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MANAGEMENT SCIENCES FOR HEALTH  
A NONPROFIT INSTITUTION

SYSTEMS ANALYSIS OF STN TRAINING  
PRIOR TO PROJECT DESIGN  
TECHNICAL AND FEASIBILITY STUDIES PROJECT  
263 - 0042  
SECONDARY TECHNICAL NURSE TRAINING PROJECT DESIGN,  
MINISTRY AT HEALTH, ARAB REPUBLIC AT EGYPT

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SECONDARY TECHNICAL NURSE TRAINING PROJECT DESIGN,  
MINISTRY AT HEALTH, ARAB REPUBLIC AT EGYPT

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MANAGEMENT SCIENCES FOR HEALTH  
9-11-81 TO 10-2-81

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## I. SUMMARY

The STN is the MOH'S front line worker in all health facilities, and her training requires major improvements to provide the skills and experience necessary to make her an effective provider of MCH/FP services.

However, given the facility-based nature of direct MOH services, and the fact that eighty to ninety percent of essential FP/MCH needs never come to health facilities directly (in Egypt or any other country), STN training alone will not meet the need. An outreach program element is essential, but reliance on intensive, sustained home visiting by STN'S is unrealistic and infeasible. In many cases, a collaborative plan involving STN's and the daya, appropriately trained and supervised, is more likely to be successful.

Egypt is fortunate that all four elements required for an effective MOH response to MCH/FP service needs exist, and are in fact current concerns of the Ministry:

1. STN curriculum revision and school improvement
2. Pre service training for graduating STN'S
3. In service skills upgrading for STN'S currently in the field
4. Daya training and certification to take advantage of their widespread utility and acceptability in community settings

Consideration should be given to expanding the project scope to become a primary health care manpower development project, and incorporating-- both nurses and dayas as members of the front line health team.

## II. INTRODUCTION

This analysis is presented in the same sequence as the questions raised in the scope of work ( appendix 1 ).

Most of the questions can be addressed, if not resolved, in a straight-forward fashion, and an abbreviated outline form is used to minimize verbiage. Section C is expanded to summarize a rationale for major revisions of the project scope, and provides some illustrations for consideration by the project paper team. Section D suggests PP team staffing characteristics.

## III. THE SCOPE OF WORK

### A1. Factors crucial to proposed curriculum design and training program

- a. MOH decision to make the STN capable of providing services that consumers perceive as valuable. If they are treated purely as handmaidens for Doctors, the message will be clear to them and to patients--they will not become important contributors to MCH/FP service delivery.
- b. A focus on competency--based rather than theoretical training
- c. Major emphasis on supportive supervision in the field--the initial curriculum revision and training can readily be accomplished--the uncertain and critical dimensions of program success will be determined by the quality and consistency of in-service supervision by MOH nurse supervisors and STN school faculty

### A2. Systemic factors likely to hinder effectiveness of trainers once they enter the system:

- a. The lack of MOH experience with positive supervisory systems which can clarify and reinforce good practices on the job-motivated Nurse supervisors and continuing education are the keys
- b. The hospital and facility--focused environment, which is extremely unlikely to successfully sustain a major outreach element in STN service.

- c. Hospital needs for a large number of STN'S will inevitably limit their direct involvement in MCH/FP services
- d. The willingness of physicians to utilize STN skills in service delivery

B1. Current STN performance

- a. In hospitals, they are mainly used for non-nursing tasks, such as; housekeeping duties, patient transport, delivery of messages etc.
- b. In MCH centers, health centers and units, they provide the MCH and well child service
- c. In rural health units and centers, they do display interest, willingness and ability to function more independently. They are unquestionably competent to be trained for and to perform more significant roles

B2. MCH/FP delivery constraints attributable to STN basic training

- a. Inadequate peripartum knowledge and skills, including competence with normal delivery
- b. Inadequate basic nursing skills and competence in basic patient care areas of high MCH/FP significance, including oral rehydration therapy, family planning, identification and action on high risk MCH situations
- c. Lack of a realistic outreach strategy to deal with the majority of community MCH/FP needs

B3. Prospects for revising standing orders and job descriptions to emphasize national MCH/FP outreach, similar to SRHD project

- a. SRHD admirably confirms that simple skill/training for STN'S in the field is effective and feasible; that they can deal with the large majority of FP/MCH needs; and that they are enthusiastic about learning new skills
- b. However, the massive outreach effort posited for STN'S alone is unlikely to be replicable or sustainable on a large scale

- c. A modified outreach effort is more realistic, involving:
  - i. Collaboration with dayas, who now do (and will continue for the foreseeable future to do) the vast majority of deliveries at home in urban and rural areas
  - ii. High risk referrals
  - iii. Provision of some useful services during outreach that consumers will value, such as eye ointment, ORT, family planning supplies, TT immunization
- d. The SRHD project has set valuable precedents by demonstrating STN competence improvement even with relatively minimal field training. The information system and field work demands of the project as structured, however, are excessive and not reproducible.

B4. Medical syndicate role in STN job description approval

- a. We understand that the Medical Syndicate appreciates the need for, and is in favor of, the revision of the STN job description. (Direct discussions were not held due to appointment cancellations)
- b. With the SRHD revision of STN training and service activities (which currently includes essentially all the skills and problem recognition-action guidelines required) functioning with MOH approval, it appears that no insurmountable obstacles from the Medical Community are likely.

B5. Relationship of the general education nurse training component and implications of limiting curriculum revision to the latter

- a. The general education component can profitably be revised to focus on Nursing and health, such as english language training concentrated on health subject matter.
- b. Limiting the curriculum revision to the Nursing component would miss a major opportunity which the MOH agrees should be seized.

- c. The role of Nurses vs MOE secondary school teachers in actual teaching of the general education material will need to be clarified when specific subject matter is developed.
- B6. Relationship of a new curriculum to pre and in-service nurse and supervisor training
- a. Supervisor and Instructor training, support and motivation is the single most important link in the project, which will succeed or fail on this issue. Major emphasis must be placed on supervisory support, recognition and continuing education, and should be expanded in the PP.
  - b. Pre-service training in midwifery and public health is essential for STN credibility and function in health units, even if they are not going to be practicing midwives. The MOH is now planning to withhold certification until they have successfully completed the pre-service training.
  - c. In-service STN training, for HC/HU Nurses focused on a few essential skills (such as high risk maternal care indicators, ORT, FP, TT, administrative) should be more strongly emphasized in the project. The large majority of Nurses in a position to have any impact on MCH/FP in the next five years are already in place, and the SRHD project confirms that direct, competency focused, skill training is possible and practical on an in-service basis.
- B7. MOH ability to provide adequate training experience in 137 schools
- A. The MOH has identified 71 schools which can realistically be upgraded and expanded, and is willing to eliminate the others once evidence that the 71 are improving make closings politically feasible.
- B8. Role of physician and Nurse supervision in STN performance
- a. Anecdotal impressions suggest that physicians currently have negative

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impact on STN'S, though Female MD'S in rural areas appear to support and relate to STN'S much more successfully.

- b. Senior Nurses, where present, are often the defacto health facility managers.
- c. Physician acquiescence, but not dominance, in an expanded STN role is necessary and appears possible.
- d. The Nurse supervisor is the key element in potential STN impact, through training and in-service support.
- e. Pre-service MD orientation to the expanded STN role, the basic skills and functions to be delegated to STN'S and to HC function should also be supported by the project.

B9. Importance of career mobility or advanced training for STN'S

- a. The initial improvement of skills and extension of responsibilities will make a major public image and credibility improvement.
- b. Good performance should merit both refresher training and supervisory/trainer and midwifery diploma course.
- c. Midwifery plus service skills can lead to increased private income opportunities in rural areas.
- d. STN graduates probably will not be able to look to a career path beyond the Nurse supervisor/trainer level. The higher institute qualifications are beyond the grasp of the vast majority.

