SENAI ELECTRICAL AND ELECTRONIC VOCATIONAL TRAINING CENTER PROJECT

EVALUATION REPORT

DECEMBER/1993

SENAL ELECTRICAL AND ELECTRONIC VOCATIONAL TRAINING CENTER PROJECT

PRESENTATION

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This report is fruit of a joint study executed by the Brazilian and Japanese Governments, through the Brazilian Cooperation Agency - ABC and the Japanese International Cooperation Agency - JICA aiming at the identification of the results obtained and the problems occurred in the planning and implementation of Japanese cooperation projects in Brazil, besides the use of these results to future projects development between these two countries. subsidize The technological Center of Electro-Electronics "César Rodrigues". CEIEL, implemented through the technical cooperation Brazil/Japan, was one of the projects chosen as the planned evaluation target.

In spite of the time passed between the development of the cooperation project and the current moment which the evaluation was executed, SENAI as JICA partner and responsible for the planning, implementation and working of CETEL, has promptly identified with the purpose of the work, by means of the opportunity of getting subsidy that could assign the planning of future actions from the Centre.

It's expected that the results that are registered here can contribute, in a decisive way, for the development of new Japanese technical cooperation projects in Brazil and that the richness of information available can contribute effectively in raising the quality of the service rendered by CETEL in favour of the graduation and development of human resources and the technological development in the Brazilian industrial sector.

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1 - CETEL - RESULT OF PARTNERSHIP BRAZIL/JAPAN

Conceived as PJ ("Projeto Japão") - CETEL had its planning started by the end of the years 70, when then the industrial development process had already missing specialized manpower to attend upon the needs of electro-electronics sector.

After a negotiation period between SENAI and JICA an agreement of technical cooperation was signed on March 29th, 1979 forecasting the donation of equipments, technical assistance and know-how transference by the Japanese side and with SENAI taking responsibility by the building construction, complementary equipments acquisition, arrangement of the human resources and the unit maintainance.

On April 6th, 1981 were officially implemented two programmed technical courses: Electric and Electronic Training Courses, pioneers till then.

During these thirteen years of running the center, 476 trainces have concluded the technical course, that has established nowadays in one of the Centre's action strategy to attend upon the needs of the electro-electronics industry, that according to data from the RAIS/MTB (Annual Report of Social Information - Ministry of Labour) numbered 790 enterprises in 1991 absorbing 11.360 employees in Minas Gerais.

The Centre's profile has been objective of a continual evolution, influenced by the quick changes proceeding from the external ambient causing the deactivation of the Electric Training Course - extinct in 1989 - and the emerging of others, as the Industrial Computer Science, besides the enlargement of the possibilities available by the CETEL nowadays.

Thanks to this capacity of adequacy, incorpored progressively to its routine, CETEL has been recognized as a Vocational Training Center model in Brazil, soon being elevated to the category of National Technology Center, what makes it worth saying, that it's directed to absorption and diffusion of new technologies, additionally to the functions that it currently performs.

It's undeniable the contribution from Centres as CETEL in the elevation of the productivity level of the industries that need, more than over, improve the quality of their products and services, facing the level of competitivity in the internal and external markets, impelled by the globalization of the economy and a higher level of the consumer demanding.

Although the serious crisis lived by the country, the high inflationary rate that endanger the expansion plan of the industries in general, the moment of great politics disorder which is passing the Brazilian nation, the country needs to grow searching its self-sufficiency.

The investment of graduating and developing human resources as part of a wider educational process, that includes in its goals the upbringing to work, as a way of citzenship redemption and structure of a fairer society, still constitutes as being the greater key for the country.

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That's once more, the reason of the importance of CETEL as a reference centre to the technical training not only in Brazil as for other countries in Latin America and the necessities of permanent updating of its material and human resources.

2 - DEVELOPMENT OF EVALUATION

The operational systematic of the evaluation, led simultaneously by the Brazilian and Japanese teams, implied the following itens:

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2.1 - Methodology used

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The methodology allows a re-analyze of the cooperation project using the concept of logical framework that defines the overview of the project, indicating the basic components of the project, i.e. inputs, activities, outputs, project purpose sector goal and super goal. It defines these components.

The evaluation focuses the project under the following aspects:

- Efficiency: to judge the appropriateness of the means, methods, time, period and cost required to achieve the results. It's concerned with the tranformation of input into output, in terms of time, cost and the use of other resources;

- Effectiveness: to examine the degree to which the project purpose is being achieved, by comparing the original planned targets with the results actually achieved, and to analyze the factors and conditions which have led to the differences, if any;

- Impact: to analyze development effects including possible negative effects brought about by the project. These effects shall be evaluated mainly from the viewpoint of operational and managemental, technical, economic, and social aspects. Impact refers to the positive and negative effects, anticipated or not, on the concerned sector or on overall development within the recipient country. - Sustainability: to assess the likelihood of the objectives of the project continuing after the project assistance is over. It shall be evaluated mainly from the viewpoint of operational and managemental, technical, and financial aspects;.

- Relevance: to examine the relevance of the project designs set up at the time of project preparation and those revised during project implementation, in accordance with changes in project circumstances. This is called project rationable. Based on an examination of the aspects previously state the relevance of the project can be discussed. Relevance is also related with whether or not the socio-economic needs are still existent to justify the continuation of the project.

2.2 - Target - Informant

Initially delimited by the Japanese study team, the target-people include: . Beneficiaries from the project: trainces, graduates, graduates' supervisors and businessmen.

. Counterparts: instructors and technicians who have worked or who are presently working at CETEL.

.Managers: staff from SENAI who have, at the time of the project, supervised its implementation.

Officials: specifically belonging to ABC and SENAI - National Department who have been responsible by the project at level of macro-system.

. Professionals: from universities and schools similar to CETEL who keep an interchange with the Centre.

2.3 - Data Collection

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The necessary data collection to the evaluation was given through:

a - Fulfilment of the Indicator Table: it was performed a survey on a secundary data source in accordance with the indicators specified in the methodology evaluation model adopted (logical framework) including information about the project during the period from 1980 to 1993.

b - Interviews: 20 interviews were done in the period from November 16th to November 19th/93 including 35 people, from which originated a report with a synthesis of the information obtained.

c - Questionnaire: 5 different questionnaires previously prepared by the Japanese Study Team were adapted and translated into Portuguese by the Brazilian Work Team.

As a result of their distribution the following aspects were verified:

- Graduates: 222 questionnaires were mailed from which 23 were returned due to graduates' changing address and 68 were filled out and returned as asked.

- Graduates' supervisors: from the 54 questionnaires mailed, 10 were properly returned.

- Trainces: 07 from the 09 trainces who are attending the last period of the Electronic Training Course filled out the questionnaires.

- Instructors: 05 instructors integrating the target-public filled out the questionnaires.

- Counterparts: identified as the technical team, in this item were included 5 technicians who have already belonged to the working team of CETEL with those who are presently working in the Centre. From 10 questionnaires 7 were mailed back.

3 - RESULTS

According to the five aspects previously established it was analyzed the 사회 소문 가슴을 들었는 것을 다 나는 것이다. following:

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3.1 - Efficiency

It can be asserted in a general way that the project was implemented in accordance with its initial planning.

The Japanese experts attended completely the purposes of the project, with a satisfactory training period, houwever the unlink of the team should have occurred gradually instead of all at once.

The technology transferred to the counterparts was positive.

Another aspect refers to the teaching materials translated at the time of the cooperation.

This material, in English, was worth for its technical contents, but the ones in Japanese were scarcely used since the translation takes time besides being expensive.

Regarding to the counterparts training in Japan it was adequate, contributing to increase their technological and training skillful level.

The difficulties found regarding to the training program, sometimes, incompatibles with the features and needs of the Brazilian counterparts, were surpassed through negotiation with the institutions responsible for the training in Japan.

The training period was considered adequate by the interviewed public on the whole, stressing that long training period (a year for example) can affect the familiar life of the counterparts.

The equipments donated to CETEL by the Japanese government were considered satisfactory, of good quality, requiring few spareparts up to now and being adequately provided.

However these equipments attended the needs of the industries during the cooperation period being up-to-date at that time what doesn't happen nowadays with most of them being considered obsolet.

Although the efforts carried out by SENAI to keep the Centre - CETEL - up-todate and to complement the existente labs, there's shortage of equipments such as: Spectrum Analyzers, Digital Oscilioscopes, Digital True and RMS Multimiters.

Regarding to the Brazilian counterpart, the building and facilities were properly provided with enough space and in accordance with the project extent at that time.

The budget for installation and maintainance of the Centre was satisfactorily provided, allowing its entire operation not only during the cooperation period but up to the present moment. An investiment of US\$ 1,176,694.00 was carried out by SENAI from the period of 1980 to 1993 aiming at the enlargement and continual adequacy of the CETEL facilities. Equipments and other materials acquired from 1987 to 1993 absorbed resources valuing US\$ 1,029,278.00

The human resources required to the operation of the Centre were duly provided in 1980 the staff straight connected to the project was composed of 14 people, besides the administrative support from the team of the Vocational Training Center which was linked to the "Projeto Japão" (PJ).

At present CETEL counts with 46 employees.

Considering the aspects previously mentioned it can be asserted that the implementation of the cooperation project occurred in a effective way, with a positive balance as for the results accomplished and with regard to the solutions adopted to the problems which appeared at the time of the cooperation period.

3.2 - Effectiveness

The permanence of the Japanese experts in the centre during the cooperation period, made possible the transference of technology understanding and didactical skills for both counterparts and instructors and the realization of the training system in Electric and Electronics as initially planned.

From the implementation of CETEL to 1993, 476 trainees graduated in the Electronics and Electric courses, and according to information from the companies they're attending to their current needs.

According to data from the graduates' questionnaires, 92% are employed, perfoming jobs compatibles with the technical courses attendend at CETEL. (Two graduates are businessmen in the electro-electronics sector).

In addition to that, the technical level of the graduates was considered " high "by the technical/teaching team of CETEL and by the industries' supervisors.

Although the positive work out of the Electric course, it was deactivated in 1989 due to the low rate of applicants and increasing of dropout rate among the enrolled trainces.

Several points in the graduates' questionnaires, certify the good quality of the Electric course and advise a study about the possibility of its reintegration to the centre's activities.

.Regarding to the centre's facilities, equipments and instruments available, they were considered satisfactory by either trainees, graduates and technical/teaching team.

It's worth saying that 57% of the graduates considered the equipments and tools available in the Centre similar to the ones they use in their companies.

The technical-pedagogical performance of the counterparts and instructors was esteemed satisfactory by 95% of the trainces and graduates.

The didactical material was esteemed properly by 95% of the trainces and graduates while 57% of the technicians and instructors esteemed it inadequate.

The companies searched showed themselves receptive to the graduates from the centre since they're quickly engaged to the productive power and for presenting a higher technological level than graduates from similar centres. (80% of the industries' supervisors have preferred graduates from CETEL).

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3.3 - Impact

According to the opinion of 90% of the supervisors from the companies searched, it's easier, nowadays, to hire Electric and Electronics technicians than ten years ago.

The knowledge acquired at CETEL is mostly applicable in the companies and transferred to the graduates' colleagues, being the first, recognized as technicians of good level and able to contribute to the improvement of other employees.

The transference of knowledge has been involved technical information, equipment maintainance, use of instruments and development of projects, according to the observations registered in the graduates' and supervisors' questionnaires.

The technical team and instructors of CETEL have transferred their knowledge to centres of SENAI located in other States, through the technical assistance, and so to the industries through development of joint projects (example: software development to simulation of measurement with CEMIG).

It can be asserted that CETEL has caused a positive impact on the companies contributing to increase their level of productivity.

According to the interviewed professionals, CETEL has been established as a model in its working field, succeding in being a reference center for technological update of universities' teachers and similar schools.

