CHAPTER SIX
MEASURING FAMILY PLANNING PROGRAM EFFORT
AT THE LEVEL OF THE GOVERNORATE

Family planning programs are organized programs designed to provide the information, supplies, and services of (modern) means of fertility control to those interested. Family planning program effort is the degree of commitment to these goals, in the private and public sectors. The concept includes a variety of program inputs (Entwisle, 1989).

This chapter focuses on the family planning program effort. It comprises two sections. Section 1 includes a description of the different approaches to measure program effort. The most recent two approaches will be described in detail. Section 2 is an attempt, to develop a governorate based index for the program effort in Egypt.

6.1 MEASURES OF PROGRAM EFFORT:

The first trial to measure program effort (program input) independently of outputs was by Lapham and Mauldin (1972). They developed 15 input measures and they applied them to 20 countries. Freedman and Berelson (1976) applied Lapham and Mauldin's scores to 46 countries. These scores were applied also to 96 countries by Mauldin and Berelson (1978) in a study of the conditions of fertility decline.

A second set of family planning program effort scores were developed by Lapham and Mauldin (1985). This set includes 30 items of program effort, grouped in four categories. They were applied to 100 countries.
Entwisle (1989), developed a new classification of Lapham and Mauldin's scores using confirmatory factor analysis technique.

I will focus on Lapham and Mauldin's items of 1985 and Entwisle's reclassification of these items.

6.1.1 Lapham and Mauldin's Items:

Lapham and Mauldin (1985) developed 30 separate measures for the measurement of the family planning program effort. These 30 items are grouped into four components as follows:

a) Policy and stage-setting activities;
b) Service and service-related activities;
c) Record keeping and evaluation; and
d) Availability and accessibility of fertility-control supplies and services.

As mentioned above, this 30-item scale is a revised and expanded version of a 15-item scale developed by Lapham and Mauldin (1972). There are eight items for policy and stage-setting activities, 13 for service and service-related activities, three for record-keeping and evaluation, and six for the availability and accessibility of fertility regulation supplies and services.

Data were collected for the individual countries using a questionnaire including the 30 items in 1982. The questionnaire was sent to approximately 630 persons of whom 433 replied. The score range for each scale item is from zero to four, where four indicates a strong policy or much activity on an item. With 30 items, the scoring range is from zero to 120.
A full description of the 30 items and the way of scoring is given below:

I. Policy and Stage-Setting activities:

1. Government’s official policy or position concerning fertility/family planning and rates of population growth.

Existence and type of official policy to reduce the population growth rate, to support family planning activities for other than demographic reasons, to allow private and/or commercial family planning activities in the absence of government-sponsored activity, or to discourage family planning services.

2. Favorable statements by leaders.

Whether the head of the government speaks publicly and favorably about family planning at least once or twice a year, and whether other high officials also do so.

3. Level of family planning program leadership.

Level of the post (person appointed) to direct the national government family planning program, and whether or not the program director reports to the highest level of government.

4. Age at marriage policy.

Minimum legal age at marriage for females at least 18 years (higher scores for minimum legal ages of 19 and 20+), and the extent of effort to enforce any changes in the law since 1960 regarding legal minimum age at marriage for females. (The score for the latter component is allowed only if new legal minimum is at least 18.)

5. Import laws and legal regulations regarding contraceptives.

Extent to which import laws and legal regulations facilitate the importation of contraceptive supplies that are not manufactured, or the extent to which contraceptives are manufactured within the country.

6. Advertising of contraceptives in the mass media allowed.

Whether the advertising of contraceptives in the mass media is allowed with no restrictions, whether there are weak restrictions, whether there are social restrictions, or whether there are strong restrictions.

7. Other ministries/governorate agencies involved.

Aside from the ministry or government agency that has primary responsibility for delivering family planning supplies and services, the extent to which other ministries and government agencies assist may be provided through the public sector, or through private-sector family planning programs or population activities, and is classified as follows: assistance with the delivery of family planning supplies and services, assistance in the form of services particular to that ministry, assistance with family planning information and education in specific ways, membership on a council for family planning that meets at least twice annually, moral support and small miscellaneous assistance, no assistance.
8. In-country budget for program.

