1. Outline of the Project
Country: Republic of Senegal
Project Title: The Project for the Development of Human Resources in Health (Projet d’ Appui au Développement des Ressources Humaines dans le domaine de la Santé, “PADRHS”)
Issue/Sector: Healthcare and medical care
Cooperation Scheme: Technical Assistance Project
Division in Charge: JICA Senegal Office
Total cost (as of the time of evaluation): Approximately 586,079,000 Japanese yen
Period of Cooperation (Duration):
R/D Signed on: September 21, 2001
Period: November 1, 2001 – October 31, 2006
Partner Country’s Implementing Organization: Human Resources Department (Direction des Ressources Humaines, “DRH”), National School of Health and Social Development (Ecole Nationale de Développement Sanitaire et Social, “ENDSS”), Primary Health Care Division of Health Department (Division de Soins de Santé Primaires, Direction de la Santé, “DSSP”)
Supporting Organization in Japan: International Medical Center of Japan

1-1 Background of the Project
The Republic of Senegal (hereinafter referred to as “Senegal”) formulated the National Human Resources Training Plan (Plan National de Formation, “PNF”) 1998-2002 in 1997, which identified the securing of healthcare and medical care professionals as one of the most important issues. In Senegal, there are only seven doctors and 35 registered nurses per 100,000 people, which lags far behind the average for developing countries as a whole (78 doctors, 98 registered nurses). In addition, because 73% of the country’s doctors, 60% of its registered midwives and 48% of its registered nurses are concentrated in the capital city of Dakar, where 22% of the total population lives, unauthorized medical personnel are forced to provide medical care and treatment in rural areas. Under such conditions, the government of Senegal has requested cooperation from Japan in support of the implementation of the PNF.

1-2 Project Overviews
(1) Overall Goal
To contribute to the growth of human resources capable of working in the primary healthcare system in Senegal
(2) Project Purpose
Training system of health workers who work in primary healthcare is strengthened.

(3) Project Outputs
1) The reinforcement of the capacity of healthcare personnel training schools to foster human resources, particularly the capacity to foster human resources working in the primary healthcare system
2) The improvement of the process toward establishing the in-service education system targeted for nursing staff in the primary healthcare system is improved.
3) The establishment of an appropriate training system for Community Health Workers (Agent de Santé Communautaire, ASC) in the test area (Gossas)

(4) Project Inputs (as of the evaluation)
1) Japanese side:
   Long-term experts 10 persons (234M/M)
   Short-term experts 17 persons (252M/M)
   No. of trainees received in Japan 34 persons (37M/M)
   Equipment supply 41,285,000 yen* (189,855,000 F CFA)
   Local cost 84,657,000 yen* (389,304,000 F CFA)
   Other (cost of equipments carried by experts): 8,826,000 yen* (40,588,000 F CFA)
   (*Exchange rate: 1 yen = 4.59857 F CFA)
2) Senegalese Side:
   Assignment of counterparts: 39 persons
   Land and facilities provided: Provision of the project office in the Ministry of Health and Prevention Médicale (Ministère de la Santé et de la Prévention Médicine, “MSPM”) and in ENDSS
   Local cost: Project office overheads and per-diems for seminars held at ENDSS

2. Evaluation Team Overview
Members of the evaluation team

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<tr>
<th>Area in charge</th>
<th>Name</th>
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<td>Members</td>
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<tr>
<td>Leader</td>
<td>Eizen IREI</td>
<td>The Resident Representative of JICA Senegal Office</td>
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<td>Seiki TATENO</td>
<td>Director of the Expert Service Division, the Bureau of International Cooperation, International Medical Center of Japan</td>
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Development of human resources in health:
Yasuko NISHINO
Leader, Healthcare Human Resource Development Team, Group III, Human Development Department, JICA
Analysis and evaluation:
Masako TANAKA
Tak International, Inc.
Cooperation planning
Miyuki OIKAWA
Planning Researcher for Extensive Area, JICA Regional Support Office for Central and West Africa
Interpreter
Mariko SEKITA
* Mr. Chiaki Miyoshi from the Expert Service Division, the Bureau of International Cooperation, International Medical Center of Japan, joined the team as an observer member.