3.4 - Sustainability

CETEL has been competent to continue implementing its activities and run as a National Technology Center in a self-sufficient way, despite the difficulties of SENAI regarding to the continual updating of material and human resources.

The operational costs of CETEL have beenkept by the budget of SENAI-MG. Nowadays SENAI has been facing problems related to its operational budget, at the same time CETEL needs to expand and to spreed out their activities.

Concerning this matter there is a national policy wich recommend the adoption of alternative ways to produce returns which can minimize the operational costs of the centre and assure major investments in its technological development.

Although the wages policy of SENAI aren't exempt of the reflection of the wages policy from the educational area on the whole, which levels aren't compensating, the centre personnel have been kept without major changes, as for the opportunities of technological update offered by SENAI and for its substructure that's reliable and steady.

CETEL has tried to develop seminars and update courses regards to the upgrade of technical-pedagogical level of its human resources, in the opinion of 50% of the instructors and 71% of the counterparts.

The number of turn over of instructors and technicians has been low and the replacement of the ones who left by graduates, who are hired at CETEL after a period of permanence as technicians in a company, is promptly provided.

As for the activities developed by CETEL, besides the technical training courses, other important ones have been implemented: technical and technological assistance to the industries regarding to resolution of specific problems, researches and projects development.

The analysis of the technical training courses implemented with their respective demanding, and the detection of the greater technological increased areas, has motivated the opening of the industrial computer science running for two years.

Nevertheless this duty of curriculum revision, which is not continuously performed isn't enough to promote its continual and needed adequacy.

According to the data obtained through the interviews and from the questionnaires filled, the curricula of the technical training courses should comprise other contents essential to the back ground of a technician, as for example:

development of software, data communication computer science, English language(considered as important tool by means of consultation of technical literature).

The establishment, at CETEL of a support service to the graduates, was an alternative suggested through the questionnaires, as a way of helping the ones who enter the work market for the first time. Such support service would be able to guarantee a close and systematic relationship between CETEL and the companies, starting during the probation phase and making possible the collect of subsidy to the reformulation of the curricula of the courses being developed.

Another aspect reported through the interviews and questionnaires refers to the little divulgations of CETEL next to the industries, schools and society in general.

All the aspects previously pointed will be very important to malke strength its efficacy even more, although the sustainability of CETEL is assured with base in the seriousness at the work SENAI performs for 51 years.

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3.5 - Relevance

CETEL was planned to provide manpower assigned to attend identified needs to the industrial sector by the time of its implementation.

Implemented with update technology and advanced equipments for that time, CETEL has placed itself ahead of time, achieving the purposes for which it was implemented.

At present the companies have adopted even more advanced technology in their productive process, impelled by the necessity of elevating their competitive level and attending the policy of industrial promotion concerning to the quality improvement.

The initial purpose of the project continues to be relevant nowadays, becoming urgent the updating of human resources and equipments, and the access to the advanced technology.

The variety of the Centre activities regarding to execution of courses and seminars to the companies, technical and technological assistance and development of projects has made possible a gradual linkage of the relationship CETEL/companies, which should be increased.

According to data obtained through the questionnaires, the courses developed at CETEL are applicable to other regions of the country, fact this, considered positive. Most of the supervisors from the companies (90%) assure that they shall need technical staff with a higher level each day.

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4 - RECOMENDATION

Although the aspects enrolled in this item, are concerned to the evaluation of the cooperation project of CETEL, they were collected aiming at subsidy to the execution of future similar technical cooperation projects.

a) Initial Planning of the Project: the initial planning of the project should forecast besides the permanence of the Japanese experts during the cooperation development period their gradual unlink, aiming at preserving the continuity of the activities.

A major understanding of either the native or English languages as mediator is of fundamental importance to the transference of technology, training of counterparts and elaboration of didactical material and operational handbooks assigned to the working of the equipments.

b) Establishment of Chronogram: the comprehension of bureaucratic aspects relating to keeping track of projects thorough Governmental Departments shall contribute to the establishment of chronograms and terms more adequated to the reality.

c) Counterparts Training: the training of counterparts in Japan shoud be preceded by analysing the level of difficulties presented by the counterparts, their level of technological development, and their real shortage.

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This study should guide the training planning as for the contents, strategy to be adopted and duration of the activities in Japan. Such procedure could assure the optimization of the expected results.

d) Project's Follow up: following up the project during and after its conclusion should be organized aiming at favouring possible problems' detection during its implementation and to guarantee the consolidation of good results.

This system would give beginning, for example, to a program of assistance to CETEL, having in view to contribute for the updating of its human resources and materials and for the technological increasing of CETEL, besides serving as a permanent channel of interchange between the cooperation agencies.

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e) Guaranty of Continuity of the Project: during the cooperation period, strategies to guarantee the continuity of the project could be analysed according to the real possibilities and local peculiarities, aiming at adopting domestic solutions to future problems.

In case of obsolescence of equipments for instance, the work up of partnership among CETEL and companies holder of technologies could bring great benefits to both parts.

f) Support Service to Graduates: the development, by CETEL, of a support service to graduates at the execution of probation and at their entering in the work market, should make concrete as a way of promoting the linkage in the relationship CETEL/company, keeping syntony with the needs of the companies, and favouring the attendance to the graduates and their professional performance, and consequently, of assuring the feedback process of the curriculum.

g) Divulgation of the Centre Activities: a project of a more intense divulgation of the Centre and the activities developed should be object of major attention by SENAI, since the high concept it holds and the relevant services it grants are of noticing of a small number of industries and society in general. This procedure would contribute not only for the increasing of the applicants' number to the technical training courses as for making more accessible to the graduates the opportunities of working.

h) Knowledge of the Language: the understanding of the English language is considered of basic importance to the technical performance, since a great part of the specialized literature, catalogues, time table, etc, are in English in the electric and electronics areas.

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CETEL should study alternatives to the development of English courses, even though being optional, parallelly with the technical training courses, aiming at its attendance by the trainces from the Centre.

i) Deactivation of the Electric Course: deactivation of the Electric course should be object of a deeper study, since the graduates from this course succeded in the work market in accordance with the information held in the questionnaires.

The investigation about the real reasons of the applicants' decrease number and the elevation of the dropout rate could lead, for example, to a restructure of the course instead of its deactivation.

j) Graduates' Updating: as for the human resources of CETEL need periodic updating, the graduates should also be thought over this aspect.

Because of the large territorial extension of the country, and the location of graduates in different parts of the Brazilian territory, plans of periodic updating for them could be worked out in the pattern of TCTP.

Additionally to that, the utilization of the capacity settled in the centre, should be considered to night-shift courses and updating seminars opened to the public as alternative inclusively as source of additional income to CETEL.

LOGICAL FRAMEWORK SENAI ELECTRIC AND ELECTRONIC VOCATIONAL TRAINING CENTRE (SE/EVIC)PROJECT

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PRESENT	 Companies prefet CETEL's graduates to others from similar schools. Mostly of graduates execute jobs competibles with the courses attended at CETEL 	 I. Implementation of Industrial Computer course in order to attend industry needs. 2. Increasing of technical/technological assistance to the industries. 3. Maintrinance of equipments in other SENAI's centres by CETEL's technical team. 4. Donated equipments presents obsolescence level. 5. A more intense divingation about CETEL's activities is recuired. 6. GETEL's activities is recuired. 6. GETEL's activities is contre model and will be classified as a Netional Technology.
IMPORTANT ASSUMPTION	1. It is easier to recruit higher trained technicaans.	 Canduates work as appreciated tchnicos. Trainings meet industrial needs. Government continue to support industrialization policy and take suitable promotion measures. Ha training system of technico was established and No. of technicos was increased in the country. Technical-pedagogical performance of instructors and counterparts is settsfactory. Creaturates transfer tecnology to their company colleagues. Maintainance of labs and equipments have, been done properly by instructors and technical team. Electronic and Industrial Computer course was deactivated in 1989. Electronic course vas deactivated in 1989.
ATTAINMENT	1.1 Technical level of graduates is considered high by the industries. 2.1 In Brazil - 1985/89: 2.54.599 in CETEL - 1982/93: 454	 1.1.1. Electric - 14 Electronic - 150% Electronic - 100% Electronic - 100% Electronic - 100% Electronic - 100% 1.1.3. 260 companies 1.1.4. Trainees - 1985/95: 386 Dropout - 1985/95: 386 Crachates - 1985/95: 326 Crachates - 1985/95: 326 Crachates - 1985/95: 327 (annual average of annual average of companies. 1.1.5 CETEL performance is satisfactory according to the companies. 1.1.5 CETEL performance is satisfactory by trainees, gradinates and contexparts. 2.1 Electric: 10 2.2 In other regions 11
INDICATORS	 Technical standard of technicos. No. Of electric and electronic technicos. 	 (After the Japanese Cooperation) 1.1. No. of training subjects 1.2 Rate of implemented subjects to plan 1.1.3 No. of companies implementing OJT program 1.1.4 No of trainees' evaluation on SE/EVTC 1.1.6 Trainees' evaluation on SE/EVTC 1.1.6 Trainees' evaluation on SE/EVTC 1.1.7 Operation budget 1.1.3 No. of equipment bought by SE/EVTC 1.1.9 No. of SE/EVTC internal seminars for trainees 1.1.10 No. of SE/EVTC internal seminars of trainees 1.1.10 No. of SE/EVTC internal seminars for the seminars of trainees 1.1.10 No. of SE/EVTC internal seminars for the seminars for the instructors in other training centers.
PROJECT SUMMARY	I.OVERAIL GOAL 1.Upgrade the technical standard of the electric and electronic technicos in Brazil 2.To increase the number of the electric and electronic technicos in Brazil.	II PROJECT PURPOSE 1: To establish an appropriate training system for higher electric and electronic technicos. 2.SE/EVIC works as a model vocational training center in the field of electric and electronic technique in Brazil

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1. Updating technological courses (OIT) are implemented by CETEL.	1. Building and facilities were provided as planned. 2. Facilities were chlerged to attend the project purposes.
 Trainees' education level is to be maintained appropriately. Trained counterparts continue to work fo SE/EVTC. Some of the graduates remain in the center to be a future instructor. Companies pay more appreciation to upgrade the technical standard. Needs for technico are high: applicants to SE/EVTC training course will be continuously. Sparepars is continuously. Sparepars is continuously suppled. Replacement of equipments is proporty undertaken. 	PRE-ASSUMPTION PRE-ASSUMPTION I. According to rapid industrialization by froneign investment, it was required to upgrade the technical standard of technicians in Brazil (SENAI) planned the establishment of vocational training center for electric and electronic technology in Belo Honizonte.
 1.1. 2 Courses implemented as planned Electronic - 1981/82: 18 Electronic - 1981/82: 18 Electronic - 1981/82: 15 1.2 Rate of plan implementation: 100% 1.3 OIT is implemented since the 1984: 17 1.4 Trainess - 1981/84 - Electric course: 33 (annual average) (annual average) (annue) (annual average) (annual avera	 Japan> Japan> 1.7 Long-term experts and 2 short-term experts were dispatched 2.17 C/Ps were trained in Japan during the Project. 3. Equipments were supplied. 4.1 1972 items of equipments were provided 4.1 1972 items of equipments were provided 4.2 66 titles of didatic materials and textbooks were provide. 4.1 5.707,6 m² were provided. 2. No of counterparts - 14 (1980/83) Total center personnel - 46 (1993) 3. USS1,176,694.00
	(IMPUT) <ul< td=""></ul<>
III. OUTPUTS I. Training implementation system has been established for the established for the following two fields: 1) Electronic technique 2) Counterpart and maintain and maintain techning plan and maintain and maintain traning 2) Lorpe can and traning 2) Lorpe can and tranin	IV.ACTIVITIES IV.ACTIVITIES I.Training and suggestion for C/P 2. Development of textbook and training and suggestion for teaching method 3. Semmar for company employees. 4. Training and suggestions for installation of equipments. 5. Training and suggestions for improvement of module education systems.
	(During the Japatrase Cooperation) 11. 2 Courses implemented superversion 12 No. of training subjects to plan 1.1 No. of training subjects to plan 1.1 No. of training subjects to plan 13 No. of training subjects to plan 1.3 No. of traines eduation on traines 1.3 No. of traines eduation on traines 13 No. of traines subjects to plan 1.3 No. of traines eduation on traines 1.1 State of the graduates transin in maintuned ear on trained counter post of the graduates transin in the other structor. 14.1 No. of trainees/graduated training 1.2 No. of trainees/graduated training 1.2 No. of trained counter by plane. 15.5 SUFEVTCs 1.4 Trainees - 1981/84 · 1.7 No. 2.7 No. of the propriately. 2.7 No. 13 No. of CPRs 1.4 Trainees - 1981/84 · 7.7 No. 3.5 Some of the graduates transin in the ontructor. 13 No. of traines of transisted into 1.3 No. of traines of transisted into 3.5 Some of the graduates transin in the ontructor. 2.1 No. of CPRs 2.3 No. of traines of transisted into 1.4 Trainees - 1.8 No. 5.0 Noeds for the ontructor. 2.1 No. of traines of transisted into 2.3 No. of traines of transisted into 2.4 Nords for the ontructor. 5.5 Spreaderate to the ontructor. 2.1 No. of traines of transisted into 2.1 No. of traines of transisted into