Percentage of the total family planning/population budget available from in-country sources. A top score is given if in-country sources provide 85% or more of the budget; no score is given if these sources less than 50% of the budget.

II. Service and Service-Related Activities:

9. involvement of private-sector agencies and groups.

Extent to which private-sector agencies and groups assist with family planning or other population activities. These groups include family planning associations, special service groups (e.g., for sterilization services), religious associations, and so on. The involvement or assistance with family planning and population activities may include the following: delivery of family planning supplies and services, training, family planning information and education, membership in family planning interagency group that meets at least twice annually, moral support, or other types of assistance.

10. Civil bureaucracy used.

Use of civil bureaucracy of the government to ensure that program directives are carried out, and the extent to which the senior government administrator at the following levels feels responsible for the success of the program: central government level, provincial or state levels, district/governorate/regency/etc. levels, country levels.


Proportion of country covered by CBD programs for the distribution of contraceptives in areas not easily served by clinics or other service points. Public and/or private CBD systems are included. The essential feature of CBD is that the contraceptive supplies are available upon request within the village, local community, or local residence neighborhood. CBD programs are assumed to be primarily rural; however, a partial extra score is allowed for urban CBD programs.

12. Social Marketing.

Proportion of the country covered by a social marketing program, that is, subsidized contraceptive sales in the commercial sector. The essential feature of social marketing is that contraceptives are sold at low cost, i.e., a (heavily) subsidized price, through channels easily available to rural or urban residents, such as local shops, pharmacies, or specially created local sales outlets. Some forms of social marketing are called commercial retail sales (CRS) programs. Social marketing programs are assumed to be primarily urban programs; however, an extra score is allowed for rural programs.

13. Postpartum programs.

Extent of coverage of new mothers by postpartum programs, which may be hospital- or field-based. Most programs are field-based. For hospital-based programs, the score is constructed from the proportion of deliveries in hospitals and maternity centers for which the new mothers are provided a family planning information and education services (by trained female workers), and the proportion of all deliveries in the country that take place in hospitals and maternity centers. For field-based postpartum programs, the score is constructed from the proportion of women who deliver at home and are offered a family planning information and education service by trained field-workers.

Proportion of the population covered by a group of workers whose primary task is to visit women in their homes (at least in the rural areas) to talk about family planning and child care. Account is taken of the population that must be covered by each field-workers in deflated if the average population covered by each home-visitor is more than 15,000.

15. Administrative structure.

Whether there is an adequate administrative structure and staff at three levels (national, provincial, and country). Adequate means that the administrative structure is sufficient to ensure that plans developed for each level are carried out, that the administrative structure is capable of recognizing and solving problems that cause low performance, and that the administrative levels in obtaining resources needed to carry out plans for the delivery of family planning supplies and services.

16. Training Programs.

Whether there is an adequate training program for each category of staff in the family planning program: administrative staff, physicians, nurses, paraprofessionals, village-level distributors, field-workers/motivators, staff in other ministries and organizations, others. Adequate means that the training provides personal with the knowledge, information, and skills necessary to carry out their jobs effectively, and that facilitates exist to carry out the training. The score is determined by the extent to which the training program, for each category of staff, is very good, moderately good, mediocre or poor, or nonexistent.

17. Personal carry out assigned tasks.

Extent to which each category of family planning program staff carries out assigned tasks (task implementation): administrative staff, physicians, nurses, paraprofessionals, village-level distributors, field-workers/motivators, staff in other ministries and organizations, others. The score is determined on the basis of the extent to which each category of staff carries out assigned tasks very well, moderately well, or poorly.

18. Logistics and transport.

Extent to which logistics and transportation systems are sufficient to keep stocks of contraceptive supplies and related equipment available at all service points at all times, at the following levels: central, provincial, county. The score is based on the availability of supplies and equipment: all or almost all of the time, about half to three-quarters of the time, sometimes, or seldom or never.