Evaluation Period
From June 5 to June 25, 2006
Evaluation type: Terminal evaluation

3. Overview of Evaluation Results

3-1 Achievements

(1) Project Purpose Achievements

The project purpose is on its way to being achieved. The number of registered nurses and registered midwives trained at ENDSS increased by an annual average of 56% from 2004 to 2006. The usage rates of the guidance for the nationally standardized (Chief Nurse of Health Post (Infirmier Chef de Poste, “ICP”) among those in charge of health education in the three model regions are 80%, 67% and 33% respectively. 87.5% of health posts in the test area are functioning under ASCs who are working in accordance with the standard module. Therefore, apart from the usage rate of national standard ICP guidance in two regions that did not reach the targeted rate (80%), all of the indices have been accomplished.

(2) Output Achievements

1) Output 1 (initial education)

Four out of five output indices have been accomplished. Financial management capacity and the capacity for training registered nurses and midwives at ENDSS (instructors’ capacity and
contents of practical training in particular) improved, and standards were set for the opening and establishment of private schools in the field of healthcare. Although equipment management at ENDSS facilities for multi-purpose practical training is not being implemented on a regular basis, it is expected that the equipment ledgers necessary for regular management will be prepared ahead of the conclusion of the project.

2) Output 2 (in-service education)

The MSPM has been producing annual reports for in-service education on a yearly basis since 2002, and the feedback on actual circumstances surrounding in-service education in all three regions is provided to related organizations. In the three model regions, the training of trainers (TOT) is being implemented with the use of the national standard ICP guidance, which was prepared through the project and was authorized by the national government, and health-related human resources in the regions have been reinforced. However, in-service education plans had only been formulated in one region as of the time of evaluation.

3) Output 3 (ASC training system)

The ASCs who were trained in the test area for the ASC training system and are currently working (27 persons) are currently examining patients at health posts in accordance with the ASC standard module authorized by the national government. Also, the instructions scheduled for provision through regular visits to health posts by ICPs are all being implemented. As for the state of the fulfillment of the promise by villages regarding paid compensation for ASCs, seven villages out of 32 have fulfilled this promise on a regular basis, and 22 villages in total (69%) have fulfilled it to at least a certain extent.

3-2 Summary of Evaluation Results

(1) Relevance

The project is highly relevant in terms of Senegalese policy and the project approach. The securing of human resources in the field of healthcare and the improvement of the quality and performance of their services are also the focus of the National Plan for Healthcare Development (Plan National de Développement Sanitaire “PNDS”) Phase II 2004-2008, and human resources development is being maintained as a the top-priority issue for MSPM. According to the Human Resources Department (DRH) of the MSPM, in regards to the level of primary healthcare facilities sought after for the achievement of the UN Millennium Development Goals (MDGs), the country is lacking in 1,824 registered nurses and 462 registered midwives, and 198 health posts have

been closed down due to lack of human resources as of October 2005. The government of Senegal plans to employ 750 healthcare and medical professionals on a yearly basis, and the DRH is planning to prepare the PNF Phase II, and as such the government is showing an active interest in training and the employment of human resources.

The project is focusing on the training system for human resources in the primary healthcare. While aiming to reinforce the system for training community healthcare staff as well as provide initial and in-service education systems for registered nurses and midwives, standardization and equalization of the quality of human resources training have been a focal issue at the national level. This approach reinforces the capacity of human resource training in Senegal. Also, the training of healthcare staff simultaneously tries to ensure sustainability at the community level, constituting an approach that may in future become one of Senegal’s regional healthcare strategies. At the regional healthcare seminar held in May of 2006, supported by the project, the importance of healthcare staff to communities was reconfirmed.