- Most of trainees and graduates is satisfied with the facilities, instruments, and equipments available in the Centre and with the technical-- 57% of graduates have considered the equipments and tools available in the Centre similar to the ones they use in the companies. - Technological knowldge and didactical skills were transferred to the counterparts and instructors by the Japanese experts. - Most of trainees and graduates consider the dicactical material satisfactory, and so do 57% of instructors and technicians. Technical level of the graduates is high according to technicians, instructors, and companies' supervisors. - Didactical material written in Japanese were scarcely used. The translation was long and expensive. - Costs of setting down and running of CETEL were properly absorbed by the budget of SENAL - Companies prefer the CETEL graduates due to their faster engagement to the productive power. - Equipments doyated by the Japanese Government were satisfatory and advanced for that time. - 92% of graduates are employed in positions compatible with the courses attended at CETEL. - Counterparts training in Japan was satisfactory, but it demended adequacy of the programs. Electric course was deactivated in 1989 due to low rate of applicants and high dropout rate. - Electric and Electronic Training courses were implemented according to the program. - There have been no problems regarding to spare parts replacement or maintainance. EVALUATION RESULTS - Unlink of the whole Japanese experts team at the same time wasn't satisfactory. Planning and implementation of the project was efficient with positive results. On the whole the project was implemented according to the initial program. - Building and facilities were provided by SENAI according to the mittal plan. Japanese experts attended satisfactorily to the purposes of the project. - Technology transference to the counterparts was satisfactory. Human resources were provided according to the initial plan. - Graduates are attending the needs of the companies. - Equipments are obsolet at present pedagogical level of instructors. EVALUATION POINTS EFFECTVENESS EFFICIENCY A-88

EVALUATION RESULTS ALONG THE FIVE POINTS OF EVALUATION (CETEL)

 Most of learning acquired at CETEL are applicable in the companies and transferred by the graduates to their colleagues. Technicians and instructors of CETEL have transferred their technological skill to other schools of SENAI from different States. CETEL has contributed to solve specific problems in the companies through technical assistance. 	 90% of the companies' supervisors think that it's easier to enroll Electric and Electronic technicians nowadays than 10 years ago. There has been positive impact from the centre on the industry as for the increasing of the productivity level. CETEL is thought over as a reference center for technological updating of universities teachers and similar schools. 	 CETEL has been able to implement it sactivities in a self-sufficient way. Operational costs of the centre are absorbed by the budget of SENAL-MG. Adoption of alternatives ways as a source of additional income will be thought over by CETEL. Instructors and technicians have preferred remaining in the Centre that, besides the wages offer a steady substructure and opportunities to technicians have preferred remaining in the Centre that, besides the wages offer a steady substructure and opportunities to technological updating. Besides the technical courses CETEL provides technical and technological assistance to the industry, researches and projects development for attend the industries' course of the industrial course. Curricula shall be periodically updating and include the contents necessaries to upgrade technicians according to the industries' needs. CETEL shall count on a support service to the graditates during the probation phase and entry in the work market. Activities of the Centre are little divulged before the industries, schools and society in general. CETEL sustainability is assured with base in the semiusness of the job performed by SENAI for SI years. 	 CETEL was planned to attend the companies' needs, identified during its implementation period. Companies have adopted major advanced technologies in their productivity process. Policy of industrial promotion concernent to the improvement of quality, interfars in the manpower needs of the companies. Purpose of the project is still relevant to the current needs of the companies. Updating of human resources and equipments of CETEL should be continual. Courses developed at CETEL are applicable to other Brazilian regions. 90% of the companies' supervisors assure that those shall need a higher technical manpower level each day. 	
DIRECT	INDIRECT	SUSTAINABILITY	KELEVANCE	

EL)	OTHERS		 Electronic development has been accured in a rythm more advanced than other learning areas. Electronics constitutes the foundation for the foundation for the technological development in several sectors of the economy. CETEL has contributed effectively for the system development of SENAI
DUCTION OF IMPACT (CET	IMPLEMENTATION	-Equipments were donated according to the initial planning - Transference of teoinology and didactical skills by the lapanese was satisfactory for both counterparts and instructors.	-Emphasys on the Practical part of the curriculum has contributed to the ingression of the graduates within the porductive process of the industries. -Instructors and technical team, were constituted mostly by former employees of SENAI - MG. - Budget was properly provided.
ENTATION AND PROI	IMPLEMENTATION DESIGN	-Presence of Japanese experts during the project implementation was decisive.	-Experience of SENAI in planning, implementing and administrating training centers was effective. -As a private institution SENAI has always had flextbility in administrating its budget resources.
FACTORS CONTRIBUTING TO IMPLEMENTATION AND PRODUCTION OF IMPACT (CETEL)	APPRAISAL	-CETEL was the first Centre in the Electric and Electronic area to be implemented in partnership SENAJ/JICA, -The Japanese high technical level in Electro-electronic area was most relevant.	-SENAI is recognized as an institution directed to the graduation and development of human resources for the industrial sector. -SENAI has always had great technical credibility on the industrial sector.
r ACTO	PROJECT IDENTIFICATION	- Project met the necessities of graduating industrial manpower	 Craduation of technicians of medium level (highschool) came to stop the gap in the structur of industriest manpower. Investment in the graduation and development of human resources constitutes as the base to the industrial development.
		DUE TO SIDE TO	DUE TO BRASIL SIDE SENAI
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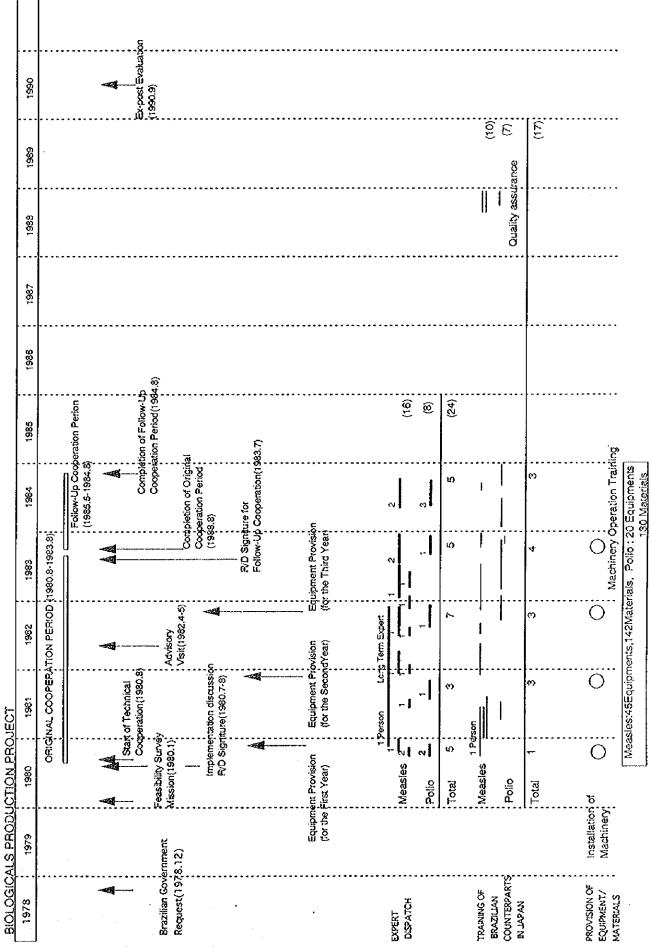
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OTHERS		Procedures of projects close to Governmental Departments is slow due to bureancratic encruthrance.
IMPLEMENTATION	-Didactial material written in Japanese was scarcely used by either counterparts or trainees.	-Flectrical course was deactivated due to reduced mimber of applicants and high for a dropout. CETEL doesn't count on a dr follow up system to the graduates.
IMPLEMENTATION DESIGN		-Communication through English through English language between Japanese experts and Brzzlian Counterparts, made difficult in the beginning for the implementation of the project -First curricula were conceived at variance to the Brazilian Teaching Legislation
APPRAISAL		
PROJECT		
	DUE TO JICA SIDE	DUE TO BRAZIL SEDE SENAI

	(LONGTERM)	S-Development of a follow up system during and after the cooperation period arming at -possible corrections of the project course. -sedimentation of the achieved results. -methodical interchange between the cooperaton.	B-Work out of partnership among the Centre and companies holder of advanced technology.
UTURE COOPERATION	SUGGESTION (MID-TERM)	3-Adequacy of diclactical material (involving translation and methodology) shall precede the mitial curricular activities.	A-Elaborations of the project consonant to the rules and policies of Governmental Departments.
LUATION STUDY AND SUCCESTIONS FOR FUTURE COOPERATION	SUGGESTIONS (SHORT TERM)	 1-Inclusion in the chronogram of different periods for Japanese experts' permanence in the project. 1-Choice of homologous with enough knowledge of either the local or the second language of the cooperaton. 4-Joint analyses, by the cooperators, of the training plan previously elaborated. 	B-Optimization of the capacity installed in the Centre through increasing of technological updating programs and technological updating programs and technological transference(emphasysmightshift course and alternative of additional income). C-Organization of a support service to the graduates regarding to probation phase and entering in the work markert. C-Evaluation study about the real reasons which conducted to the dearivation of the Electric course D-Elaboration.
LESSONS DRAWN FROM EVAL	LESSONS DRAWN FROM EVALUATION STUDY	1-Therefil be a greater guaranty of the continuity of the project if the unlink of Japanese experts be gradual. 2-Tecimology transference will be effective if the language obstacie be surpassed by the cooperator team. 3-Didactical material and equipments' operational handbooks shall be translated and suitable to the trainees level. 4-Japanese training plan shall consider the shortage and technical skill of the counterparts. 5-Attainment of the project's objectives requires its systematic attendance with process feed-back.	A-Project chronogram will be more effective if its procedute period be pondered close to Governmental Departments. Departments. B-Project continuity will be assured if local alternatives be adopted with such objective. C-industry meeds shall guide changes in the courses curricula if there be a narrower linkage between CETEL/comparies. D-Entry of Graduates in the work market and demad of the Centre's activities be done.
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ANNEX-B BIOLOGICALS PRODUCTION PROJECT