19. Supervision.

Whether there are an adequate system of supervision at all levels. Adequate means that: (a) supervisors exist at all levels of program operations in sufficient numbers to make possible supervisory visits at least once a month at service delivery levels (and quarterly at higher administrative levels); (b) supervisors in fact make such supervisory visits to the work sites of the persons supervised; (c) during these supervisory visits, encouragement, advice, and support are provided to supervisors, in addition to any necessary checking of operations and records that assist in the evaluation of worker performance; and (d) supervisors carry through on providing/obtaining supplies and services identified as needed during their visits (or at least make serious attempts to obtain these needed supplies and services).

20. Mass media for information, education, and communication (IE&C).

Frequency of mass media messages that provide family planning information, including where family planning services are available, and how much of the country is covered by various types of mass media: newspapers, magazines, radio, television, mobile IE&C units (films, etc.), billboards and other outdoor media (buses, etc.), traditional types (puppet shows, folk dances, local theater, etc.), other types. The frequency classification include: at least once a month, sometimes (about once every three to six
months), infrequently (about once a year or less often), never.

21. Incentives/disincentives

Use of monetary or other incentives for the adoption of family planning. The incentives may be provided to clients, service personnel, recruiters (including CBD personnel), communities. The disincentives may refer to individuals or to communities, and include regulations or constraints designed to encourage family planning or small family size.

III. Record Keeping and Evaluation:

22. Record keeping

Whether or not there are record-keeping systems for family planning clients at the clinic level, plus a system for the collection and periodic reporting of summary at regional and national levels (that is, numbers of acceptors, supplies distributed, number of workers, and so on), and whether or not there is feedback to each reporting unit from regional or national units. The scoring takes into account the existence of good systems as well as their implementation. Feedback refers to reporting back to lower-level units on a regular basis with progress measured against some standard, such as acceptance or prevalence targets or trends.

23. Evaluation

Whether or not some or all of the following exist (some score given for each): regular estimation of prevalence levels and trends (annually or quarterly) using program statistics and estimated continuation rates; measurement every two or four years of family planning prevalence levels and trends using data collection methods that are independent from program statistics such as contraceptive prevalence studies; implementation of operations research studies designed to help program managers understand the program, its problems, and potential improvements; professional staff in an evaluation unit who prepare technically correct periodic reports on the program, what it has achieved, etc.; professional staff who interpret and summarize, for program management, national and regional population data collected through censuses, vital registration systems, and surveys (these staff may be directly associated with the program or with other institutions); good coordination, working relationships, and timely sharing of information between the evaluation unit and other units in family planning programs. Some score is also given for the existence of universities or research institutes in the country that carry out demographic research, family planning research, or population research of other kinds.

24. Management use of evaluation findings.

Extent to which the program managers (decision makers) use the research and evaluation findings to improve the program in ways suggested by those findings.

IV. Availability and Accessibility of Fertility Control Methods:

25. Male sterilization.

Whether or not medically adequate voluntary sterilization services for males are legally and openly available, and the percentage of the population that has ready and easy access to such services.
26. Female sterilization.

Whether or not medically adequate voluntary sterilization services for females are legally and openly available, and the percentage of the population that has ready and easy access to such services.

27. Pills and injectables.

Percentage of the couples of reproductive age who have ready and easy access to pills, through programs other than CBD and social marketing programs. Ready and easy access means that the recipient spends no more than an average of two hours per month to obtain contraceptive supplies and services. Easy access also implies that the cost of contraceptive supplies is not burdensome, i.e., a one-month supply of contraceptives should cost less than 1% of a month's wages to meet this criterion. (If the availability of injectables is higher than that of pills, the data on injectables were used to score this item.)

28. Condom, diaphragm, spermicide.

Percentage of the couples of reproductive age who have ready and easy access to condoms, through programs other than CBD and social marketing programs. Ready and easy access is defined as in item 27 above. (If the availability of other conventional contraceptives is greater than that of condom, the data on these other methods were used to score this item).

29. IUDs

Percentage of the couples of reproductive age who have ready and easy access to IUDs through programs other than CBD and social marketing programs. Ready and easy access is defined as in item 27.

30. Abortion.

Proportion of the population that has ready and easy access to abortion services, whether or not abortions are legal, but excluding in the scoring the availability of abortions carried out only under poor conditions.

