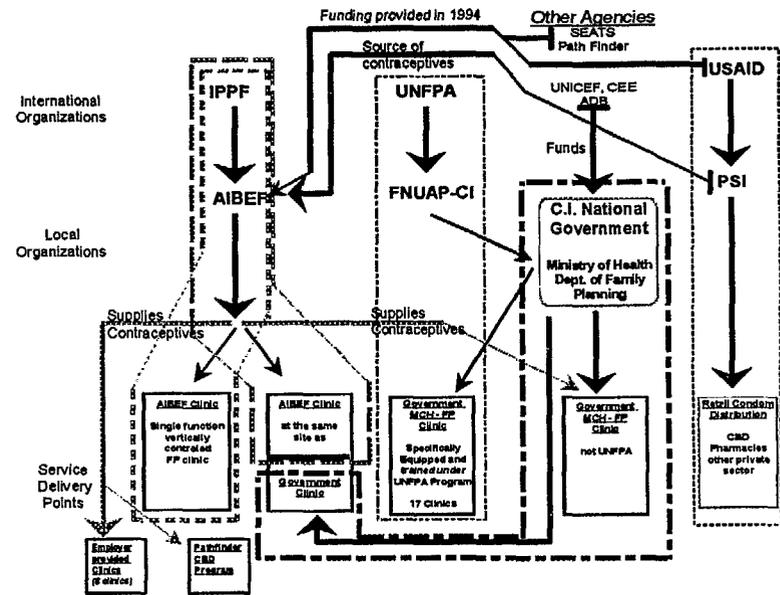
Often multiple
fundings:
variety of
objectives

Multipurpose
facilities

Economies of scope and Scale
shared resources
complimentarities in service
provision and information
transfer

Multiple structures of FP service provision in Cote d'Ivoire

Cote d'Ivoire: Structure of Family Planning Organizations



Revision 07/08

Key elements of the study

- 1. For each country in the study, we need a detailed descriptive case study.

Primary goal: Identify the "types" of SDP's by their type of organizational structure.

- 2. For a population based sample, obtain survey information on resources typically used in FP procedures. Also obtain service statistics and information on organizational structure.

Primary goal: micro level data on input usage and output produced.

- 3. For all types of SDP's in sample trace the flow of funds and resources to their source.

Primary goal: to identify input prices.

Estimating the cost of service provision

Simple World:

All empirical questions are "a difference in means test" if you can beat the ceteris paribus condition.

Real World Consideration:

Cost estimating technology (multiple products, differing efficiencies, scale and scope considerations)

- Structural "baggage" in economic cost functions
 - purchase of inputs sale of outputs on market
 - control of input decisions by rational manager
 - no bottlenecks/shortages
- Even if accept the baggage of structure, data does not exist in usable form
- Endogeneity of demand
 - the "output" is an input
 - demand depends on the quality of service,
 - thus the inputs put into production process.

Linear Production Models

Total Cost of Q: $TC(Q) = \sum X_i p_i$

$$q_i = \min \left[\frac{X_{1,i}}{a_{1,i}}, \dots, \frac{X_{n,i}}{a_{n,i}} \right]$$

where q is output quantity
 x are input quantities
 a are input requirements coefficients

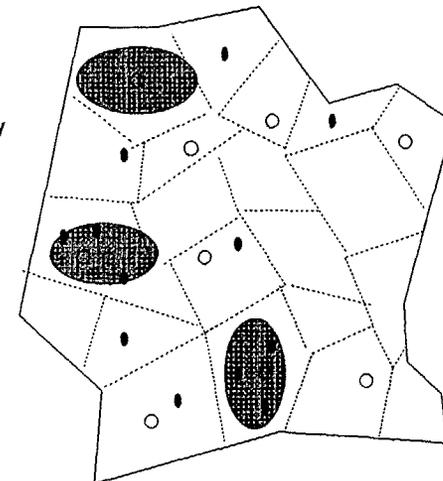
Methods of obtaining input usage
Time and motion study
Time and motion by survey