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Factors Inhibiting Implementation and Production of Impact	B-5
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			3.054 Fiers (35)	production the.	the vaccine production line.
 (b) Calif Subjection (b) Calif Subjection (c) Varies connects tees (c) Onner quality leads (c) Production of virus aurgemention and builts (c) Production of measurements (c) Entertainment of Hust memory 			0% (35)	÷	
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			100 1 2000 200		throws the ot variation.
		2.1 600,000 (34)	(38) 000 555 5	3 Materials are sufficiently provided.	3 Materials are sufficiently provided, except for some
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		2.2 72.5 item (84)	60.6 liters (35)	4 Factifies and mechines for production are	4 Facilities and machines for production are adequately
	 			appropriately maintained and improved	munitarioo, but there is a nood tot updatted as to now
			/m/		oquipment, Makeniais were also improved; glassware
plants for pollomyolitis venctine	2.4 Number of quality tosts by type in Poliomyesitis	2.4 35 tests (84)	136 tests (85)		purchased from industries were improved to these the
					tow requestions:
II) Carlet quality test of build imported					
polomyatike vaccine and control of the					
V. ACTIVITES					
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 From theme of the Construction of Construction 2. Symmetric and the Construction of Construction 	diameter and an interest	· · · · · · · · · · · · · · · · · · ·			
and quality control of the vaccino		Polici 11thg mechine set and other 19 equipments	other 12 equipments		
87	Provision of strain, vaccine and monovalent	3 mension: 142 terns	polic: 730 flertas		
(B) Poteonyettis vaccine					
1 Shenghemma the capacity of quality	porconnel in Japan	4 14 counterparts were trained it	tapen		
Control of Appoints Version Control Manager of the Application Automatic Section Application Control Application Section Application Section Application Section Se					
for the production of trivelent monovalent builts		1 17 counterparts are assigned: 10 (meeting)	10 (meetbet)	PEASSIMETION	
	personnel and Administrative personnel	7 polio		1 Brazilis torienearchanna holdinn ana	Parally formion currency accord and address for
Diending and Silling of Imported viral	Supply of land, buildings and facilities	2 building and tacilities were provided.	Make a state of the state of th	not sufficient for vaccine import	
•	Supply or reprecement of mechinery, equipment	3 meetlest odwards troozor-dryot, othor 111 equipments	or, other 111 equipments	2 Proceement of necessary amount of vaccines	2. Up to this date, there has been no problem in the amount
	and any other meterials heccessary for the	and pomenoni materials		Is apt to be unstable because of the dependence on	of vaccines for routine and comparign vaccination.
hing to the rectinical	implementation of the Project other than these	pollo: laminar flow module, other 55 equipments	her 55 oquipments	Ioreign countries" production	However, problems have artean for producing the
personnel to the Project		and permanent materials			recessing amount of vectors for special vectorion
manufy apred upon	expenses for the Project				osiona roqueng vory large outh amounts of vacunat

Evaluation points	
	- One long term expert and 23 short term experts were dispatched as planned.
Efficiency of Implementation	- Technical transfer in the field of measles vaccine production and the quality control of the measles vaccine and poliomyelitis vaccine was completed during cooperation.
	- Mote time thay have been necessary, for at least a rew months in the beginning, in order for brazinan counterparts to realit use inter worksy.
	- Imported materials and equipment for measles production and for poliomyelitis quality control were provided by Japanese side as planned
	The original manual machinery was reinferced by the FIOCRUZ for increasing the capacity of production.
Effectiveness	- The production was carried out according to the denatios of the initialization production and gained higher specialized technical
	I Machine mantenance technician, nowever, do not rei tray are wei trained to obtain ingrier techniques.
Impact	- At present there have been no cases of poliomyelitis and the mortality rate from measles has decreased.
Direct Impact	- The incidence of measles dropped from 99,263 cases in 1980 to 2,931 cases in 1992, and the incidence of poliomyelitis decreased
	from 1,290 cases in 1990 to zero (no cases) in 1992.
	- The strengthening of quality control through the cooperation contributed to the making of specifications of FIOCRUZ
	As a result, supplies by industries for the production process; such as glassware which were poor in quality, were improved to meet FVOCRUZ
tantinant lanarat	I - Multiplying research activities transferred fectingues are now adapted and extended to other biologicals and it was carried
	· The technology for quality control has contributed to the improvement of the National Control of all vaccines, mainly in the field of the specific
	I taboratory methodology, and the basic methodology of analysis of control procedure unitaed. The exterise meet of the Third Country Training Program (TCTP) in 1988 use riven as a trial of antisectional antivity of the countrants.
	resulted through the strengthered their ability of quality control by dapabese experts.
Sustainability	- The production system is appropriately established and the storage system have been adaquately strengthened
	- The intensive use of equipment for more than ten years has resulted in a shortage of spare parts and in a reduction of output.
	- FIOCRUZ has been expanding the building which is under construction. This will meet the further necessity space for
	amount and kind of vacanes production and its quality control area.
	- House of the framed out incidents committee to work for the vacuus production misso. - Economic measure for containment of inflation proscribes the employment of new personnel: which does not allow FIOCRUZ to have an adecuate
Relevance of Planning	• The Japanese cooperation was timely as far as the Health administration policy of the Brazilian Government and
	- For production of measies vaccine, it was planned initially to produce 10 million coses per year. In 1990, 15 million doses are already produced
	and also the machinery of FIOCRUZ is reinforced to increase the production so as to cope with the requirement

	Others	1 The Japanese cooperation was	important for strengthening	the relationship between Japan	and Stazi.		2 Japan played an important	role in providing the BIKEN	CAM70 shein for measles	vaccine production and financial	and technical support required	to implement the project.		a The establishment of the	Third Country Training	Program(ICTP) was given as a	trial of professional activities of	the counterparts resulting from	the cooperation in Bioligicals		b The regional branch of WHO	for the Americas established	FIOCRUZ in 1991 as one of	the two regional centers for	vacane development		c The establishment of the National	Seit- sufficiency Program	reconfirmed the importance of	this project		
	Implementation	1 The Japanese experts were	dispatched as planned and	technical transfer from the	experts was completed.		2. The production system was	introduced for measles and	quality control system was	emphasized.				a Sufficient number of	manpower were assigned	and trained.		b 9 Brazilian counterparts	were mobilized for technical	training in Japan												
(CT - Biologratis Production Projec	Implementation Design	1 Equipment/materials not	evaliable in the Srazilian	market were provided by	Japan		2 Qualified Japanese experts	were selected for the	Project					5	materiais were purchased	in the market		b Building of a plant with	facilities for production and	quality control activities of	measles and polio vacanes	was carried out by the	Brazilan side.									
FACTORS CONTRIBUTING TO INPREMIATION AND PRODUCTION OF IMPACT - Biologricals Production Project	Appraisal	1 Equipment/materials not	available in the Brazilian	market were provided by	Japan		2 Gualified Japanese experts	were selected for the	Project					a Other agencies, besides	FIOCRUZ and MOH gave	financial support to the	Project as FINEP-	Financiadora de Projects					化学校建立机构 化合理合物 计存在分词 化合物 医外外外的 化分子分子 化分子分子 化分子分子 化合金合金合金合金合金合金合金合金合金合金合金合金合金合金合金合金合金合金合金									
IS CONTRIBUTING TO INPLEMENT	Project (dentification	1 Project was formulated in	Biologicals where the needs	trom Brazilian side were very		2 The Japanese cooperation	was timely as far as the Health		Brazilan Government and	organization of needs of	FIOCRUZ were concerned.			a FIOCRUZ is the largest	integrated research in Latin	America and was identified	as a project implementation	Agency	b Japanese cooperation in	Elologicals was timely as	tar as the policy of Health	administration of the	Government was concerned	c The establishment of the new	vaccination strategy of the	National Immunization Program	happened at the time of	commencement of the Project.	This field of technology	development was a national	priority	
ACTOP			orie		2		ADIU	نىرمىت : تىرىنىيە	side								que		2		12 Brazi	•••••	side								بىمىسىمە مېمىمىچى	

Others		
Implementation		
Implementation Design	 Some equipment was not provided with specification and manuals in English. English. Some spare parts for the equipment provided ware not available in the Brazilian market. 	a Sufficient time for adjustment of counterparts was needed, for at least a few months in the beginning. Training in maintenance were not conducted
Appraisal		
Project Identification		
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Suggestion (long term)		An internal training system should be established.	
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	1.a Greater emphasis should be given to maintenance training and to advising trainees on the replacement of spare parts. as well as on the procedures for purchasing these spare parts in the international market.	e Budget for purchasing spare parts should be fully allocated after cooperation and a system for replacing spare parts should be envisaged according to the ife span of the equipment.	
	Preiminary survey shoud be enhanced with a view to understanding the precise local technology level.	Greater emphasis should be given for training of technicians in the field of maintenance and replacement of spare parts. Prior to project implementation, it is necessary to make even the level of the CPS skill and knowledge. If needed, preliminary training for CPS should be provided. The effort for improving the local transportation and storage system is indispensable.	for future cooperation projects are summarized here.
Lessons drawn from evaluation study	Mantenance training for C/Ps in Japan should have sufficiently been provided.	Less emphasis has been given to training, specially for technicians in maintenance. More time may have been necessary for at least a few months in the beginning, in order for Brazilran counterparts (C/Ps) to acquire frowledge at the earliest time of the frowledge at the earliest time of the cooperation. A steady flow of information on the updating of fromwledge and technology should be obtained by FIOCRUZ The coldchaim and storage system should have been strengthened in order to maintain the quality of vaccin.	 Budget for purchasing space parts should be turily allocated and a system for replacing spare parts should be installed. The poor quality of instruments purchased in the local market, such as glassware, hindered the project from being efficient. In the project from being efficient in the operation.

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Y		BIOLOGICALS PRODUCTION PROJECT