B10. Attrition/retention problems with STN'S

- a. Anecdotal evidence suggests greater stability of STN'S in rural areas due to home location and potential marital options.
- b. A manpower flow analysis needs to be done in conjunction with the PP to assess at least the major personal streams.

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While dynamics of the STN manpower pool are unclear at present, data are available to develop an aggregate picture. Annual emigration for work takes about 1000 Nurses. Annual production is about 3500. Average service life is perhaps four years.

B11. Importance of wages, working conditions, quarters and non-monetary incentives to STN'S

- a. Current private income opportunities are limited to small gifts, delivery fees and extra work in doctors' clinics.
- b. Excess of MD'S makes independent practice opportunities unlikely, except for birth-related services and direct, useful services and treatment provided on outreach.
- c. Mass emigration to gulf states by young unattached Moslem women for work testifies to the value placed on salary.
- d. The improved job description will offer increased respect and credibility, which are among the few incentives available.

B12. Diarrheal disease PP/STN overlap

- a. Both STN and Daya training offer major opportunities to promote and disseminate URT and severe diarrheal referral.

C. Appropriateness of project purpose and scope, with suggested revisions

This section outlines the rationale for a revision of the project concept. While the examples are illustrative only and not complete, a good case can be made for keeping the technical content of each element to the minimum necessary for practical work. The tendency to overload people and training programs for theoretical completeness is one of the major reasons why health workers can't do their jobs - expected to do everything, they give up and do nothing.

### C1. Current circumstances

Current circumstances suggest several changes in the project if significant improvements in national MCH/FP services are desired. These circumstances include: a) the almost universal experience that facility-based Ministry of Health Services in MCH/FP never reach more than 20% of the population; b) the Egyptian decision to certify dayas where conditions warrant; and c) the SRHD project experience that confirmed the value of skills-oriented, brief retraining of health unit staff.

### C2. Illustrative list of essential services

#### What services are we talking about?

While MOH staff have broader responsibilities, for discussion purposes we can consider a very short list of health activities which are likely to have direct impact on MCH/FP problems.

The list includes;

- a. Perinatal Care
  - 1) Prenatal high risk screening, tetanus toxoid and postpartum care.
  - 2) Normal delivery care.
  - 3) High risk delivery care.
- b. Oral Rehydration Therapy
- c. Family Planning
- d. Lower Respiratory Disease Treatment

### C3. Realistically, where can these services be provided in Egypt?

The figure below illustrates the point by presenting an estimate of where these services can be provided: in hospital settings, in health centres and health units or in the community. As a general statement, only a very few services can or need to be met in hospital, a few more can be met in health units and centres, leaving the large majority to the community.

The hospitals and health units are already well-staffed in absolute numbers though deficiencies do exist in Upper Egypt. With skill improvement, training and supervision, which are widely needed, the hospitals and health units can meet their portion of the task. This leaves the majority of the work still to be faced in the community.

FIGURE C. 3.

PERCENTAGE OF SERVICES WHICH CAN AND NEED TO BE LOCATED IN A PARTICULAR SETTING. (PERSONAL ESTIMATE, NO PRECISION INTENDED OR REQUIRED IN THE EXAMPLE)

	Hospital	Health Ctr/ Health Unit	Community	Total
Perinatal care-				
Prenatal screening	5%	20%	75%	100%
tetanus toxoid, post-partum				
Normal delivery-	10%	0%	90%	100%
High risk delivery-	90%	10%	0%	100%
Oral rehydration-	2%	10%	88%	100%
Family planning-	5%	20%	75%	100%
Lower respiratory disease treatment-	5%	55%	40%	100%

C4. What are the choices at the community level?

Figure C4. illustrates some of the potential choices directly linked to the health system: Health Center Nurses, Dayas, and the private sector, including both medical and pharmacy practice, which is very widespread.

The private sector category of medical and pharmacy practice, is of course extremely important, as demonstrated by the annual percapita private expenditure on drugs alone which is estimated to be about 3.5 L.E., or six times the government expenditure. This is beyond the scope of the project, although certainly worth separate consideration. Modest improvements in pharmacy training and practice could well have impact of a magnitude similar to this project.

From the perspective of meeting community needs for essential MCH/FP Services. both the Nurse and the Daya have potentially important roles to play, and are recognized by both the Ministry of Health and the Community in that light. This presents a major opportunity for the project.

FIGURE C.4.  
 POSSIBLE CHOICES OF WORKERS TO  
 MEET COMMUNITY BASED MCH/FP NEEDS

	NURSE	DAYA	PRIVATE SECTOR	
			MEDICAL PRACTICE	PHARMACIES
Perinatal care				
Prenatal screening	yes	yes	possible	no
Tetanus toxoid	yes	possible	possible	possible
Post partum	yes	yes	possible	no
Normal delivery	yes	yes	possible	no
High risk delivery	no	no	no	no
Oral rehydration	yes	yes	yes	yes
Family planning	yes	yes	yes	yes
Lower respiratory disease treatment	possible	possible	possible	possible

#### C5. Attributes & conditions of nurses & dayas

In suggesting an expanded scope for the project, it may be worth summarizing the environmental attributes and conditions surrounding the nurses and dayas, as in figure C5. The important point is that while they have some potential areas of conflict, there are many more areas of complementary experience and interest. The evidence in favor of a concrete program of manpower development is substantial at many levels.

In the community, the vast majority in urban and rural areas rely on the daya. Nurses are neither available nor interested in attempting to replace them in the foreseeable future.

In the health centers and units, nurses are already in defacto managers of most activities, and with retraining and a new curriculum, will be increasingly occupied with patient services that they are currently unprepared to perform. An outreach role which concentrates on high risk MCH contacts is all that is sustainable, in conjunction with closer communication with the dayas.

In the hospitals, the revised curriculum will help produce skilled assistants for the doctors, but no major impact on FP/MCH activities can be anticipated, with the important exception of midwifery training and the small percentage of cases which require hospital services, such as severe dehydration and surgical family planning.

FIGURE C5

SUMMARY OF NURSE & DAYA ATTRIBUTES & CIRCUMSTANCES

	NURSE	DAYA
Employment/Work Site	<ul style="list-style-type: none"> <li>- Government employee</li> <li>- Health Facility-based</li> <li>- Often <u>defacto</u> health/unit manager</li> <li>- Potentially short service life</li> <li>- Available during working hours</li> </ul>	<ul style="list-style-type: none"> <li>- Private entrepreneur</li> <li>- Home/Community based</li> <li>- Long service life</li> <li>- Available any time</li> </ul>
Background	<ul style="list-style-type: none"> <li>- Literate, formally educated</li> <li>- Young</li> <li>- Profession-oriented</li> </ul>	<ul style="list-style-type: none"> <li>- Illiterate</li> <li>- Mid to older age</li> <li>- Service-oriented</li> </ul>
Rewards/incentives	<ul style="list-style-type: none"> <li>- Salaries</li> <li>- Government position</li> <li>- Limited outside income due to lack of service skills &amp; MD oversupply</li> <li>- Not rewarded for outreach</li> </ul>	<ul style="list-style-type: none"> <li>- Fee-for service</li> <li>- Community respect</li> <li>- Potentially powerful community figure due to ceremonial services performed</li> <li>- Total reward is for outreach</li> </ul>
MCH/FP Experience	<ul style="list-style-type: none"> <li>- Limited delivery exp.</li> <li>- Some like midwifery, many do not</li> <li>- Currently perform few deliveries</li> </ul>	<ul style="list-style-type: none"> <li>- Varying delivery exp.</li> <li>- Mix of good practices and harmful</li> <li>- Currently perform majority of deliveries</li> </ul>
Current Govt. and Community Posture	<ul style="list-style-type: none"> <li>- Committed to upgrade skills through training</li> </ul>	<ul style="list-style-type: none"> <li>- To be again recognized through certification</li> <li>- Strong local interest in some governorates</li> </ul>
What can be done to Strengthen Impact?	<ul style="list-style-type: none"> <li>- Increase skills &amp; direct patient service-ability which will be perceived as valuable ie, as in SRHD proj.</li> </ul>	<ul style="list-style-type: none"> <li>- Improve-delivery practices</li> <li>- High risk referral</li> <li>- Family planning training ORT</li> </ul>
How?	<ul style="list-style-type: none"> <li>-Curriculum revision</li> </ul>	<ul style="list-style-type: none"> <li>- Short training at Health Ctr</li> </ul>

How?