In view of the scores for each country, Lapham and Mauldin divided the countries into four levels of program effort:

<table>
<thead>
<tr>
<th>PE Level</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong</td>
<td>80+</td>
</tr>
<tr>
<td>Moderate</td>
<td>55-79</td>
</tr>
<tr>
<td>Weak</td>
<td>25-54</td>
</tr>
<tr>
<td>Very weak or none</td>
<td>0-24</td>
</tr>
</tbody>
</table>
6.1.2. Entwisle’s Reclassification of PE Components:

Entwisle (1989), applied confirmatory factor analysis to the data matrix which was collected by Lapham and Mauldin in 1982. She found eight underlying dimensions of the 30 scores, which she compared to the four groupings of the scores used in Lapham and Mauldin’s work. Entwisle’s work tries to answer the following question:

Is program effort a unidimensional concept. Or does it instead incorporate different dimensions of policy, sponsorship, delivery system, and the like?

The main concern of Entwisle is to examine the way that Lapham and Mauldin organized the items into four components of effort. To do so, she used a statistical technique which is Confirmatory Factor Analysis (CFA). CFA is a technique that estimates a measurement model and compares it with the pattern of variances and covariances observed in the data. She proved that the four groups of variables reflected several dimensions of family planning program effort. These eight components of Entwisle are as follows:

1. Policy & stage setting activities.
   - Government’s official policy or position concerning fertility/family planning and rates of population growth.
   - Favorable statements by leaders.
   - Import laws and legal regulations regarding contraceptives.
   - Advertising of contraceptives in the mass media allowed.

2. Government sponsorship.
   - Level of family planning program leadership.
   - Other ministries/governorate agencies involved.
   - In-country budget for program.
- Civil bureaucracy used.

3. **Private sector sponsorship.**

   - Involvement of private-sector agencies and groups.

4. **Program organization & management.**

   - Administrative structure.
   - Training Programs.
   - Personal carry out assigned tasks.
   - Logistics and transport.
   - Supervision.
   - Record keeping
   - Evaluation
   - Management use of evaluation findings.

5. **Innovative delivery system.**

   - Social Marketing.
   - Postpartum programs.
   - Community-based Distribution (CBD).
   - Mass media for information, education, and communication (IE&C).

6. **Strategies to generate demand.**

   - Mass media for information, education, and communication (IE&C).
   - Home-Visiting Workers.
   - Incentives/disincentives

7. **Availability of standard contraceptive methods.**

   - Abortion.
   - Male sterilization.
   - Female sterilization.

8. **Availability of supplementary methods.**

   - Pills and injectables.
   - IUDs.
   - Condom, diaphragm, spermicide.
6.1.3. Comparison Between the Two Approaches:

A comparison between the two approaches of measuring the family planning program effort must be carried out. It is noticed from the above description of the two main approaches that the main difference between the two approaches is just in the grouping of the variables. The two approaches used the same set of variables to evaluate the program effort. Entwisle's approach dropped the age at marriage item from the components of the program effort. Entwisle's approach do not reveal a unique measure of program effort. That is each component must be dealt with as a separate indicator of the program effort. In the second approach a distinction between the standard contraceptive methods and the supplementary methods can not always be accepted, because this depends heavily on the method mix and the traditions and norms of the society. For example, if the abortion is legally and traditionally not allowed it must not be scored. Also, the single indicator of private activity in Entwisle's components is inadequate (Hernandez, 1989), because there are many other indicators in the other components refer to the contribution of private sector.

To conclude, one can say that the two approaches are different only in the way of grouping the items of the program effort.

6.2 PROGRAM EFFORT INDEX BY GOVERNORATE:

Since this is a pioneering study to evaluate the family planning program effort by governorate in Egypt, a new approach will be applied in the measuring of the items and grouping them. This approach depends on the calculation of the program effort in the governorates depending on the available data at the level of the governorate in the case of the existence of variations between the governorates in the items. The list of items developed by Lapham and Mauldin and the way of grouping of Entwisle will
be only used as guide lines. The way of calculating the values of each item that used by Lapham and Mauldin will be employed, that is the lowest value for each indicator will be given a value of zero, and the highest one will be given a value of 4. The value of zero does not mean that their is no effort or value in this governorate. It means only that this is the minimum observed value. Also 4 does not mean the maximum possible, but it means only the maximum observed. Since Lapham and Mauldin's indicators were selected for the purpose of making comparisons between different countries, many of the indicators will not be calculated at the level of the governorate due to (a) the equality of their values in all of the governorates and for some of them (b) the non-applicability to the Egyptian society. Examples for the first ones are:

- Government's official policy concerning fertility: The government official policy toward fertility and family planning in Egypt is directed to all the Egyptians in all of Egypt, so that no differentials in the political support of the family planning programs. This is also the case of the statement by leaders toward the subject.

- Age at First Marriage: Inspite of the slight differences in age at marriage among governorates, all the governorates follow the same law which determine the minimum age at marriage for females to be 16 years.

- Advertising of contraceptives in the mass media. The advertising of contraceptives is allowed in Egypt and the TV and Radio broadcasting is extended in all the Egyptian governorates. Also, newspapers are distributed in all the Egyptian governorates.

- Import laws and legal regulations regarding contraceptives, laws of importing and producing the contraceptive commodities in Egypt do not differentiate governorates. The import of contraceptives is centralized in the ministry of health and pharmaceutical companies for all the Egyptian governorates.

- Availability and Accessibility of Fertility Control Methods: The family planning methods that are used in Egypt are the same in all governorates, and
they are available through the governmental and non-governmental agencies, no shortages were found in the availability of the methods in any governorate (See NPC, 1993).

Examples for the non-applicability of some items to the Egyptian society can be described as follows:

- Male sterilization; This is not practiced in Egypt as a family planning method. It is not accepted in the Egyptian culture.
- Abortion; This is not practiced in Egypt as a family planning method. It is used only in the case of the pregnancy being necessary to save the mother’s health. Abortion is prohibited by religion also.

6.2.1. Program Effort Indicators:

The difficulty of finding reliable and comparable indicators for the program effort by governorate limited the researcher to much due to the selection of such indicators. These difficulties was mainly in the different understanding of the way that governorate workers deal with the data and measurement methodologies. For example some workers in the governorates consider that the religious symposiums that are carried out in the mosques and churches about family planning as an IE&C activity about family planning, while some others do not consider it so. Therefore, the minimum comparable and reliable data are used in this section.

Nine indicators were selected to represent the program effort by governorate. A full description of each indicator and the rationale of its choice is given below:
I. Policy & stage setting activities.

1. Number of the Governorate Population Council Meeting.

In January, 1985 the National Population council was established chaired by the President of the republic. A similar Population Council at the level of the governorate was established in each governorate. The Governorate Population Council (GPC) includes in its membership all the top administrators of the main governmental and non governmental sectors in the governorate. The GPC is responsible about the preparation and implementation of the governorate population plan and also to follow up activities and achievements. The GPC should have four meetings per year, one each quarter (three months). The number of meetings per year is taken as a reflection of the strength of the population policy in the governorate. The maximum expected value of the meetings is four and the minimum is zero. The maximum score is given for the governorates that carried out four meetings in 1992 and the minimum is given for the governorates that did not carry out any meeting during that year.

Table (6.1) shows the number of meetings that were held in 1992 by governorate. It is noticed that only six governorates reached the maximum possible number of GPC meetings (Port Said, Sharkia, Suez, Behera, Ismailia, and Giza), while only two governorates did not carry out any GPC meeting during 1992 (Cairo, and Aswan). Two governorates carried-out one meeting only (Giza and Fayoum).

II. Availability and Accessibility of Family Planning Services:

The availability and accessibility of family planning services can be measured by the density of outlets which is likely to be among the important determinants of accessibility of family planning services (Jain, 1989).
Since the density of family planning services differ among the governorates, three items were selected to measure these differentials:

2. **Number of Women per Family Planning Center:**

   Although the number of women per clinic (NWPC) is not an accurate measure for the density of services inside the governorate because it assumes that the service units are uniformly distributed across the geographic area of the governorate, it is considered as a good representative of the density of services in the governorate as a whole. Table (6.1) presents the number of women per clinic by governorate. The highest number of women per clinic is found in Cairo (4462) followed by Alexandria and Giza, (3834) and (3595) respectively. The lowest number of women per clinic is found in Aswan (1023). In sum, it is noticed that the Upper Egypt governorates have a NWPC lower than lower Egypt governorates, which in turn have a NWPC lower than the urban governorates.