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លី	BIOLOCICALS PRODUCTION PROJECT												1			
	A STATE AND STRUCTURE AND STATE AND	-EN2				ŭ,	FISCAL YEAR									
			1980	1981	1982	1983	1984	1985	1986	1987	1988	1969	1990	1991	1992	1955
-	OVERALL GOAL	•	A A A A A A A A A A A A A A A A A A A													
:-	arcidence of meastes/poliomyeiths															
<u>.</u>	en (A. + Populations of the State and St															
, 		Nosned			and the second		-						•••		147.3	1
	A Trice a.2. Population(age:0-14)million of the second second second second second second second second second	berson						and the second			-				5.8	
	a Brotheree of mostles of the Presidence of the second second second second second second second second second															
	b-ti. No. of new sufferers from measter(all age)	person	98263	61279	3970	5257	80879	75096	129942	65039	25179	22853	61435	2525	7887	8
	b'2. tradence of measters(all age)	* *	83.4	50.5	31.9	45.3	8	58.2	97.6	-87	18.9	16.7	£2,8	8	5.3	8
	b3. No. of new sufference from measles(age 0-14)	Derson	•		- 24736	46509	62445	57929	54172	c 8180	22269	17754	45244	31797	5789	1
: مشرقه	the bet incidence of measles(age 0-14) . The factor and the factor	*	•	•	20 0	37.0 1	48.7	444	70.8	35.5	19	12.6	31.5	218	40	
	 C. Particlence of policynyafitiss (2007) A. Particle and P. Particle and C. Parti						a print generali							-	•	
	c-1. No. of new sufference from policonyeitis(all age)	Derson	1 <u>8</u> 8	:2:	8	\$	8	329	612	<u>8</u>	\$	8			1	
ر د بېرې	c-2 introtence of policinyeitits(all age)	*	1	0.1	00	00	5	S	0.5	5	0	00	0.0	00	8	8
	- C-3. No. of new sufferers from poliomyekitis (age 0-14)	Derson	•	•	ŀ					ŀ	•	•				
	- c-4. incidence of potiomyelitis(ace 0-14)	*		•	•	•	•	.	ŀ		•		•	•	•	
រដ្ឋ B	Rat		3 1 12													
	A Rate of ceath from measles															<i>.</i>
	a-1. No. of deatrs from messies(all age)	Derson	3263	883	1670	1769	2344	166	1623	794	8	205	\$74		•	
	a-2. Flats of death from measter(at age)	*	2.7	1.9	13	4.1	1.8	60	12	0.6	0.3	0.1	0.3	•	•	
 	a-3. No. of deaths from measues(age 0-14)	person	3206	2300	1645	7:7:	2287	1103	1525	758	382	154	442	•	•	
	e-4. Pate of death from meastes(age 0-14)	*	27	61	13	1.3-4		0.8	1.1	0.5	0.3	0.1	0.3	•••	•	•
197	8. Rate of ceath from policinyeitits								in a subscription of the second							
	b-1. No. of ceaths from polionysitis(all age)	Derson	164	5	Ş	9	. 15 [-	5	8	8	g	83			•	
-	► C. Rate of death from policonyeitts(all age)	*	0.1	00	0.0	0.0	00	000	00	00	0.0	0.0			,	
	b3. No. of deaths from measter(age 0-14)	uosuad	148	21	- 13	4	6	6	8	ţ	0	9		•		
	b-4. Rate of death from policy with (age 0-14)	. %	. 0.1	0.0	00	0:0	0:0	00	0.0	- 0.0	0.0	. 0.0		•	•	
3	o:					and the second				· · ·						
	(A Propulsion of the second s second second seco	-												. .		•
	t = 1. Poputation(age 0-4)(million)	berson	17.1	.17.5	6/1	18.3	18.7	19.2	19.2	19.9	19.5	19.4	19.7	18.7	17.S	
	B. Pate of preventive incutation for measues															
	- b-1. No. of incousted persons for measies(all age)(million)	person	5.0	101	5.5	63	8.6	5.1	50	121	6.3	6.6	7.6	6.7	32.2	
	b2 Not of incoulated persons for mezsies(age 0-4)(million)	person	•	•	•	•	•		•	•	•	•	16.5	- 3 08	220	ľ
<u></u>	b-3. Pats of inocutation for measies(age 0-4)	*	8	•			•	•		•		•	<u>52</u> 8	\$	8	
<u></u>	C. Rate of preventive incontation for policon yeiths														N.4	
	c-1. No. of inocutated percons for policynyaitids all age)(million)	person	21,7	21.9	19.5	8.6	16.8	17,5	19.3	8.0	80.4	21.7	21.0	20.7	19.7	ľ
	1 c-2 No. of incontated persons for poliomyelitistage 0-4)(million)	Derson	+ 4 +													ľ
,				17.5	17.	18.0	17.0	16.3	17.1 - {	17.9	18,1	13.4	18.2	17.8	17,1	1