(2) Effectiveness

Although the project relates to various government levels and is also a rather extensive project in the area of human resource training, it has achieved results through the promotion of information sharing and collaboration between different sectors through the performance of activities in the three sectors of the project and meetings in the three sectors. For the initial education, reinforcement of the capacity of instructors at ENDS and the improvement of the content of education were the intended goals. Also, the improvement and equalization of private schools were promoted through support of the formulation of standards for the establishment of private schools. In terms of in-service education, foundations for the regional provision of in-service education were created through measures such as the formulation of a national standard ICP guidance, the implementation of TOT for those in charge of healthcare education in the three model regions through the use of this guidance as well as the preparation of- and sharing of information on the annual report for in-service education. With regard to the ASC training system, as a result of approaches aimed at establishing a system focused on the sustainability in communities (securing the payment of compensation to ASC from villages, the national standardization of examinations provided by ASCs, the establishment of an ASC training system and visiting instructions by ICPs), the project was able to present a single model. The project purpose is about to be achieved, and it is considered that the project’s level of effectiveness is high. The early holding of the National Coordinating Committee on Initial/In-Service Education, established by ministerial ordinance in May 2006, and the development and standardization of project outputs through the committee remain as issues to be addressed in the future.
(3) Efficiency

As for points of the project that were particularly efficient, it can be pointed out that the project was able to implement high-quality technical exercise and practical in-service training by utilizing facilities and equipment provided through grant aid cooperation, and also that a training program in Japan that met the needs of the C/Ps was implemented in a timely manner and that these C/Ps were proactively engaged in activities upon their return to Senegal.

On the other hand, there were factors that resulted in the impairment of efficiency. These included that the time it took to reach a consensus due to a lack of understanding and communication in terms of the cooperation scheme at the early stage of the project and the insufficient sharing of concepts such as the direction of the project and PDM, the time-consuming process by which coordination between the divergent opinions concerning daily payments between the Japanese and Senegalese sides were addressed and measures in response thereto were taken, and a delay in the dispatch of long-term experts for initial education. It is also considered that the project’s efficiency level would have been even higher had the test area for the establishment of the ASC training system been the health district within the three model regions for in-service education.

(4) Impact

It is expected that the overall goal of “contributing to the expansion of human resources capable of working in the primary healthcare system in Senegal” will be achieved. However, because there is a lack of information and analysis on the turnover rate of the human resources trained, the extent to which this goal will be accomplished is unknown.

The positive impacts of the project can be identified as follows: the establishment of the DRH within the MSPM as promoted through the project activities, the inclusion of the results of activities in regional health sectors into the regional healthcare strategy by MSPM and the utilization of educational materials and manuals developed through the project outside the scope of the project, the promotion of the establishment of a relationship between the ENDSS and private schools, and the increase in interest within the Ministry of Education in the preparation of standards for the establishment of vocational schools in other areas.

(5) Sustainability

It is considered that there are generally no problems regarding the project’s sustainability in terms of policy/system, organization and technical skills.

However, there are several issues that need to be addressed. At the central government level, it is necessary that information sharing be implemented, as well as collaboration and coordination with institutes engaged in human resources training through the National Coordinating Committee on Initial/In-Service Education, which was established by ministerial ordinance in May
2006. As for the cost of maintaining the equipment at ENDSS’ facility for multi-purpose practical training, it is possible that the necessity for financial support will increase in future, since the school’s independent revenue resources are limited. There are concerns about the financial sustainability of activities at the regional and lower levels, and future efforts to secure financial resources are needed.

3-3 Factors Contributing in the Production of Effects

The factors that contributed largely in the production of the project’s effects are as follows: the promotion of project activities by C/Ps with enhanced capabilities upon their return to Senegal, the strengthening of human resources training organization in the Ministry as a result of the establishment of the DRH within the MSPM resulted in the, which promoted collaboration and coordination between other relevant departments and facilitated the project operation, and the reinforcement of organizational support for the project through the appointment of the Technical Advisor at the Cabinet of the MSPM (JICA expert).

3-4 Problems and Factors that Raised Problems

Factors such as the delay in the project activities due to the issue of daily payments, the shortage in human resources in the area of nursing education in Japan, and particularly the difficulty in employing experts who are able to do their work in a French language context, can be pointed out.