- In-service training & supervision
- Pre service training orientation of doctors
- Monthly meetings at HC for continuing education

Who will do it?

- Nurse Supervisors
- Midwife & nurse supervisors potentially STN

Evidence of potential for success

- SRHD Project
- Existing health unit-initiated contacts with dayas
- Successful programs in similar Moslem country circumstances

## C6. An Alternative Approach--A Manpower Development Strategy

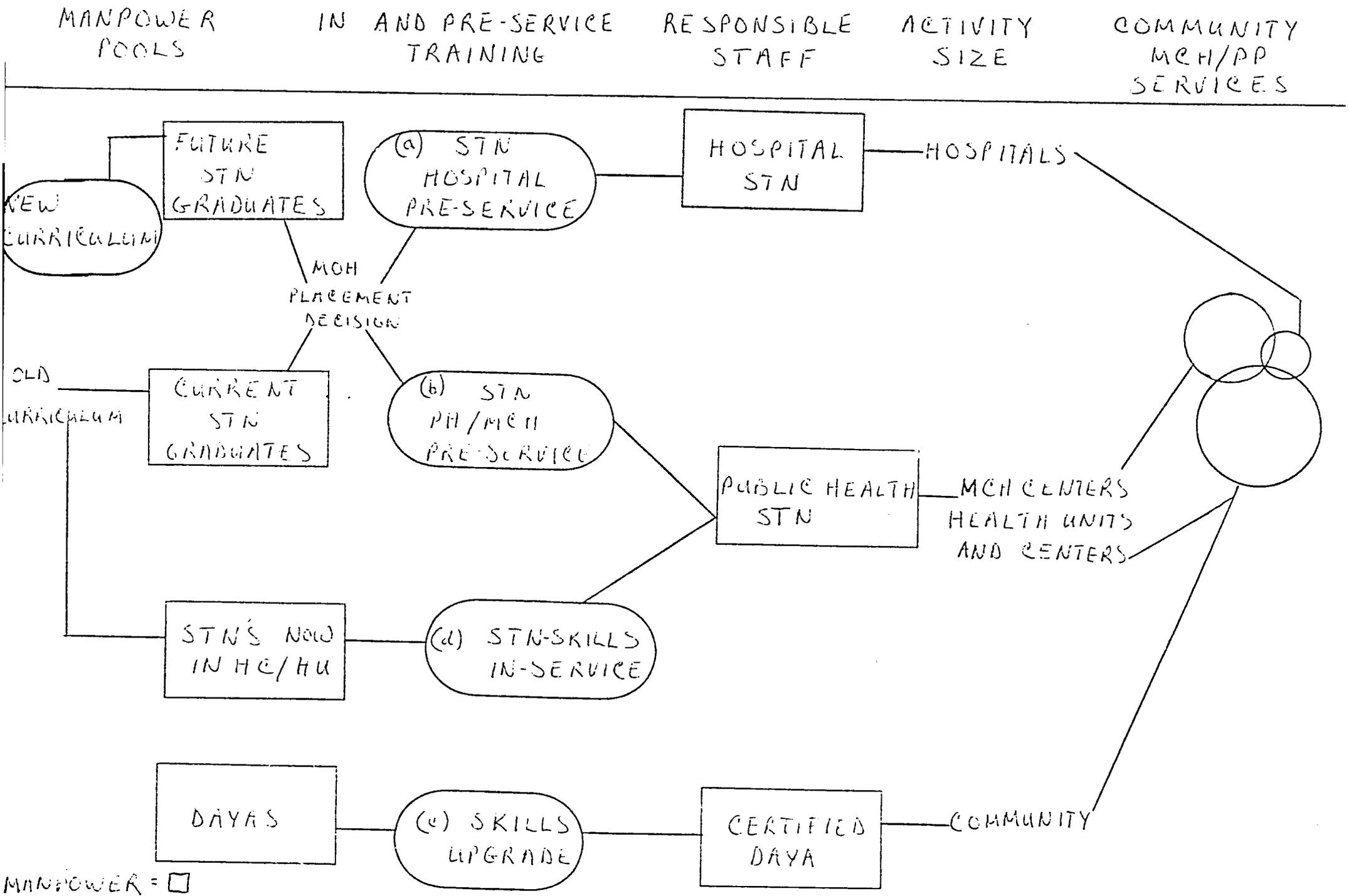
The STN is and will be the backbone of MOH, MCH/FP services, and should remain a major focus of the project, but revising her basic curriculum is inadequate to achieve the project purpose. The scope of the project should be expanded to include the elements essential to widespread STN impact on national MCH/FP needs. This implies:

- a. STN curriculum revision - for the years ahead.
- b. Pre-service training for both STN's and MD's - to upgrade practical skills for health center service.
- c. Daya training-for the community MCH/FP agent.
- d. STN in-service training - for the current practitioners.

Figure C6, illustrates one view of the manpower-development process, and points to the intervention required. All of these programs depend on good nurse trainer/supervisors as discussed in C8.

- a. The STN curriculum remains a major development task. It can readily encompass the basic skills and knowledge necessary for nurses entering the health system. Three years is certainly adequate if superfluous hours and the secondary education time are reallocated. As it will be several years before the curriculum will also be fully functional, major emphasis will also need to be placed on pre-service training.
- b. Pre-service training administered within each governorate once assignments have been made, currently lasts four months. Separate hospital and public health/midwifery programs need to be improved, focussing on the skills required for job performance and credibility. For health center work, this requires midwifery training of a basic level. Once the STN curriculum is in place, pre-service training content and time may be revised.

FIGURE C6  
NURSE MANPOWER TRAINING FLOW



MANPOWER = □

c. In Service Training for the large reservoir of health unit Nursing Staff.

This SRHD project has confirmed that short (1 week) training on specific MCH/FP skills can make significant improvements in nursing skills and performance. This project should exploit that experience by abstracting the elements which are feasible for large scale replication, and implementing the essential skill elements only through in-service training.

d. Daya Training

Short programs for the upgrading of daya skills and orientation to good health practices can readily be developed for initial implementation in those governorates where public interest and MOH staff willingness coexist. They have proven highly popular and successful in other Moslem countries, in terms of community acceptance and cooperation with MOH staff.

C7. AN ILLUSTRATIVE SUMMARY OF SKILLS TRAINING

Figure C7 presents an illustrative summary of the skills contents which might be considered for each training activity.

C8. PROGRAM PHASING & IMPLEMENTATION

Figure C8 presents an illustration of potential project phasing. It should be viewed as a device to focus on the interrelationships of project elements, and particularly on the training of trainers and supervisors activities--the crucial points on which the program will succeed or fail. The curriculum development elements of the program are essential but readily manageable, largely self-contained tasks. The implementation elements, largely through existing network of nurse supervisors within each governorate, require careful consideration by the MOH consultant team in developing the P.P.