Note: Measles: 1953 - up to 42nd week - No caeses

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Consider la factor Consol	C. Production of vaccine for measules from imported vulks in Brazil	Sees Co														
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٥	D. Amount of imported vutics for measies in Brazil						and the second									
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212 Inten	interior tate in toliomveitis varoine on district in Brazili															
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Ĺ	b-2. Amount of vults for conjourneitis made in Brazil	- Hiter												-		
L	b-3. Interior rate of domestic vulks for policymyelitis in Brazil	*			-	 										
٥	Interior rate of imported vaccine for policimyelitis in Brazil															
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Ľ	o-2. Amount of imported veccine for pollom velocs in Brazil	COSES							_	•		-	.			
Ľ	e.3. Interior rate of imported vaccine for policmyetitis in Brazil	*								 					***	
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	No. of quality tests by type in measies vaccine production						9 2.34. J									
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6. Production of vaccine for measies from domestic vulks in FIOCHUZ	COSES	-		9126137	9126(37	2145062	1/779099 2	2582500	1204000	17845000	19135000 1520000 20790000		8	
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3. E. Amourt of Imported with for measures in Flocofluz	i kter				1								••••	
1.3 Production of writes for measives in FIOCR012														
A Interior rate of STF eggs in FLOCPUZ														
a-1. No. of interior SPF eccs in FlocTRUZ		-		2277	2347	2400	4105	2353	1100	106	1:24	1200	222	
a-2 No. of purchased SPF accs in FIOCRUZ				15247	152.07	16000	24000	2:8	18045			-	15082	
I a.3. Interior rate of SPF acros in FlOCPU2	*			75	-	¥ ا			÷	┢╌		 	۹ ۲	
 Interior rate of domestic vultes for measies made in FIOCRUZ 														
	Eter			8	1 275	0	8	8 <u>1</u>	8	8	8	53	9	
5. 5-2. Amount of vultes for meastes made in FIOCRUZ	liter			1312	1812	200	3122	3920	3472	325			389	
1. b. Attenior rate of domestic withs for measless made in FIOCFUZ	*			5.4	52	0	2.4	8.1	3.4	7.5	3.0	4.0	30	
Interior rate of imported vutics for measues in FIOCPUZ.						11. 1 <u>1.</u> 1.								
c-1. Amount of inferior imported vults for measues in FIOCPRUZ	liter {	-										•	-	
c-2. Amount of imported vulies for measles in FIOCRUZ	iter (a and a second second		· · · · · · · · · · · ·	
c-3. Interior rate of Imported vultes for measures in F/OCRUZ	*												-	
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d-1. Amount of interior imported vaccine for measters in FOCRUZ	doses							- 			ومعد الإرجاب والمراز	n an		
d-2. Amount of Imported vaccine for measles in FIOCRUZ	doses	tion and the second		ġ		· •			1					-
63. Interior rate of imported vaccine for measles in FIOCRUZ	*								-				***	
1.4 No. of quality texts by type in meases vaccine production in FIOCRUZ														
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1 Did the Japanese Government provide enough input for the measles/	Total	Yes		No	and the second	NC
poliomyelitis vaccine production Project?	1010	100		NO	<u> </u>	
(i) measles						
a) As a whole	13	13	100%	0		
b)Was the machines/equipment/materials adequate?	13	13	100%	0	0% 0%	0
c)Was the counterpart training in Japan adequate(in general)?	13	13	100%	0		0
d) Was the technology transfer from Japan to Brazil adequate?	13	13	100%	0	0%	0
(ii) potlomyelitis	Total	Yes	100 %	No	0%	0 N/C
(ii) poiloinyeinis a)As a whole	5	5	100%	0		
b) Was the machines/equipment/materials adequate?	ستعمدونهم فما	بتحسب دم	معاصية فتجمعه فعوجه	- maria da	0%	0
 c) Was the machines/equipment/materials to equate (in general)? 	5	5 5	100%	0	0%	0
d) Was the technology transfer from Japan to Brazil adequate?	5	5 5	100%	0	0%	0
As vaccine production should be made in principle by consistent		C	100%	0	0%	0
production plant from material to final products, overall technology	-				-	
transfer of production and quality control is desirable.				 	····	
2 Did the Brazillan Government provide enough Input for the meastes/	Total	Yes				110
poliomyelitis vaccine production Project?	Total	res	د به در از رو اسبو معرجه	No	<u> </u>	N/C
(i) measles	-				م ـ با زمان دخانه اس	
a) Are the facilities (space, utilities etc) adequate?	13	11	85%		*****	
b) Did they provide enough budget for the Project?	13	7	63% 54%	0	0%	2
c) Did they provide enough manpower for the Project?	13	11	85%	0	0%	6
(ii) polomyelitis	Total	Yes		No	0%	2
a) Are the facilities (space, utilities etc) adequato?	5	1	20%	3	6001	N/C
b) Did they provide enough budget for the Project?	5	0	0%	1	60%	1
c) Did they provide enough manpower for the Project?	5	3	60%	1	20% 20%	4
3 Do you think that the vaccination against measles/pollomyelitis			00%		20%	1
was practiced by the Brazilian Government effectively after			بىرىنىيەن ر			
the Japanese cooperation for the Project?	Total	Voe		Mis		AIP
(i) measles	10ta/	Yes 9	69%	No 0	0%	N/C 4
(ii) poliomyelitis	5	2	40%	1	20%	2
4 Do you think that the implementing schedula of Biologicals Production		<u> </u>	10.70		2078	
Project against measles/pollomyelitis was adequate?						
(i) measles	13	12	92%	0	0%	
(ii) poliomyelitis	5	4	32.70 80%	1	20%	1 0
5 Do you think that the Japanese cooperation was given enough support					4070	
from the other sections of M.O.H.?	-	<u></u>		<u></u>		
(i) measles	13	8	62%	0	0%	5
(ii) poliomyelitis	5	2	40%	0	.0%	3
6 Do you think that the Japanese cooperation was implemented with			-10 /0		070	
enough linkage with the other related project of related organization?						1
(i) measles	13	0	0%	2	15%	
(ii) poliomyelitis	5	0	0%	1	20%	4
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1 Yes 11 4 Yes 13 13 12 8 6 12 9 Yes 4 3 4 4 2 5 3 Yes 8	85% 20% 20% 85% 80% 100% 62% 62% 62% 62% 62% 62% 62% 62% 62% 80% 80% 80% 80% 80% 80% 80%	0 3 No 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 60% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	2 2 1 N/C 2 1 1 5 7 1 4 N/C 0 0	
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11 4 Yes 13 13 12 8 6 12 9 Yes 4 3 4 4 4 2 5 3 Yes 8	80% 100% 92% 62% 62% 62% 62% 62% 62% 62% 62% 62% 6	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0% 0% 0% 0% 2%	2 1 N/C 0 0 1 5 7 1 4 N/C	
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Yes 13 13 12 8 6 12 9 Yes 4 3 4 5 3 Yes 8	100% 100% 92% 62% 46% 92% 69% 69% 80% 80% 80% 80% 100%	No 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 2 2 0	0% 0% 0% 0% 0% 0% 0% 20% 40%	NVC 0 1 5 7 1 4 NVC	
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12 8 6 12 9 Yes 4 3 4 4 2 5 3 Yes 8	92% 62% 46% 92% 69% 80% 60% 80% 80% 80% 100%	0 0 0 0 0 No 1 2 0	0% 0% 0% 0% 2% 40%	1 5 7 1 4 N/C	
8 6 12 9 Yes 4 3 4 4 2 5 3 Yes 8	62% 46% 92% 69% 80% 60% 80% 80% 80% 100%	0 0 0 No 1 2 0	0% 0% 0% 0% 20% 40%	5 7 1 4 N/C	
8 6 12 9 Yes 4 3 4 4 2 5 3 Yes 8	62% 46% 92% 69% 80% 60% 80% 80% 80% 100%	0 0 0 No 1 2 0	0% 0% 0% 20% 40%	7 1 4 N/C	
6 12 9 Yes 4 3 4 4 2 5 3 Yes 8	46% 92% 69% 80% 60% 80% 80% 40%	0 0 No 1 2 0	0% 0% 0% 20% 40%	1 4 N/C	
12 9 Yes 4 3 4 4 2 5 3 Yes 8	92% 69% 80% 60% 80% 80% 40%	0 0 No 1 2 0	0% 0% 20% 40%	1 4 N/C	
9 Yes 4 3 4 4 4 2 5 3 Yes 8	69% 80% 60% 80% 80% 40%	0 No 1 2 0	0% 20% 40%	4 N/C	
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4 2 5 3 Yes 8	80% 80% 40% 100%	0		0	
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2 5 3 Yes 8	40% 100%		0%	1	
5 3 Yes 8	100%	0	0%	3	
3 Yes 8		0	0%	0	
Yes 8		0	0%	2	
8		No		NC	:
وبعه فعصم حصائك	62%	0	0%	5	
	80%		20%	0	
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a) Overall 5 b) Understanding of vaccine production 5 c) Simple device handling 5 d) Machine operation 5 e) Machine operation 5 e) Machine operation 5 g) Keeping and distribution of vaccine 5 g) Keeping and distribution of vaccine 5 g) Keeping and distribution of vaccine 5 Legend: N/C=No comment Mod.=Moderate 7 Project contributed to the Improvement of the technology of other kind 7 vaccine production in Brazil? 13 (i) meastes 13 (ii) poliomyelitis 5 13 Have the vaccines supplied by the project contributed to the improvement 6 of preventive measures against measles/poliomyelitis in Brazil 70tel Y (ii) poliomyelitis 5 14 Do you think that Japanese cooperation for the Biologicals Production 7 Project has contributed to reduce the foreign financial burden of Brazil? 13 (i) meastes 13 13 (ii) pollomyelitis 5 5 15 Do you think that technology transfer of Biologicals Production 7 Prazillan counterpar	High 1 20% 1 20% 1 20% 2 40% 1 20% 3 60% 1 20% Yes 10 77% 4 80% Yes 12 92% 4 80% 1 20% 1 20% 1 20%	6 0 6 0 6 1 5 0 6 1 6 0 6 1 6 0 6 0 6 0 7 0 8 0 9 0 9 0 9 0 9 0 9 0 9 0 9 0 9 0 9 0 9 0	0% 0% 0% 20% 0% 20%	Mod 3 3 1 1 1 0 1 1 N/C 3 1 1 1 1 1	1 3 1
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Of preventive measures against measles/poliomyelitis in Brazil Total Y (i) measles 13 1 (ii) poliomyelitis 5 5 14 Do you think that Japanese cooperation for the Biologicals Production 5 Project has contributed to reduce the foreign financial burden of Brazil? 13 (i) measles 13 (ii) poliomyelitis 5 5 Do you think that technology transfer of Biologicals Production by 5 15 Do you think that technology transfer of Biologicals Production by 5 (i) measles 15 (ii) pollomyelitis 5 (ii) measles 15 (i) measles 15 (ii) measles 15 (i) measles 15 (ii) pollomyelitis 5 (iii) pollomyelitis 5 (i) measles 15 (ii) pollomyelitis 5 6 Have the measles/pollomyelitis vaccines supplied by this Biologicals Production Project been distributed all over the country to meet the 14 demand in Brazil? 14	12 92% 4 80% 7 54%	0 0 0	سموديسيد سعيته	N/C 1	
Of preventive measures against measles/poliomyelitis in Brazil Total Y (i) measles 13 1 (ii) poliomyelitis 5 5 14 Do you think that Japanese cooperation for the Biologicals Production 5 Project has contributed to reduce the foreign financial burden of Brazil? 13 (i) measles 13 (ii) poliomyelitis 5 5 Do you think that technology transfer of Biologicals Production by 5 15 Do you think that technology transfer of Biologicals Production by 5 (i) measles 15 (ii) pollomyelitis 5 (ii) measles 15 (i) measles 15 (ii) measles 15 (i) measles 15 (ii) pollomyelitis 5 (iii) pollomyelitis 5 (i) measles 15 (ii) pollomyelitis 5 6 Have the measles/pollomyelitis vaccines supplied by this Biologicals Production Project been distributed all over the country to meet the 14 demand in Brazil? 14	12 92% 4 80% 7 54%	0 0 0	سموديسيد سعيته	1	
(ii) poliomyelitis 5 14 Do you think that Japanese cooperation for the Biologicals Production 5 Project has contributed to reduce the foreign financial burden of Brazil? 13 (i) measles 13 (ii) pollomyelitis 5 5 Do you think that technology transfer of Biologicals Production by 5 Brazillan counterparts without any foreign aids is possible in Brazil? 15 (i) measles 15 (ii) pollomyelitis 5 6 Have the measles/pollomyelitis vaccines supplied by this Biologicals 5 7 Production Project been distributed all over the country to meet the demand in Brazil? 14	4 80% 7 54%	0 0 0	سموديسيد سعيته	1	
14 Do you think that Japanese cooperation for the Biologicals Production 14 Project has contributed to reduce the foreign financial burden of Brazil? 13 (i) measles 13 (ii) pollomyelitis 5 15 Do you think that technology transfer of Biologicals Production by 5 Brazilian counterparts without any foreign aids is possible in Brazil? 15 (i) measles 15 (ii) pollomyelitis 5 6 Have the measles/pollomyelitis vaccines supplied by this Biologicals 5 Production Project been distributed all over the country to meet the demand in Brazil? 15	7 54%	0	0%	1	*
Project has contributed to reduce the foreign financial burden of Brazil? 13 (i) measles 13 (ii) pollomyelitis 5 5 Do you think that technology transfer of Biologicals Production by 5 Brazillan counterparts without any foreign aids is possible in Brazil? 15 (i) measles 15 (ii) pollomyelitis 5 (i) measles 15 (ii) pollomyelitis 5 (iii) pollomyelitis 5 (ii) pollomyelitis 5 (ii) pollomyelitis 5 (iii) pollomyelitis vaccines supplied by this Biologicals 5 (ii) Production Project been distributed all over the country to meet the demand in Brazil? 1	ورفن وتبيره وحرجه والمشتقية ليرمنه				
(i) measles 13 (ii) pollomyelitis 5 15 Do you think that technology transfer of Biologicals Production by 5 Brazillan counterparts without any foreign aids is possible in Brazil? 15 (i) measles 15 (ii) pollomyelitis 5 6 Have the measles/pollomyelitis vaccines supplied by this Biologicals 5 Production Project been distributed all over the country to meet the demand in Brazil? 15	ورفن وتبيره وحرجه والمشتقية ليرمنه				
(ii) pollomyelitis 5 15 Do you think that technology transfer of Biologicals Production by 5 Brazilian counterparts without any foreign aids is possible in Brazil? 15 (i) measles 15 (ii) pollomyelitis 5 6 Have the measles/pollomyelitis vaccines supplied by this Biologicals 5 Production Project been distributed all over the country to meet the demand in Brazil? 15	ورفن وتبيره وحرجه والمشتقية ليرمنه		111 A. 11		
5 Do you think that technology transfer of Biologicals Production by Image: Second State Sta	1 20%		0%	6	
Brazillan counterparts without any foreign aids is possible in Brazil? 15 (i) measles 15 (ii) pollomyelitis 5 6 Have the measles/pollomyelitis vaccines supplied by this Biologicals 15 Production Project been distributed all over the country to meet the demand in Brazil? 1		1	20%	3	
(i) measles 15 (ii) poliomyelitis 5 6 Have the measles/poliomyelitis vaccines supplied by this Biologicals 5 Production Project been distributed all over the country to meet the demand in Brazil? 5	그 아파 가 있는 것				
(ii) poliomyelitis 5 6 Have the measles/poliomyelitis vaccines supplied by this Biologicals 5 Production Project been distributed all over the country to meet the demand in Brazil? 5				<u>.</u>	·
6 Have the meastes/poliomyelitis vaccines supplied by this Biologicals Production Project been distributed all over the country to meet the demand in Brazil?	7 47%		13%	4	
Production Project been distributed all over the country to meet the demand in Brazil?	0 0%	3	60%	2	
demand in Brazil?	<u></u>	-		·	·
				····	
	1				
	11 85%	0	0%	2	ء حم بند
(ii) poliomyelitis 5 2 7 Were there any other unexpected social/economical contribution by the	2 40%	1	20%	2	
Japanese cooperation for the Biologicals Production Project?	۱۰ ^۲ ۰				مېنېد
	3 23%	1	<u>~</u>		
	<u> </u>	0	8% 0%	9 3	
8 Have you had any negative impacts from the Japanese cooperation	<u> </u>	0	<u> </u>		
for the Biologicals Production Project?					
	0 0%	8	62%	5	
	0 0%	3	60%	2	(
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1 Did the Japanese Government provide enough input for the measles/poliornyelitis	Total	Yes	د. سيترينية	No		NK
vaccine production Project? (i) measles				: ,		:
a) As a whole	33	28	85%	0	0%	5
b) Was the machines/equipment/materials adequate?	33	31	94%	1 1 1 1	0%	
c) Was the counterpart training in Japan adequate (in general)?	33	24	73%		0%	9
d) Was the technology transfer from Japan to Brazil adequate?	33	28	85%		3%	4
e) Was the level of technology transferred from Japan to Brazil	33	27	82%	1	3%	5
(II) poliomyelilis						
a) As a whole b) Was the machines/equipment/materials adequate?	19	9	47%		5%	9
c) Was the counterpart training in Japan adequate (in general)?	19	10	47% 53%		5% 0%	
d) Was the technology transfer from Japan to Brazil adequate?	19	10	53%		5%	
e) Was the level of technology transferred from Japan to Brazil	19	9	47%		5%	
2 Did the Brazilian Government provide enough input for the measles/poliomyelitis	Total	Yes		No		NK
vaccine production Project?					نې پېرې د ر	
(i) measles		<u> </u>				
a) As a whole	33	28	85%	and the second second	9%	1 A A
b) Are the facilities(space, utilities etc) adequate?	31	23	74%		26%	
 c) Old they provide enough budget for the Project? c) Old they provide enough provide the Project? 	32	23	72%		3%	
d) Did they provide enough manpower for the Project? (ii) pollomyelitis	33	27	82%	<u> </u>	3%	5
a) As a whole	20	11	55%		5%	8
b) Are the facilities(space, utilities etc) adequate?	20	11	70%		15%	
c) Did they provide enough budget for the Project?	20	9	45%		5%	the second
d) Did they provide enough manpower for the Project?	20	13	65%		5%	
3 Do you think that the vaccination against measles/pollomyelitis was practiced	Total	Yes		No		NK
by the Brazilian Government effectively after the Japanese cooperation						
for the Project?						
(i) measles	32	23 13	72%		0%	9
(II) pollomyelitis 4 Do you think that the Japanese cooperation was given enough support from	- 21	13	62%	2	10%	6
the other sections of M.O.H.?	33	17	52%	0	0%	16
5 Do you think that the Japanese cooperation was implemented with enough			~~~			
linkage with the other related project of related organization?		4	13%	2	7%	24
FFECTIVENESS			6			· · · · · · · · · · · · · · · · · · ·
3 Do you think that Japanese cooperation for the Biologicals Production	Total	Yes		No	استيب	NÆ
Project has succeeded to supply measles/poliomyelitis vaccines on a large scale? (i) measles		~~~~				
(i) b) poliomyęlitis	<u>33</u> 19	25 8	76% 42%	6 5	18%	2
7. Do you think that Japanese cooperation for the Biologicals Production	Total	Yes	16,70	No	2076	NO
Project has contributed to strengthen the ability of quality control of the			غ به جو		المستنبك الم	
measles/poliomyelitis vaccine production?						 -
() measles	33	33	100%	0	0%	0
(I) poliomyelitis	21	17	81%	0	0%	4
3 Do you think that Japanese cooperation for the Blologicals Production						
Project has contributed to implement the National Vaccination Programme? How do you evaluate your skill and knowledge just after the cooperation	33	31	94%	0	0%	2
with Japanese experts and your current one?	Aftor	cooper	ation		أججب	
	Total		auon	Low		Mod
a) Overall	30	7	23%	2	7%	18
b) Understanding of vaccine	- 30	8	27%	1	3%	18
c) Simple dovice handling	31	18	58%	0	0%	9
d) Machine operation	28	4	14%	1		13
e) Machine maintenance	27	0	0%	3	11%	6
1) Understanding of the methods of quality test	30	14	47%	2	7%	
Legend: N/C=No comment, Mod = Moderate			at di Na Barang	n da Mintory	e de la composición A composición	