3. **Number of Women per Pharmacy:**

   The results of the 1992 Egypt Demographic and Health survey (1992 EDHS) showed that the percent of current users of contraceptive methods relying on pharmacy is 28.3% (El Zanaty et. al., 1993). The role of pharmacies is essential in the distribution of non-clinical methods like pills and condoms. Table (1.6) shows that the highest number of women per pharmacy (NWPP) is found in Ismailia (1569) followed by Aswan, Fayoum, Qena, and Beni Suef (1364, 1155, 1122, and 1118 respectively). The lowest NWPP is found in Alexandria, Cairo, and Suez (399, 443, and 485 respectively). It is noticed that the availability of pharmacies in the urban governorates is higher than the governorates of Lower Egypt, which in turn is higher than the governorates of Upper Egypt.
4. Percent of Women Who Have Family Planning Services in Their Localities:

Many studies showed that the travel time for women to reach the family planning clinic is one of the most important determinants of contraceptive use (See Hermalin, 1983). Therefore the availability of services in the area of the woman’s residence is one of the important factors that may motivate women to use contraceptive method. The percent of women who have family planning services in their localities (PWFPOL) is considered as an important item of the program effort. The PWFPOL was calculated by summing the number of currently married women in the reproductive age (MWRA) who have family planning services in each village (Shiakha in Urban areas) and dividing them by the number of MWRA in the governorate.

Table (6.1) shows that all the urban governorates are fully covered by family planning services, that is the PWFPOL is almost 100%. The low coverage of family planning services as measured by PWFPOL is found in Kalyoubia and Sharkia (73% and 77% respectively). The variations between upper and lower Egypt governorates are not significant.

III. Information, Education, and Communication Activities and Home Visits:

Under the supervision of the State Information Authority, The Information, Education, and Communication Center (IE&CC) was established to carry out the activities of Information, Education, and Communication for family planning and contraceptive use. The IE&CC has more than 50 satellite centers in the Egyptian governorates to carry the family planning message to all the target population.

In addition to the IE&C centers’ activities, the National Population Council (NPC), Ministry Of Social Affairs (MOSA), and Ministry Of Health (MOH) employ
volunteer and non volunteer Home-Visiting workers (Raída Rifia & Health Visitor) to carry the family planning message to women at their home. The following is a description of the IE&C activities and the home-visit by governorate:

5. Number of IE&C Hours per Woman:

The IE&C centers carry out many types of IE&C activities such as Symposia, Dialogue Meetings, Films and Art Shows, and Three Days Meetings for the social workers and Raída Rifia. The number of hours per each activity is used as a common measure of the IE&C activities. The number of hours is divided by the number of MWRA by governorate. This measure is used to represent the density of IE&C activities. The results show that the highest number of hours of IE&C activities per woman (IE&CHW) is found in Port Said followed by Suez, and Alexandria and Kafrel-Shéikh in the same rank (2.03, 1.79 and 1.22 respectively). The lowest IE&CHW is found in Giza, followed by Cairo and Assuit governorates (.24, .29, and .39 per thousand women respectively). Except Cairo, urban governorates have higher IE&CHW than lower and upper Egypt governorates.

6. Number of Home Visits per Woman:

The home visits for women are carried out by two types of workers, the Raída Rifia and the Health Visitors. The first type of workers belong to the Ministry of Social Affairs (MOSA) and the National Population Council (NPC), while the second type of workers belong to the Ministry of Health (MOH). The Raída Rifia and the Health Visitors are responsible for recruiting new family planning acceptors, in addition to providing the advice for the current users of family planning methods. It is hypothesized that the higher the density of home visits the higher the quality of information and communication services. As noticed from Table (6.1), the highest number of home visits (per thousand
woman) is found in Menoufia governorate followed by Behera governorate (843 and 681 respectively). The lowest number of home visits is found in Cairo and Port Said governorates. This may be explained by the fact that no Raida Rifia work in these two governorates. However Alexandria and Suez are urban governorate but the number of visits is very high (if compared with Cairo and Port Said). This is due to the fact that these two governorates have Raida Rifia system in addition to the Health Visitors.