C9. Issues And Tasks Required For Training Of Trainers And Supervisors  
And Their Continuing Support.

As noted previously, the single most crucial and difficult project activity will be the phasing and conduct of the training of trainers/supervisors and their support in the field.

Figure C9 presents a first approximation of the issues which the PP team and MOH need to resolve for the training process. Conflicts and manpower limitations need to be defined before project output targets can be set.

A less tractable but equally significant area is the reward/recognition/support system for nurse trainer/supervisors in the field. In general, these positions are already filled in each governate, and the success of the project will be, in large, part in the hands of these nurses. Again personal observation and the anecdotal experience of the SRHD project suggest that nurse supervisors have performed quite well when given concrete skills to transfer. The proof will only be seen with time as the excitement of innovation is superceded by the reality of more work every day than they are used to doing.

III D.

ILLUSTRATIVE SCOPE OF WORK FOR PP TEAM MEMBERS

NURSE EDUCATOR

Schedule for Curriculum Revision  
Identify MOH and Egyptian Curriculum Specialists potentially available for project  
Sources of competency-based materials  
Visit, Assess, Enumerate Central and Governorate Supervisory Nursing Staff availability for training and work on project

NURSE MIDWIFE

Assess current midwifery training sites and curriculum content  
Estimate potential training capacity for midwife and STN normal delivery training  
Assess governorate interest in Daya training and establish priority list of locations  
Assess governorate staff for potential Daya trainers, and alternative of Central teams for training - of trainers programs  
With Anthropologist/Sociologist, visit several daya sites and assess potential interest in training  
Develop outline of daya training curriculum

MANAGEMENT ANALYST

With Nurses and MOH, prepare project training schedules to ascertain feasibility or necessary tradeoffs in training and supervisory schedules  
Assist project officer with project implementation schedule Project Budgeting  
Financial Analysis of project input on MOH  
Review and assess projected project work load demands on MOH supervisory/trainers realistic incentives and motivations

ANTHROPOLOGY/SOCIOLOGIST

Examine roles of Nurses and Dayas in health care delivery including public and professional perceptions  
Explore alternative approaches to Dayas involvement with MOH health services, particularly in terms of potential training and communication relationships with STN's, Nurse supervisors, Nurse Midwives and male and female physicians.

Summarize current roles of Dayas in health care in urban and rural areas.

PERSONS INTERVIEWED:

September 14, 1981:

Boulac Al Aam Hospital and STN School, Cairo  
Dr. Ismail Kamiel-Director of Hospital  
Dr. Adel A. Elvady-Head, OB-GYN Department  
Taiya Mohammed Abdel Hamud-Headmistress and Acting Matron

September 15, 1981:

Kafre Nassar Health Unit, Giza  
Dr. Mohamed Ismail

Meet Rahena-Combined Health Unit, Giza  
Dr. Maddy Armed Salimont  
Dr. Masmî  
Dr. Asmuth

Al Badrashein Hospital and STN School  
Dr. Hassan-Medical Director  
Matkoa Zaki-Matron

September 16, 1981:

Ahmad Maher Hospital and STN School  
Dr. Marsi Zidan-Director of Hospital  
Fawzia Sadie-Deputy Headmistress and Instructor  
Amin Mohamed-Instructor  
Mona Maher-Instructor  
Shafka Mohamed-Instructor  
Safia Abdel Azim-Instructor  
Farida Hussine-Instructor  
Samira Abdel El Malak-Instructor

Heliopolis Health Center  
Dr. Zyjarta ElGapi-Deputy Director  
Dr. Rawia Mohamed Abdel Hafez  
Kamla Kamel-Matron

September 17, 1981:

Karser El Enee Hospital and School  
Neemat Abu Seoud-Professor Emeritus  
Batmina Yousef-Headmistress  
Kawkab Armanious-Director of Education  
Refehia Fouad-Nurse-Midwifery Instructor  
Aida Ghali-Instructor

Strengthening Rural Health Delivery Project  
Dr. Farouk Mostafa Munir-Deputy Executive Director  
Dr. Clayton Ajello-USAID

September 20, 1981:

Roda Center

Dr. Fawzia El-Gamal-General Director

Dr. Mohamed Labib Ibrahim-Consultant

Miss Amara-Nurse Trainer/Media Specialists

Eagan Montazi-Nurse Trainer/Continuing Education

September 22, 1981:

Urban Health Project

Dr. Nabahat Fouad-Director

September 23, 1981:

SRHD Project, Fayoum

Dr. Fahkri-Rural Health Project Director, Fayoum

September 29, 1981:

El Galoa Hospital and Nurse-Midwifery School

Shawkia Ahmed-Headmistress

Hosna Rashed-Matron

Olfat Eltobgi-Assistant Matron

Aster Yousef-Instructor

Esmat Gamil-Instructor

Ministry of Health Personnel

Dr. Abdel Kafar Khalaf-Director Development Research Sector

Effat Kamel-Director of General Nursing Department

Soheir Shams-STN Project Director

Dr. Enamin Awabbi-Director of Training

Japanese Nurse Consultants: Junko Kondo

USAID Personnel:

Donald Brown-Director

Owen Cylke-Deputy Director

Dr. William Oldham-Director, Health Office

Dr. Rose Britanak-Public Health Advisor

Connie Collins-Public Health Advisor

Thomas Reese-Director of Population Office

Fawzia Tadros-Public Health Specialist

FIGURE C7a)  
ILLUSTRATIVE TRAINING CONTENT - REVISED 5713 CURRICULUM

CORE SKILLS

T, P, R, B/P, FETAL HEART TONES

HEIGHT/WEIGHT WITH SALTER, MUNICH, ADULT SCALES

BATHING/PHYSICAL COMFORT MEASURES

POSITIONING, AMBULATION

BED MAKING

MEDICATIONS - PO, IM, R, ID, SQ, IV, ENT

BEGIN IV

DRAW BLOOD / HEMOGLOBIN (GAST)

URINE TEST FOR SUGAR & PROTEIN

STOOL EXAM

EYES/EA

IRRIGATIONS / INSTALLATIONS / CATHETERIZATION

STERILE TECHNIQUE / WOUND CARE

APPLICATIONS - HOT & COLD

O<sub>2</sub> ADMINISTRATION

CPR - ADULT, CHILD, NEWBORN

FIRST AID

ORT

FIGURE C761

ILLUSTRATIVE TRAINING CONTENT - PRESERVICE, INSERVICE AND DAY

STN PRESERVICE

SKILLS

- BP
- SQ/IM INJECTIONS
- ORAL/RECTAL TRACTS
- HGB MEASUREMENT
- WEIGHING - SALTER UNICEF, ADULT SCALES
- ARM CIRCUMFERENCE
- WEIGHT RECORDING ON GROWTH CHART
- ANTICLANS USE / STERILIZATION
- NEWBORN EXAM
- ORAL REHYDRATION THERAPY
- SALT/SUGAR SOLUTION
- PACKET PREPARATION
- NORMAL DELIVERY

KNOWLEDGE

- SIGNS, SYMPTOMS, TREATMENT OF: DIARRHEA / DEHYDRATION
- EYE INFECTION
- SKIN INFECTION
- MALNUTRITION
- SIGNS, SYMPTOMS OF: PREMATURAL HIGH RISK DELIVERY, ABNORMAL FETAL POSITION
- PNEUMONIA / LOWER RESPIRATORY INFECTION
- TETANUS
- ANTE PARTUM INTERFERENCE OF TETANUS TOXOID
- FAMILY PLANNING METHODS -
- CHILD IMMUNIZATION
- INFANT DIET