	Total	High	Low	Mod. N/C
a) Overali	23	14 81%	1 4%	6 8
b) Understanding of vaccine	22	13 59%	1 5%	6 8
c) Simple device handling	22	17 77%	1 5%	6 4
d) Machine operation	16	10 63%	1 6%	6 5
e) Machine maintenance	11	2 18%	3 27%	6 6
f) Understanding of the methods of quality test	19	14	1 5%	0 4
O Were you satisfied with the training skill/knowledge of Japanese experts?	Total	Yes	No	NC
a) Scientific Subject	33	28 79%	1 3%	6 6
b) Technical/Practical Subject	33	28 85%	0 0%	6 5
1. Have you taken a counterpart training in Japan?	33	9 27%	24 73%	6 0
2 Did you have any problems, when you start your job after training?	18	5 28%	4 22%	6 9
3 Were the facilities (space, utilities etc.) adequate during the Japanese cooperation?	23	13 57%	4 17%	6 6
4 Have the production equipment/machines been sufficiently provided	29	25 86%	0 0%	6 4
during the Japanese cooperation?				
5 Have the production equipment/machines been adequately maintained		11 1 1 N 18		
during the Japanese cooperation?	28	22 79%	1 4%	6 5

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16. Do you think that Japanese cooperation for the Biologicals Production	Total	Yes	N)	NO
Project contributed to the improvement of the technology of other kind					
vaccine production in Brazil?	29	15 52	% 2	7%	12
17 Have the vaccines supplied by this Project contributed to the					
Improvement of preventive measures against measles/poliomyelitis?					
(i) measles	32	29 91	% 0	0%	3
(ii) pollomyelitis	20	14 70	% 0	0%	6
18 Do you think that Japanese cooperation for the Biologicals Production		بليكة البرساط التوجيد يحمد الم		*****	
Project has contributed to reduce the foreign financial burden of Brazil?	32	10 31	% 2	6%	20
19 Have you ever had a chance to transfer your technology to the staffs of		1. 11 A A			
other biologicals production system?	33	22 67	% 1	3%	10
20 Do you think that Japanese cooperation for the Biologicals Production Project has					
contributed to the improvement of vaccination system in Brazil?	33	30 91	% 0	0%	3
21 Have the measles/poliomyelitis vaccines supplied by this Biologicals Production	1.1			sta diretta	
Project been distributed all over the country to meet the demand in Brazil?					
(i) measlos	32	20 63	% 2	6%	10
(ii) poliomyelitis	21	7 33	6 6	29%	8
22 Do you think that Japanese international contribution to the					
Biologicals Production is broadly recognized in Brazil?	32	19 59	6 4	13%	9
23 Have you had any negative impacts from the Japanese cooperation for					23
the Biologicals Production Project?	33	0 0	6 32	97%	1
24 Were there any other social/economical contribution by the Japanese					
cooperation for the Biologicals Production Project?	33	15 45	6 3	9%	15
(SUSTAINABILITY)					

[SUSTAINABILITY]

25 Does the Brazilian Government have the consistent policy for the	Total	Yes	No		NC
Biologicals Production Project to continue its activities of measles/		a de la calencia de l			
poliomyelitis vaccine production after the Japanese cooperation?	-		in the second		
(I) measles	33	21 64%	3	9%	9
(ii) poliomyelitis	20	10 50%	3	15%	7
26. Does the meastes/pollomyetitis vaccine production Project have enough	Tola	Yes	No		NC
resources to continue its activities?					
(i) measles	32	9 28%	19	59%	4
Equipments/machines	19	11	3.192		
Spare parts	19	19			
Materials	19	15			
Facilities	19	8			
Operation system	19	4.500	979 C		
Stelf	19	14	÷		
Budget	19	8		्राज्य हुन	

	Total	Yes		No .	1.1	NK
(II) poliomyeliits	19	1	5%	7	37%	11
Equipments/machines	7	2				
Spare parts	7	4				
Materials	7	2				
Facilities	7	3				
Operation system	7	1				
Staff	7	5			••••••••••••••••••••••••••••••••••••••	
Budget	7	2				
27 Have the equipments/machines/spare parts for the Project been sufficiently		******				
provided after the Japanese cooperation?	32	18	56%	9	28%	5
28 Have the equipments/machines/spare parts for the Project been adequately						<u>├</u> ──
maintained after the Japanese cooperation?	33	8	24%	20	61%	5
29 Do you think that this measies/policimyeliils vaccine production Project will make						
enough benefit to adopt self-supporting system?				<u> </u>		<u> </u>
(i) measles	31	18	58%	2	6%	11
(i) poliomyelitis	19	8	42%	2	11%	6
30 Do you think that this poliomyelitis vaccine production Project will develop into			-17.70		1170	
	23	5	22%	8	35%	
consistent national production plant without import of foreign vulks? 31. Do you have an internal training system in FIOCRUZ to transfer the technology	257		24/0	<u> </u>		
	32	10	31%	16	50%	6
for biologicals production among stalls?	C			10		
32 Do you think that you have mastered enough technology to maintain the activities	20	- 01	700/		4/00/	Į,
for this Project?	32	23	72%	4	13%	
33 Are you satisfied with your current situation in Biologicals Production Project?	33	13	39%	17	52%	1
Salary is not enough (Negative reason)	17	9	53%			<u> </u>
Lack of opportunities to improve your technology(Negative reason)	17	15	83%		مسميت	ļ
Others (Negalive reason)	17	3	10%			ļ
34. Do you plan to continue to work for this Blologicals Production Project?	32	29	91%	0	0%	3
	in de		1.00	1997		
[RELEVANCE]						.
35 Have there been any major policy changes relating to the national vaccine production	Total	Yes		No		N
in Brazil?	32	_19_	59%	2	6%	1
38 is the purpose of the project, to establish self-producing system of measles/						
pollomyelitis vaccines on a large scale, still relevant to the current needs of your country?						
(i) measles	- 33	30	91%	0	0%	
(ii) poliomyelitis	20	15	75%	0	0%	5
37 Do you think that detailed plan of technology transfer and cooperation between Japan						
and Brazil were adequately made after enough consultation with Brazilian counterparts?	32	17	53%	2	6%	1
38 Do you think that Japanese technology transfer and cooperation were made opportunely	31	25	81%	0	0%	6
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Legend: N/C=No comment, Mod.=Moderate

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10 RESULT OF QUESTIONNAIRE: BENEFICIARIES

ESULT OF QUESTIONNAIRE: BENEFICIARIES		ant Anna An Anna				
1 Did the Brazillan Government established appropriate vaccination system	Total	Yes		No		NA
against measles/poliomyelitis during the Japanese cooperation?	11	10	91%	0	0%	
(i) measles						
a) Are the facilities for measles vaccination enough?	11	7	64%	1	9%	3
b) Did they provide enough budget for meastes vaccination?	11	6	55%	0	0%	5
c) Did they provide enough manpower for measles vaccination?	: 1 1	6	55%	0	0%	5
(ii) pollomyeliils	Total	Yes		No		N
a) Are the facilities for poliomyelitis vaccination enough?	10	9	90%	0	0%	1
b) Did they provide enough budget for pollomyelilis vaccination?	11	9	82%	0	0%	2
c) Did they provide enough manpower for poliomyelitts vaccination?	े 🖬 ी	9	82%	0	0%	2

2 Do you think that Japanese cooperation for the Biologicals Production	Total	Yes	No	N/C
Project has succeeded to supply measies/pollomyelitis vaccines on a				
large scale?			She gotter in	
(i) measles	10	5 50%	3 30%	2
(II) poliomyelitis	10	3 30%	3 30%	4
3 Do you think that Jepanese cooperation for the Biologicals Production				د
Project has contributed to strengthen the ability of quality control			at latent	
technology of measles/pollomyelitis vaccine?	Total	Yes	No	N/C
(i) measles	THE	10 91%	0 0%	1
(ii) poliomyeätis	11	10 91%	0 0%	1
IMPACT]				

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4 Have the vaccines supplied by this Biologicals Production Project	Total	Yes		No		N/C
contributed to the Improvement of preventive measures against measles/		1994 - B				
pollomyelitis?						
(i) a) measles	11	9	82%	0	0%	2
(ii) poliomyelitis	10	6	60%	1	10%	3
5 Have the measles/pollomyelilis vaccines supplied by this Biologicals						
Production Project been distributed all over the country to meet the			1000			
demand in Brazil?						
(i) measles	11	8	73%	1	9%	2
(ii) pollomyalitis	10	8	80%	Q	0%	2
6 Do you think that Japanese cooperation for the Biologicals Production						
Project has succeeded to supply measles/poliomyelitis vaccines at a						1
moderate price?				all al		
(i) measles ,	10	3	30%	0	0%	7
(ii) poliomyelitis	9	3	33%	0	0%	6
7 Do you think that Japanese cooperation for the Biologicals Production						
Project has contributed to the improvement of preventive measures						
against measles/pollomyelitis in Brazil?				al de la		
(I) measles	11	9	82%	0	0%	2
(ii) poliomyelilis	10	7	70%	0	0%	3
8 Do you think that Japanese cooperation for the Biologicals Production						
Project has contributed to the improvement of vaccination system in Brazil	11	8	73%	1	9%	2
9 Were there any other social/economical contribution by the Japanese	~					
cooperation for the Biologicals Production Project?	10	6	60%	0	0%	4
10 Do you think that Japanese international contribution to the Biologicals						
Production is broadly recognized in Brazil?	11	5	45%	3	27%	3
11 Have you had any negative Impacts from Japanese cooperation for the				1997 (1997) 1997 (1997)		
Biologicals Production Project?	11	0	0%	6	55%	5

Legend : N/C = No comment

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I SUSTAINABILITY]

12 Does the Brazilian Government have the consistent policy for the	Total	Yes	No	T N/O
Biologicals Production Project to continue its activities of measles/				
pollomyelitis vaccine production?				
(i) moasles	11	8 73%	2 18%	
(ii) pollomyelitis	8	4 50%	1 13%	3
3 Have the Brazilian Government established pertinent vaccination system	1		1070	- °
for measles/pollomyelitis such as the distribution and keeping of				· · · · · · ·
vaccines and inoculating persons in need of ?				
(I) measles	11	10 91%	0 0%	:
(II) pollomyelitis	11	11 100%		
	L		0 0%	Ļ

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vaccines on a large scale, still relevant to the current needs of your coun (i) measles	irv?				the second s	NK
	in the second					
	11	9	82%	0	0%	2
(ii) poliomyeliits	11	7	64%	2	18%	2
15 Do you think that Japanese technology transfer and cooperation were man	ade					
opportunely during the Project?						
(i) measles	11	6	55%	0	0%	- 5
(ii) poliomyelitis	11	6	55%	0	0%	
Legend : N/C = No comment		L	~~~~(0 /0	<u> </u>
신물은 계속 방법은 전통 사람들은 것이 가 없는 것이 없다.			5			
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SUSTAINABILITY]							i i i
19 Have there been any policy change in measles/poliomyelitis vaccine	Total	Yes	n an an an an a n an	No		N/C	l -
production by Brazilian Government after the Japanese cooperation?						ميتحقق تفتحهمها	
(i) measles	13	0	0%	4	31%	9	
(ii) poliomyelitis	5	1	20%	1	20%	3	
20 Does the measles/poliomyelitis vaccine production Project have enough							
resources to continue its activities?		(1, 2)				1.1	
(i) measles*	13	9	69%	0.	0%	4	
(ii) poliomyeliilis*	5	1	20%	2	40%	2	
21 Do you think that this measles/poliomyelitis vaccine production Project							
will make enough benefit to adopt self-supporting system?		n de la composition de la composition					
() measles	13	8	62%	0	0%	5	
(ii) poliomyelitis	5	2	40%	0	0%	3	
22 Do you think that this poliomyelitis vaccine production Project will							- 1
develop into consistent national production plant without import of				1. 1. 1.	3		
foreign vulks?							1.
(II) poliomyelitis	5	2	40%	1	20%	2	
23 Do you think that the establishment of an internal training system in							
Brazil without any foreign aids to transfer the technology for Biologicals					da sina n Sina si		
Production?	Total	Exist		Not E>	dst	No	NK
(i) measles	13	4	31%	6	46%	1	2
(il) poliomyetitis	5	1	20%	1	20%	3	0
RELEVANCE]			na si si Na si				
24 Have there been any major policy changes relating to the national	Total	Yes		No		NC	Γ
24 Have there been any major policy changes relating to the national vaccine production in Brazil?	Total	Yes		No		N/C	
****	Total 13	Yes 0	0%	No 4	31%	N/C 9	
vaccine production in Brazil?			0% 20%		31% 20%		
vaccine production in Brazil? (i) measles	13	0		4	-	9	
vaccine production in Brazil? (i) meastes (ii) poliomyelitis	13	0		4	-	9	
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 vaccine production in Brazil? (i) measles (ii) poliomyelitis 25 Is the purpose of the project, to establish self-producing system of measles/poliomyelitis vaccines on a large scale, still relevant to the current needs of your country? (i) measles (ii) poliomyelitis 26 Do you think that detailed plan of technology transfer and cooperation between Japan and Brazil were adequately made after enough consultatio with Brazilian officials/counterparts? (i) measles (ii) b) poliomyelitis 	13 5 13 5 n 13	0 1 12 2 13	20% 92% 40% 100%	4 1 0 2 2 0	20% 0% 40%	9 3 1 1 0	

Legend: N/C=No comment

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1.