IV. Record Keeping and Statistics:

7. Record Keeping and Statistical Reporting:

Each Family Planning Center (FPC) must keep statistical records. In these records the center registers its activities and registers each client and the method that she uses. Each month a form including the number of methods and clients is completed. This form must be sent to the department of family planning in the capital of the district (Kism/Markas), which in turn sends it, after registration, to the Family Planning Administration in the capital of the governorate. The Governorate Office of the Population Council receives all of the FP statistical forms and send them monthly to the General Administration of Statistics in the National Population Council (NPC). The percent of FPCs that send FP forms to the NPC in each governorate is taken as representative of the effectiveness of the record-keeping system and statistical reporting. It is noticed from Table (6.1) that most of the governorates have high percent of statistical reporting (more than 90%). Few governorates have statistical reporting less than 90%. These governorates are Aswan, Cairo, Port Said, Qena, and Ismaillia (74%, 75%, 80%, 84%, and 88% respectively).
V. Social marketing and Private Sector:

8. Social Marketing:

The Family Of The Future (FOF) was responsible about the social marketing of contraceptive commodities until the end of 1992. The Egyptian Family Planning Association is responsible now about this program. Since The reference year of the study is 1992, the year of the EDHS, the percentage contribution of the FOF in the distribution of contraceptives is used as a measure of the social marketing activities. To find a measure to calculate the percentage contribution of the FOF the Couple Year of Protection (CYP) method is employed. This method depends on the transformation of the methods distributed to years of protection from the risk of pregnancy for a year assuming that all the contraceptives distributed will be used efficiently.

9. Private Sector:

The contribution of the private sector is one of the most important factors in the Egyptian family planning polices. The role of private sector is encouraged by the government. The percent of private family planning centers is used as representative of the contribution of the private sector in the family planning programs. Percent of women served by private sector may be more suitable than percent of private family planning units, but unfortunately data are not available at the level of the governorate. It is only available at the level of the region in the EDHS, 1992.

VI. Training:

Data about training of doctors and nurses is not reliable. Many authorities in Egypt carry out training courses for doctors and nurses. For example the following authorities carry out different types of training for family planning doctors and nurses:
- Ministry of Health.
- The National Population Council.
- Egyptian family Planning Association.
- Clinic Improvement Project (MOSA).
- Regional Center for Training on Family Planning.
- Authority of Health Insurance.

Most of the training courses take place in Cairo, so that it is difficult to calculate the training hours per governorate. In view of the difficulties the index of the program effort by governorate will not include anything about training. Of course this will affect the index but it is much better than including non reliable data.

6.2.2. Index Values by Governorate:

The value of the Program Effort Index (PE) by governorates are given in Table (6.3) while the individual scores for each indicator are given in Table (6.2). The governorates are grouped in three categories according to the level of PE. The highest category values ranged between 23.73 and 19.09. It includes five governorates. The second category lies between 17.68 and 15.66, and the third category values ranged between 14.46 and 11.73. See Figure (6.1).

Since the maximum possible index value is 36, it is noticed that the observed values of the PE index are very low. The highest value of the index is in Suez governorate with only 65.9 percent of the maximum possible. The lowest value which is observed in Kalyubia governorate is only 32.7 percent of the maximum possible. It is noticed also that the range of variations between governorates is small, but this is not the outcome of similar characteristics of the program effort but it is the outcome of different scores on the individual indicators (See Table 6.2).

<table>
<thead>
<tr>
<th>Gov.</th>
<th>Number of GPC Meetings</th>
<th>Number of FP SERV. per Pharmacy</th>
<th>Number of Res. Woman</th>
<th>% Women Have Hours</th>
<th>% Women IR&amp;C</th>
<th>No. of Home Visits</th>
<th>% Stat. Mark.-Repting</th>
<th>Social % Non-Gover. Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cairo</td>
<td>0</td>
<td>4462</td>
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