Sample design

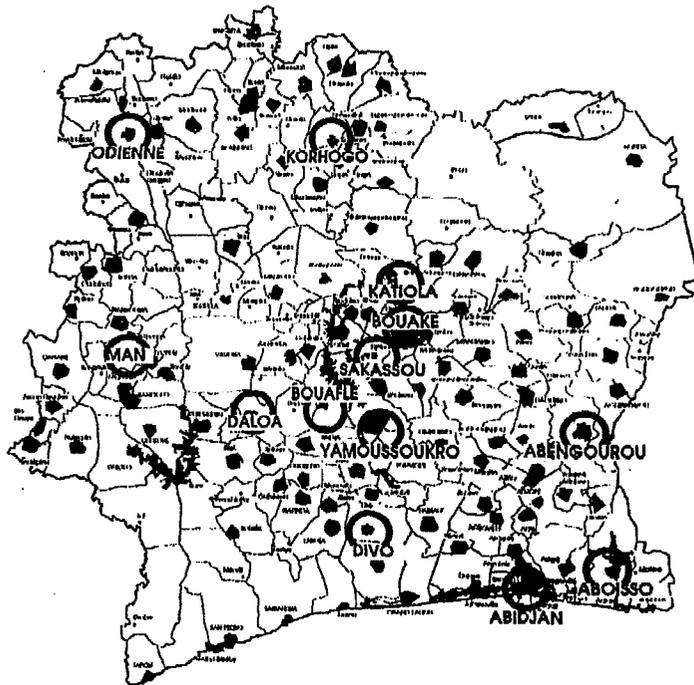
Survey design and sample:

countries with diverse structures
countries with recent DHS (demand side)
census of facilities in random sample of "markets"

- DHS cluster
- facility
- market boundary
- sample



Family Planning Service Provision in Cote d'Ivoire



Survey data collected

For "typical" procedure:

- who does it
- how long did it take
- what was done (quality)
- where was it done
- what else was used

Service statistics

Inventories

- contraceptives
- supplies
- equipment
- facilities

Management structure

- source of inputs, conditions of acquisition
- decisions made at SDP level
- oversight & supervision

Data collected from other sources

Input price data:

Need to obtain a measure of the "cost" of getting a unit of each type of input used to the SDP level

- wage rates
- contraceptive and supply prices
- estimates of rental rates for buildings and equip.
- general admin. (both at SDP and at levels above)

Total expenditures on FP

- agency budgets

DHS

socioeconomic and demographic data

Data analysis

- Calculation of unit costs

comparison of cost and quality across organizational structures.
estimates of economic cost of service provision

- Measurement of factor productivities

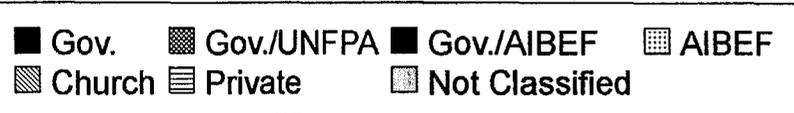
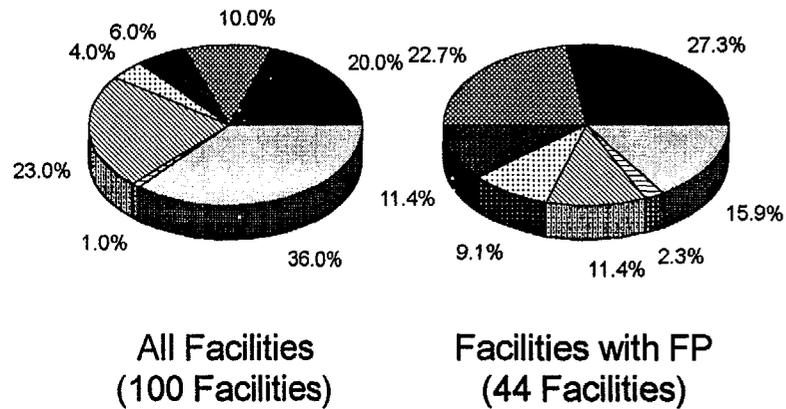
- Measures of capacity utilization

- Identification of bottlenecks

shortage of facility capacity?
shortage of demand?
shortage of information

- market effects

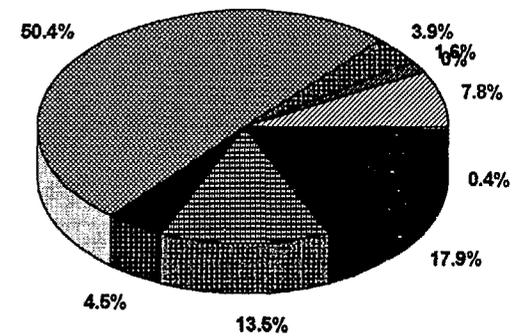
Distribution of sample by operating authority