3-5 Conclusion

The project was implemented with the aim of strengthening the system for training human resources working in the primary healthcare system in Senegal, based on the country’s national policy, in order to fulfill the needs of healthcare and medical care areas that face a shortage of human resources. In particular, the project focused on raising the qualification, capacity and level of activity (including support for ASC) of the ICPs. In the initial education phase, the project aimed to improve the contents of nursing and midwifery education and upgrade the instruction system in regional healthcare practices, as well as utilize the national standard ICP guidance. As for in-service education, the actual conditions of in-service education were ascertained, a national standard ICP guidance was prepared, and TOT for those in charge of regional healthcare training and health districts assuming ICP training roles was implemented. At the community level, training of ASCs by ICPs was provided. The achievements of these activities contributed to the strengthening of the human resource development system comprised of three sectors (initial education, in-service education and ASC training system in communities), and it is expected that the project purpose will be achieved.

As explained above, the project has a foundation prepared for the purpose of strengthening
the human resources training system. In order to maintain and develop the achievements thereof and to further strengthen the system, it is essential that the National Coordinating Committee on Initial/In-Service Education be held and become functional at an early stage. It is necessary to make efforts to diffuse the results thereof, equalize training opportunities, formulate and coordinate training plans that meet the needs of worksites, and standardize educational contents at the national level. In future, it will become necessary to try to establish a mechanism wherein the project achievements can be maintained/developed by the Senegalese side and to secure a source of revenue for this purpose.

3-6 Recommendations (Specific Measures, Recommendations and Advice in Relation to this Project)

(1) It is recommended that the National Coordinating Committee on Initial/In-Service Education be held at an early stage and that the coordination process be promoted, and that the following be included:
- The further promotion of the utilization of the national standard manual (ICP guidance, ASC training manual), videos showing nursing techniques, nursing techniques explanation sheets and nursing techniques textbooks in initial and in-service education
- The establishment of the necessary coordination for the equalization of opportunities for in-service education at the national level and the implementation of training that meets the needs of worksites by way of utilizing information from annual report for in-service education
- The standardization of the contents of initial education, including those of private schools, as well as the coordination of the selection of hospitals for practical training programs and establishment of the period and venues for regional healthcare practice sessions

(2) Joint meetings of the three sectors, which were established through the project, are an effective means of soliciting feedback regarding worksite needs. The DRH should consider establishing a similar mechanism aimed at developing cross-sectional, collaborations within the Ministry even after the completion of the project.

(3) The MSPM should accumulate the experience of regional healthcare in the Gossas district, and should make an effort to maintain and diffuse a system to ensure continuous activities at health posts implemented by the municipalities, communities and health districts.

(4) Before the end of the project, the DRH of the MSPM and the National Service for Health Information (SNIS) should establish a mechanism wherein the contents of annual reports for in-service education are included in their annual reports.
5) The MSPM should make an effort to strengthen the system necessary to ensure the continuous provision of quality education that is consistent with the standards for the opening of private schools for training human resources in the field of healthcare (standards for the establishment of schools), including the clarification of the different roles at the central and regional levels, and the assurance of human resources and the preparation of the equipment necessary for regular audits.

3-7 Lessons Learned

(1) The project oversaw various implementation organizations and project designs encompassing various levels of government, which reflected the wide range of requests made by the Senegalese side. Consequently, some operational problems and delays in the progress of activities occurred upon the initiation of the project, and the project was forced to review the PDM. At the project formulation stage, it is necessary to share the direction of the project and target recognition among the Japanese and Senegalese sides through an adequate approximation process. Also, on the Japanese side, close consideration should be made regarding the feasibility of the input of human resources in Francophone Africa.

(2) Projects aimed at developing human resources in the field of healthcare usually only identify sites for actual human resource training, such as schools and target regions, as direct project targets. However, it is more effective and consequential to implement project activities together with departments at the central government level in charge of human resource development policy, as was the case in this project.

(3) With sufficient information sharing between the project and the organizations that accepted trainees, it was possible to provide training programs in Japan that met the needs at the actual project sites. This resulted in raising the training participants’ sense of ownership of the project and led to the smooth and effective operation of the project.

(4) In order to produce better project results through efficient project operations and management, further information sharing in regards to the budgetary framework and actual activities to be implemented should be promoted among the relevant parties of the project at the outset of the project as well as during the project period.