STN INSERVICE

- WEIGHING - SALTER UNICEF, ADULT SCALES
- ARM CIRCUMFERENCE
- WEIGHT RECORDING ON GROWTH CHART
- ORAL REHYDRATION THERAPY

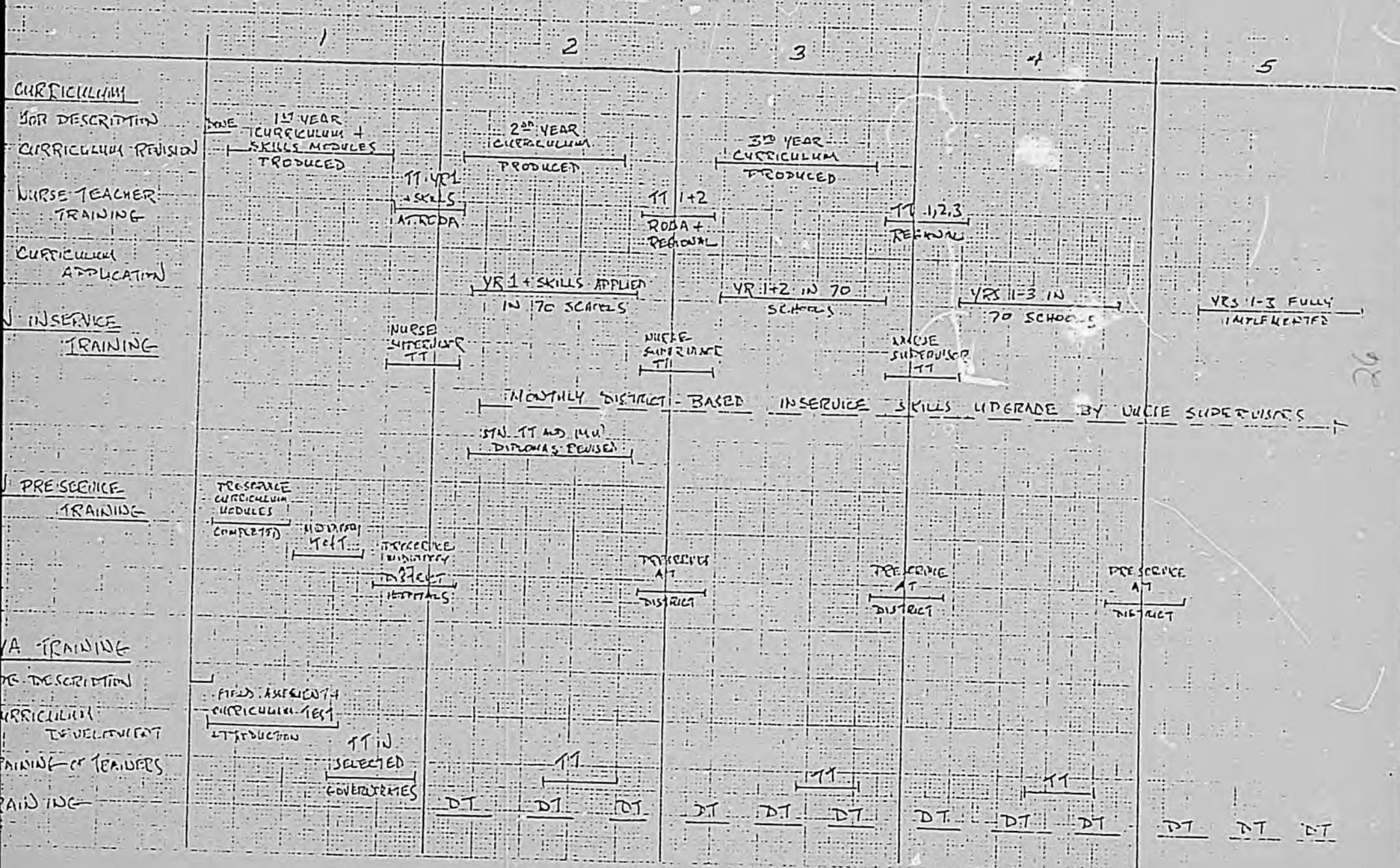
- SIGNS, SYMPTOMS, TREATMENT OF: DIARRHEA / DEHYDRATION
- EYE INFECTION
- SIGNS, SYMPTOMS OF: HIGH RISK DELIVERY
- LOWER RESPIRATORY INFECTION
- FAMILY PLANNING METHODS USE -
- INTERFERENCE / SCHEDULE FOR TETANUS TOXOID

DAY TRAINING

- NORMAL DELIVERY TECHNIQUE
- SKILLS FOR HIGH RISK CASE REFERRAL
- ORAL REHYDRATION THERAPY
- SUGAR/SALT SOLUTION
- PACKET PREPARATION

- SIGNS, SYMPTOMS, TREATMENT OF DIARRHEA / DEHYDRATION
- EYE INFECTION
- FAMILY PLANNING METHODS -
- INTERFERENCE OF LATE MATERNAL TETANUS TOXOID
- SIGNS, SYMPTOMS OF LOWER RESPIRATORY INFECTION

FIGURE C E  
 NUCCE MASTER TRAINING - ILLUSTRATIVE PHASING



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FIGURE C9 : ILLUSTRATIVE TRAINING SUMMARY

COURSE	PARTICIPANTS	PURPOSE	TEACHER OPTIONS	WHERE TAUGHT	SOURCE OF MATERIALS	WHEN GIVEN	POTENTIAL SCHEDULE CONFLICTS
STN SCHOOL FACULTY SERVICES	PRESENT STN SCHOOL FACULTY	INTRODUCE NEW CURRICULUM	RODA CURRICULUM DEVELOPMENT TEAM ? HN FACULTY	RODA REGIONAL TRAINING OR TRAINING SITES	STN CURRICULUM DEVELOPMENT	4 WEEKS PRIOR TO THE NEW CURRICULUM 2 WEEKS PRIOR TO 2.1.30	FACULTY OVERLOAD VARIATION TIME
STN SUPERVISOR SERVICE	CURRENT STN SUPERVISORY STAFF	ORIENTATION TO NEW JOB REQUIREMENTS & SKILLS	GOVERNORATE SUPERVISORS	GOVERNORATE / DISTRICT	CURRICULUM + JOB DESCRIPTION	AFTER FIRST YEAR 1-2 DAYS	PRACTICE ALSO SCHEDULED
TRAINING OF STN YOUNGER SUPERVISORS	GOVERNORATE / DISTRICT SUPERVISORS	PREPARE STN SUPERVISORS AS TRAINEES FOR FIELD SKILLS	? REGIONAL TRAINING CENTER STAFF	REGIONAL TRAINING CENTRES + GOVERNORATES	CURRICULUM MODULES	FIRST YEAR 4 WEEKS	PRE SCHEDULED
STN DIPLOMA SPECIALTY PROGRAMS	NON-CERTIFIED STN SCHOOL FACULTY	INSTRUCTOR CERTIFICATION	REGIONAL TRAINING CENTERS, RODA OR KASR EL AINI	REGIONAL T.C. RODA KASR EL AINI	MAJORITY DOG IN PLACE FULL NEW CURRICULUM	INTERMEDIATE STARTING 1st SECOND YEAR	
	CURRENT FACULTY OF NURSE MIDWIFE / SCHOLS	REVISED MIDWIFERY CURRICULUM	MIDWIFE PARTICIPANTS IN CURRICULUM REVISION ? OUTSIDE TA	REGIONAL T.C. + HOSPITAL TRAINING	REVISED CURRICULUM	4-6 WEEKS LATE IN FIRST YEAR	
	NURSE MIDWIFE TRAINEES	NURSE/MIDWIFE CERTIFICATION	MIDWIFERY SCHOOL FACULTY	HOSPITAL / MIDWIFE SCHOOLS	REVISED CURRICULUM	2nd YEAR	
STN RESERVE TRAINING	STN GRADUATES	PREPARATION FOR FIELD PLACEMENT	GOVERNORATE / DISTRICT UNEMP SUPERVISORS	DISTRICT	FIELD SKILLS: MODULES FROM CURRICULUM	AFTER STN SCHOOL 4 MONTHS	IN SERVICE ALSO SCHEDULED
	GOVERNORATE / DISTRICT SUPERVISORS	PREPARE FOR STN INTERFACE TRAINING	REGIONAL TRAINING CENTER STAFF	GOVERNORATES		24 WEEKS LATE IN YEAR	
DAYA TRAINING	DAYAS	UPGRADE SKILLS IN DELIVERY / REFERRAL CRT, FP	NURSE / MIDWIFE AT RAC / DISTRICT	COMMUNITY / HEALTH CENTER	DAYA CURRICULUM DEVELOPMENT	AFTER FIRST YEAR 3 WEEKS + MONTHLY FOLLOWUP	
	DAYA TRAINEES (ACTIVE MIDWIVES)	TRAIN & SUPERVISE DAYAS	DISTRICT NURSE / MW & REGIONAL CENTER MW	GOVERNORATE / DISTRICT		LATE FIRST YEAR 2-3 WEEKS	IN & OUT SERVICE STN TRAINING ALSO SCHEDULED
	TRAINERS OF DAYA TRAINEES	DAYA TRAINER PREPARATION	REGIONAL T.C. TRAINERS	SELECTED GOVERNORATES		2-4 WEEKS	