Preliminary 4/96

Sources of funds for family planning expenditure

Cote d'Ivoire, 1994

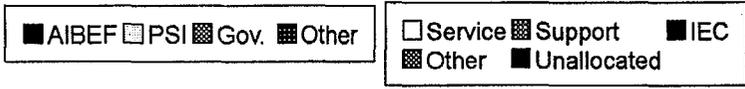
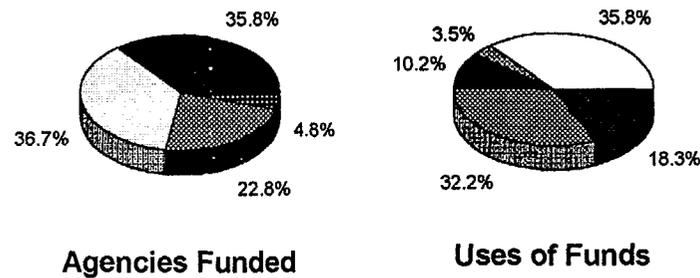


Funding Sources



Uses of funds for family planning expenditure

Cote d'Ivoire, 1994



Cote d'Ivoire FP Expenditure Matrix

1994

Cote d'Ivoire FP Cost Matrix

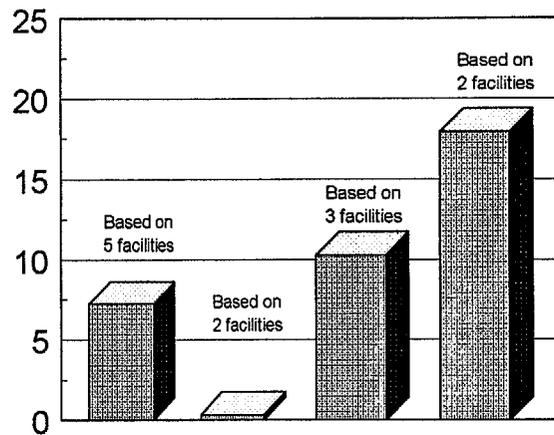
Total: Primary FP Programs

1994 Expenditure in CFA's

Expenditure Type	Service	Support	Research & Information, Educ		Other		Unallocated Expenditure	Total
		Training	Evaluation	Comm	Admin	Other		
Salaries and Wages								14,492,545
Medical, paramedical	93,392,545	21,000,000						22,708,400
Fuel/vehicles	14,836,500					7,981,800		17,230,288
Administrative, Clerical	17,532,074	17,522,897	12,889,724			15,401,093	14,454,500	27,222,708
Dispensing, information, education					21,222,708	6,000,000		
Commodities and supplies								
Contractual	429,609,800							429,609,800
GR		6,250,000	7,500,000	188,500,000	71,000,000	19,300,000		289,550,000
Maintenance and operation	14,640,519	3,500,000		28,000,000	365,173,843	2,957,115		414,271,477
Capital Construction and improvement						6,804,299		6,804,299
Other	38,889,559	12,886,303		2,254,980	25,000,000	14,755,990		93,786,822
Unallocated Expenditure	223,229,075						425,000,000	648,229,075
Total	631,930,072	80,789,320	20,389,724	217,977,698	907,341,155	130,487,805	425,000,000	2,323,865,554
Dollars	1663,860	12,159	40,379	475,935	1,044,882	300,935	850,000	4,847,391

Exchange CFA/\$ 500

FP patients seen per staff hour

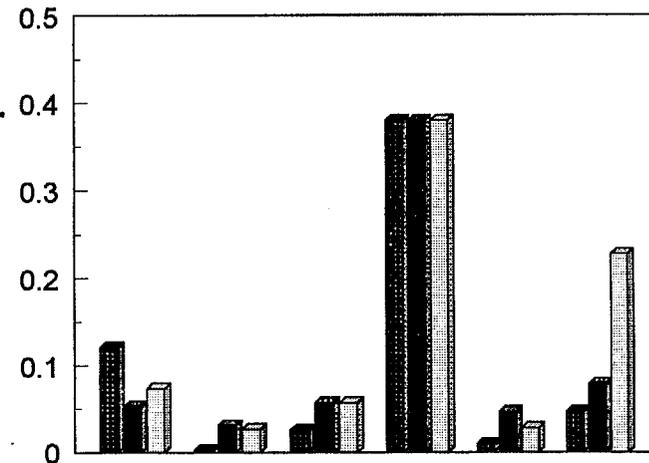


	Gov.	Gov. UNFPA	Gov. AIBEF	AIBEF
FP Patients /staff hour	7.217	0.308	10.300	17.925

Patients seen per hour per square ft. facility is open

FP visits / (area x FP service hours)

All visits / (area x hours open)



	Gov.	Gov. UNFPA	Gov. AIBEF	AIBEF	Mission	Not Classified
FP Patients	0.1198	0.0025	0.0255	0.3792	0.0097	0.0468
Total visits (all clinics)	0.0530	0.0307	0.0568	0.3792	0.0468	0.0784
Total visits clinics with FP	0.0733	0.0265	0.0568	0.3792	0.0282	0.2271

Preliminary