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ARTICLE I - TITLE

Technical & Feasibility Studies Project, No. 263-0042- (Secondary Technical Nurse Training Project Design).

ARTICLE II - OBJECTIVE

System analysis of Secondary Technical Nurse Training prior to Project Paper design.

ARTICLE III - STATEMENT OF WORK

A. The Contractor's team shall reassess the proposed Nurses Training Project purpose and planned interventions in terms of:

1. Factors likely to be crucial to the proposed curriculum design and training program and
2. Systemic factors which likely to hinder effectiveness of trainees once they enter the health delivery system.

B. The Contractor's team shall also assess the following:

1. Current STN performance.
2. Constraints to delivery of MCH/FP service attributable to STN basic training.
3. Prospects for revising current standing orders and job descriptions for nurses to emphasize an MCH/FP outreach program on a nationwide basis, similar to the program developed under the SRHD project.
4. Medical syndicate role in approval of revised job description and curriculum.
5. Relationship of the general education component to the nurses training component of the STN curricula and implications of limiting curriculum revision to the latter.
6. Relationship of new curriculum to current or proposed pre-service and in-service training for nurses and supervisors.

Consider relationship and possible expansion of in-service training proposed in PID.

7. Ability of MOH to provide adequate and practical training experience in 137 widely dispersed schools. Consider skills, capability and numbers of STN instructors; consider possibility of reducing and consolidating number of schools; reconsider rationale of renovation component and criteria for selection of schools.
8. Role of physician and nurse supervisor in STN performance and potential need for system-wide revision of job descriptions and retraining of both. Consider joint physician/nurse in-service training, job descriptions and standing orders developed for outreach program in SRHD Project.
9. Importance of career mobility and/or advance training for STN's.
10. Attrition/retention problems relating to STN's.
11. Importance of wages, working conditions, living quarters, and other non-monetary incentives to STN performance.
12. Review diarrheal disease PP and consider how STN project might overlap and assist.

C. After considering the above questions, the team shall make recommendations on the appropriateness of project purpose and scope, including specific recommendations for expansion or reduction. Explicit consideration should be given to potential phasing options if project expansion is recommended.

#### ARTICLE IV - REPORTS

A. A draft copy of the final report shall be made available to USAID/Cairo/HRDC/H for review and discussion prior to the team's departure from Egypt.

B. The title page of the report should include: Title of Report, project number, project title, authors and reporting period.

C. The final report should be submitted in English, to the following not later than 15 days after departure from Egypt:

USAID/Cairo/HRDC/H	5 copies
AID/NE/TECH/HPN	2 copies
AID Reference Center	2 copies

#### ARTICLE V - RELATIONSHIPS AND RESPONSIBILITIES

The Contractor shall receive technical directions from William D. Oldham, M.D., USAID/Cairo/HRDC/H and Barbara Turner, NE/TECH/HPN, AID/W.

#### ARTICLE VI - TERM OF PERFORMANCE

Starting Date: September 11, 1981

Completion Date: October 2, 1981

#### ARTICLE VII - WORK WEEK

The Contractor's technicians are authorized up to a six-day work week with no premium pay, only upon approval of the AID project manager.

#### ARTICLE VIII - DUTY POST

Cairo, Egypt

#### ARTICLE IX - ACCESS TO CLASSIFIED INFORMATION

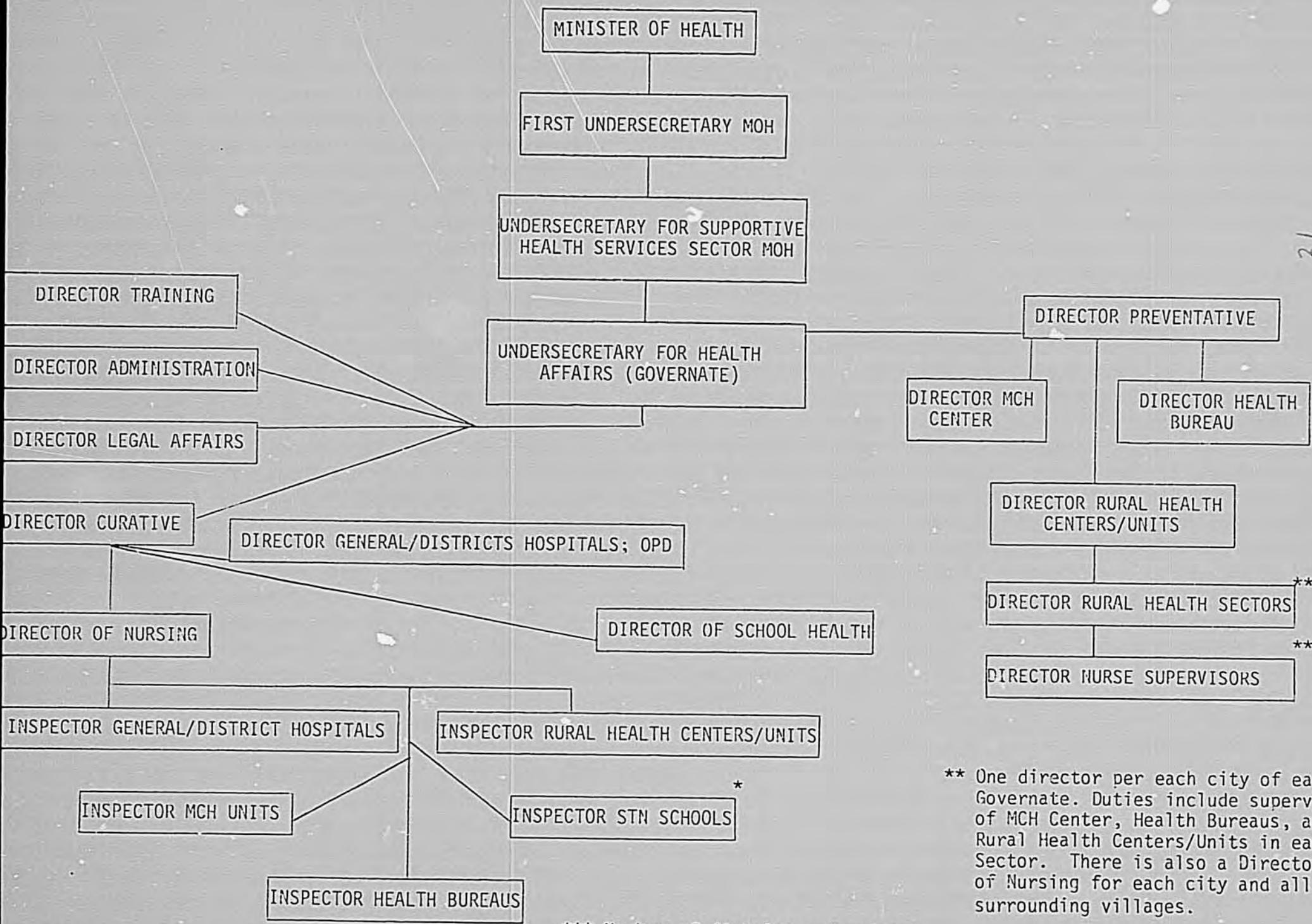
The Contractor's technicians will require no access to classified information.

#### ARTICLE X - LOGISTICS SUPPORT

The cooperating country will provide office space, office equipment, transportation in in cooperating country and medical facilities either in kind or from local currency supplied by USAID/Cairo.

International and in-country travel and local per diem will be funded in local currency.

APPENDIX 2



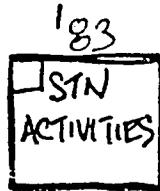
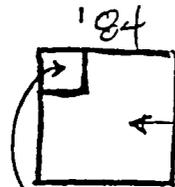
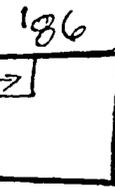
\*\* One director per each city of each Governate. Duties include supervision of MCH Center, Health Bureaus, and Rural Health Centers/Units in each Sector. There is also a Director of Nursing for each city and all surrounding villages.

\*\*\* Number of district supervisors will vary according to number of villages in each area. Usually one District Supervisor for ...

\* Placement varies per Governate: may be under Director of Training

STN  
CURRICULUM  
REVISION

NEW CURRICULUM GRADUATES



STN'S ALREADY  
IN PLACE

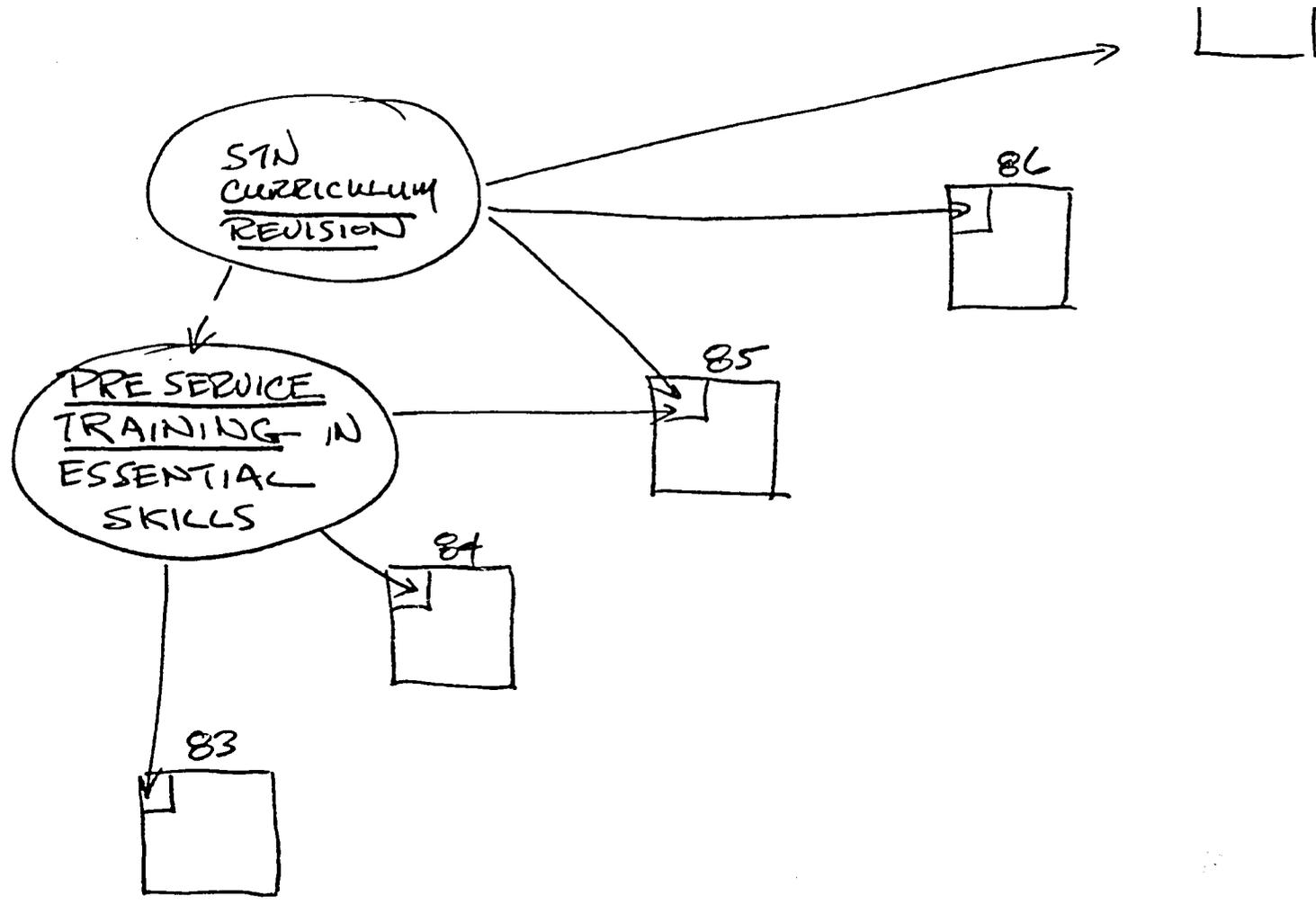
NEW STN  
GRADUATES  
ADDED EACH  
YEAR

=

TOTAL OF  
STN SERVICE  
ACTIVITIES  
BY WOH

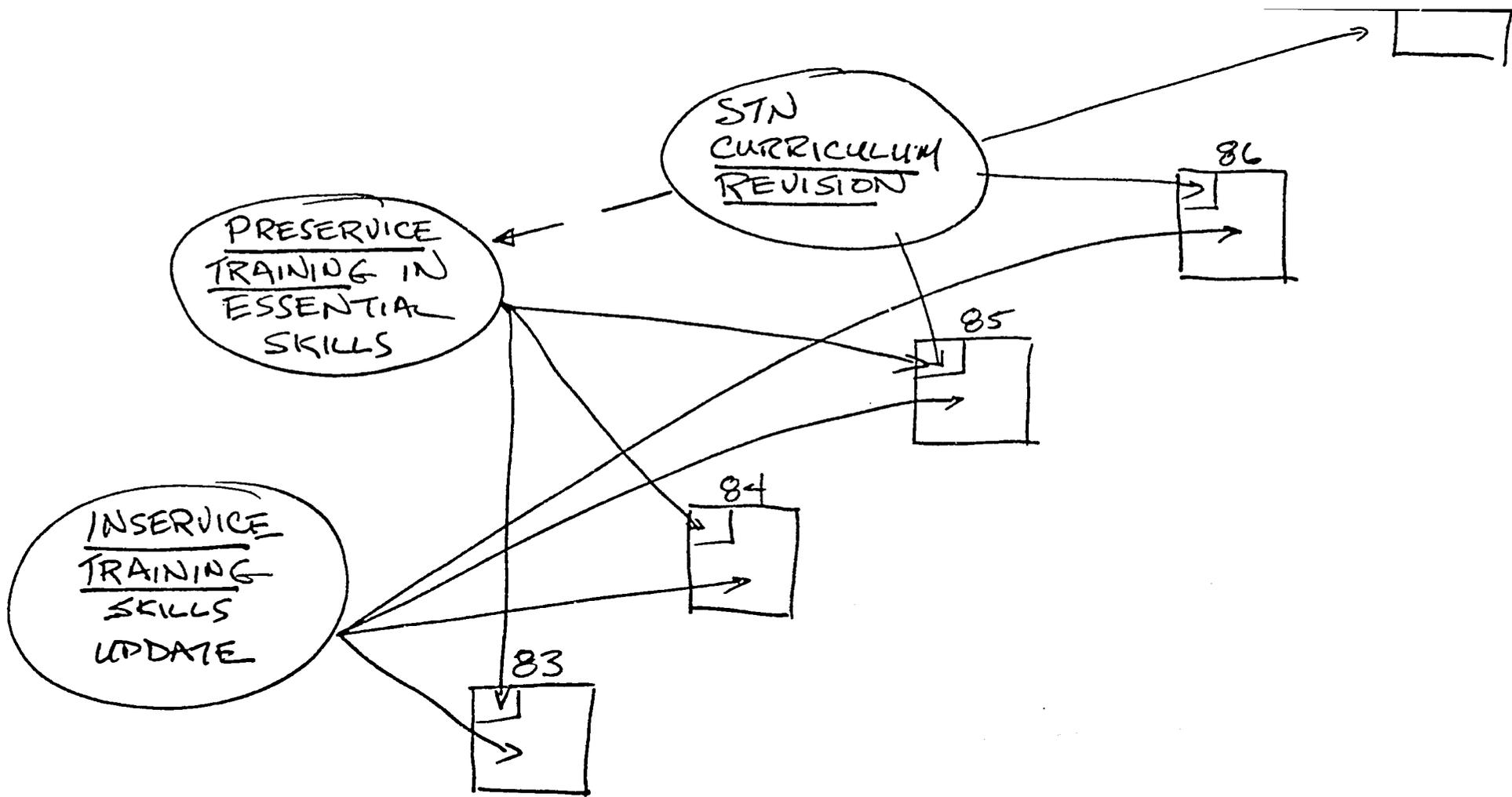
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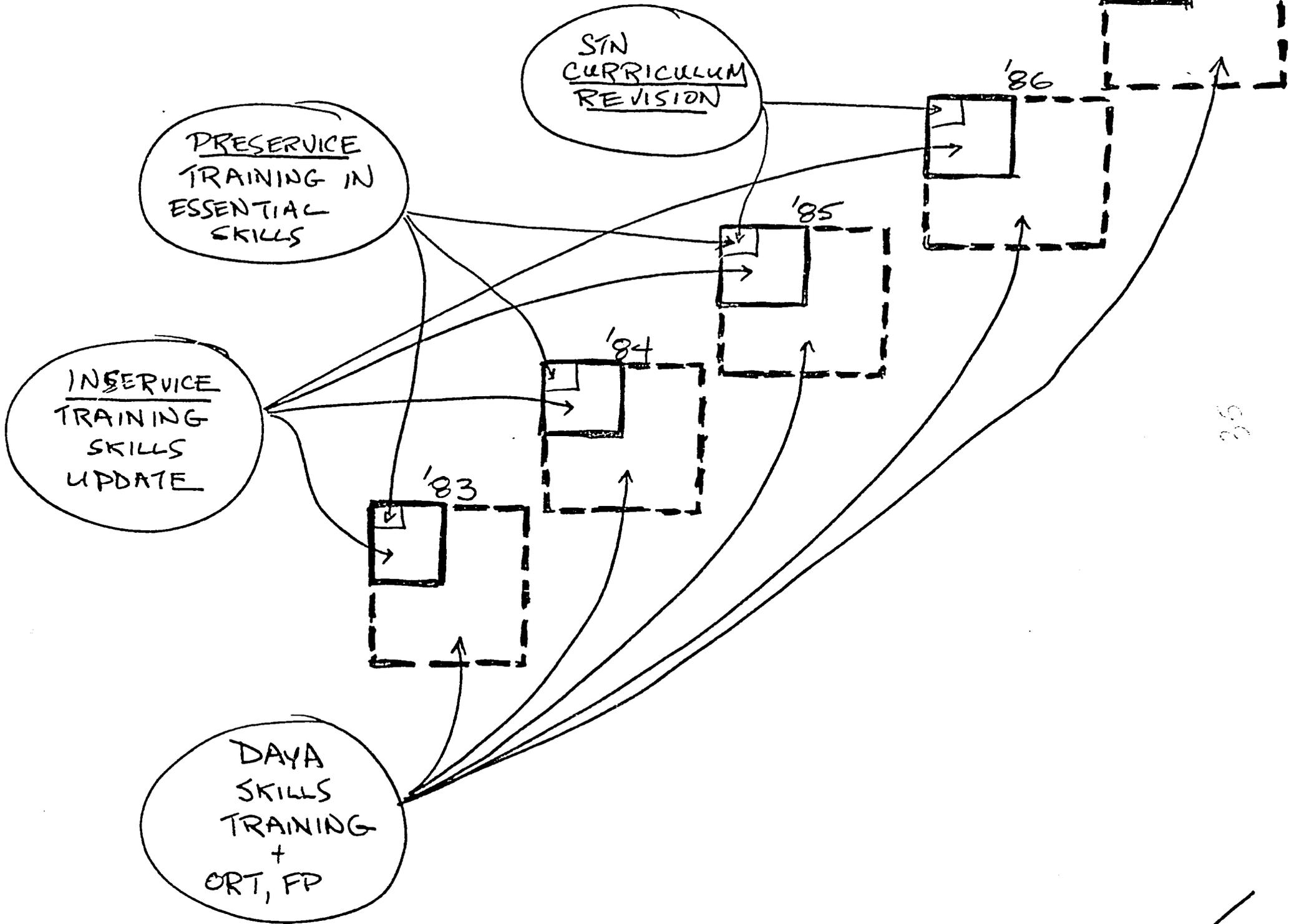
APPENDIX D



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1

# ESTIMATED RANGE OF TASK DIFFICULTY

NOT  
DIFFICULT

→ DIFFICULT

CURRICULUM  
DEVELOPMENT

DAY A  
TRAINING

STN  
TEACHER  
TRAINING

PRE SERVICE  
TRAINING

IN SERVICE  
TRAINING AND  
SUPERVISORY  
SUPPORT

## REASONS:

- 1) FIXED, CLEAR OBJECTIVE
- 2) FEW PEOPLE INVOLVED
- 3) MOSTLY TECHNICAL WORK

- 1) BEGIN IN A FEW INTERESTED GOVERNORATES
- 2) SHORT, LIMITED TRAINING
- 3) INDEPENDENT PRACTITIONERS

- 1) AT LEAST 70 LOCATIONS
- 2) A LOT OF NEW MATERIAL AND TECHNIQUES TO LEARN

- 1) MANY LOCATIONS
- 2) DIFFERENT GOVERNORATE TRAINING INTERESTS

- 1) LONG TERM, CONTINUING PROCESS
- 2) DEPENDENT ON NURSE / SUPERVISOR WILLINGNESS AND INTEREST IN FIELD WORK