THE JOINT EVALUATION STUDY ON THE JAPANESE TECHNICAL COOPERATION PROJECTS IN BRAZIL

BIOLOGICALS PRODUCTION PROJECT

والمرجوع والم

OUESTIONNAIRE TO COUNTERPARTS

JAPAN INTERNATIONAL COOPERATION AGENCY SEPTEMBER, 1993

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的情况中心

BACKGROUND OF RESPONDENT

Name:

Designation:

الله الله فالفراق فالمدعاتية بدعد بديدانيا إليا بعد مدينا عز يعرج

Division:

Organization:

Year when you took training during Japanese cooperation: Subject of training:

Speciality in Biologicals Production Project:

Date:

Following are the question on the Biologicals Production Project. This survey is being conducted by the Brazilian Government and the Japanese Government in order to make a post evaluation on the Brazil-Japan Technical Cooperation Project(1980-1985).

Kindly please tick (v) the most appropriate answer or write down your comments. Your cooperation would be highly appreciated and your cooperation would be fully confidential and used exclusively for this survey.

4.美国大学会议会主要的方法。

[EFFICIENCY]

This section is concerned with the efficiency of the Project; i.e. how economically the inputs are translated into outputs.

1. Did the Japanese Government provide enough input for the measles/poliomyelitis vaccine production Project?

(i) measles a) As a whole Yes

No

No comment

b) Was the machines/equipment/materials adequate? Yes No comment If 'No', please explain:

c) Was the counterpart training in Japan adequate(in general)? No comment Yes No If 'No', please explain:

d) Was the technology transfer from Japan to Brazil adequate? DNo comment Yes No If 'No', please explain:

e) Was the level of technology transferred from Japan to Brazil adequate? Yes []No No comment If 'No', please explain:

f) If you have any comments on the Japanese inputs, please explain:

(ii) poliomyelitis a) As a whole []Yes []No

e ser and a straight and a set of the set

b) Was the machines/equipment/materials adequate? Yes No Comment If 'No', please explain:

c) Was the counterpart training in Japan adequate(in general)? Yes ΠNo No comment If 'No', please explain:

d) Was the technology transfer from Japan to Brazil adequate? []Yes []No comment If 'No', please explain;

e) Was the level of technology transferred from Japan to Brazil adequate? []No Comment Yes If 'No', please explain:

ده هم جمع بيد منه منه منه بين دين بين ويد جيد جي منه منه هي ويد هي جي مي منه جي بين بير ا f) If you have any comments on the Japanese inputs, please explain:

الم المحار المار الأرام عنيه المالة عنها المحار المارة بالدر جرين البسو ويادة جرية المارة عنها المار المار السور السور عنها فيسو عامه

2. Did the Brazilian Government provide enough input for the measles/poliomyelitis vaccine production Project? (i) measles

a) As a whole

Yes **No** DNo comment

b) Are the facilities(space, utilities etc) adequate? []No **Yes** If 'No', please explain:

c) Did they provide enough budget for the Project?
 Yes
 INo
 If 'No', please explain:

d) Did they provide enough manpower for the Project? []No comment []Yes []No

If 'No', please explain:

e) If you have any comments on the Brazilian inputs, please explain:

化化学性的 有限的 使使的 医血管的 (ii) pollomyelitis a) As a whole No comment **Yes** []No

 $\mathbb{E}_{\mathbb{P}^{d}} \times_{\mathbb{P}^{d}}$

b) Are the facilities(space, utilities etc) adequate? □Yes □No []No comment If 'No', please explain:

c) Did they provide enough budget for the Project? DNo comment TYes No If 'No', please explain: · 通信和公司第三人称单

d) Did they provide enough manpower for the Project? Yes No No comment Yes If 'No', please explain:

e) If you have any comments on the Brazilian inputs, please explain:

3. Do you think that the vaccination against measles/poliomyelitis was practiced by the Brazilian Government effectively after the Japanese cooperation for the Project? lander Bore

a) measles a) measles Yes INo INo comment If 'No', please explain:

b) poliomyelitis Yes INo If 'No', please explain:

4. Do you think that the Japanese cooperation was given enough support from 4. Do you think that the Japanese cooperation has given and given the other sections of M.O.H.?

5. Do you think that the Japanese cooperation was implemented with enough linkage with the other related project of related organization?

No Comment Yes

If 'Yes', please list those projects: Name of Project

Implementing Organization

EFFECTIVENESS] This section is conc extent whereby the	erned with the effectiveness of the Project: i.e. the objectives of the Project are successful.
6. Do you think tha Project has succeed scale? a) measles []Yes	at Japanese cooperation for the Biologicals Production ed to supply measles/poliomyclitis vaccines on a large
If 'No', please	explain:
b) poliomyeli []Yes If 'No', please	[]No comment
Project has contribu measles/poliomyelit a) measles	at Japanese cooperation for the Biologicals Production uted to strengthen the ability of quality control of the is vaccine production?
[]Yes If 'No', please	[]No explain:
b) poliomyel []Yes If 'No', please	[No comment
and the second	hat Japanese cooperation for the Biologicals Production
8. Do you think th Project has contrib []Yes If 'No', please	INO INPLEMENT THE NATIONAL VACCINATION Programmer
Project has contrib Yes If 'No', please 9. How do you eva	aluate your skill and knowledge just after the cooperation error and your current one?
Project has contrib Yes If 'No', please 9. How do you eva with Japanese expe a) Overall b) Understanding	e explain:
Project has contrib Yes If 'No', please 9. How do you eva with Japanese expe a) Overall	aluate your skill and knowledge just after the cooperation erts and your current one? After cooperation No comment Low Moderate High Low Moderate High
 Project has contrib Yes If 'No', please 9. How do you evant with Japanese expension a) Overall b) Understanding of vaccine production 	aluate your skill and knowledge just after the cooperation erts and your current one? After cooperation No comment Low Moderate High Low Moderate High

maintenance

quality test

10. Were you satisfied with the training skill/knowledge of Japanese experts?

an an tha an

a) Scientific Subject Yes No No comment If 'No', please explain:

b) Technical/Practical Subject If 'No', please explain:

11. Have you taken a counterpart training in Japan? ☐Yes ☐No a) If 'Yes", were you satisfied with it? ☐Yes ☐No What was the best point to be trained in Japan? Please explain.

If 'No', what was the major problem for you? Training period was too short. Technical level was too high. Technical level was too low. Training curriculum did not meet your needs. Others please specify:

고 고 보는 보 12. Did you have any problems, when you start your job after training? If 'No', please explain:

13. Were the facilities (space, utilities etc.) adequate during the Japanese cooperation?

Doperation? Yes []No comment If 'No', please explain:

14. Have the production equipment/machines been sufficiently provided during the Japanese cooperation?

[]Yes []No comment If 'No', please explain:

15. Have the production equipment/machines been adequately maintained during the Japanese cooperation?

ex Telefor (Belegel)

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If 'No', please explain:

[IMPACI'] This section is concerned with the impact of the Project: i.e. direct or indirect, positive or negative.

16. Do you think that Japanese cooperation for the Biologicals Production Project contributed to the improvement of the technology of other kind vaccine production in Brazil?

No comment No Yes

If 'Yes' or 'No", please explain:

17. Have the vaccines supplied by this Project contributed to the improvement of preventive measures against measles/poliomyelitis?

a) measles Yes
INo

If 'No', please explain:

b) poliomyelitis Yes No comment If 'No', please explain:

18. Do you think that Japanese cooperation for the Biologicals Production Project has contributed to reduce the foreign financial burden of Brazil? Yes INo Comment

网络拉拉

If 'Yes' or 'No", please explain:

19. Have you ever had a chance to transfer your technology to the staffs of other biologicals production system? []No comment

Yes No

a) If 'Yes', what type of technology did you transfer to them?

EQuality test

[]Machine maintenance/management/operation

Others (please specify:

b) If 'No', what was the major hindrance for transfer?, please explain:

20. Do you think that Japanese cooperation for the Biologicals Production Project has contributed to the improvement of vaccination system in Brazil? []No comment TYes

If 'No', please explain:

21. Have the measles/poliomyelitis vaccines supplied by this Biologicals Production Project been distributed all over the country to meet the demand □No comment in Brazil?

a) measles Yes If 'No', please explain:

b) poliomyelitis If 'No', please explain:

22. Do you think that Japanese international contribution to the Biologicals Production is broadly recognized in Brazil?

가 있는 것이 있는 것이 있는 것이 있는 것이 있는 것이 있는 것이 있다. 것이 있는 것이 같은 것이 같은 것이 같은 것이 같은 것이 같은 것이 같은 것이 있는 것이 있는 것이 있는 것이 같은 것이 있는 것이 있는 것이 있는 것이 같은 것이 있는 것이 있는 것이 있는 것이 같은 것이 있는 것

[]No comment Yes

If 'No', please explain:

23. Have you had any negative impacts from the Japanese cooperation for the Biologicals Production Project? 1.000

No comment Yes []No If 'Yes', please explain:

24. Were there any other social/economical contribution by the Japanese cooperation for the Biologicals Production Project? No Comment **Yes**

If 'Yes', please explain;

[SUSTAINABILITY]

This section is concerned with the sustainability of the Project: i.e. the extent of the Biologicals Production Project development for self sustainability after the Japanese assistance was completed.

25. Does the Brazilian Government have the consistent policy for the Biologicals Production Project to continue its activities of

measles/poliomyelitis vaccine production after the Japanese cooperation? a) measles

Yes []No No comment

	b) poliomyclitis []Yes []No If 'No', please explain:	No comment
	ویک میں بند میں بین ہیں کہ میں بند میں بند میں میں میں کی <u>اور میں میں اور اور اور اور اور اور اور اور اور اور</u>	the moduation Project have enough
26. L	ces to continue its activ	itis vaccine production Project have enough
resou	a) measles	FILATION CONTRACTOR AND A CONTRACTOR AND AND A CONTRACTOR AND A CONTRAC
gan in. Sin sin	Yes INO	[]No comment
		ch one of the following items is not
	sufficient:	
	Equipments/machine	s(please specify:
	Spare parts(please sj	
	Materials(please spe	
	Facilities(please spe	
	Operation system(pl	
	Staff(please specify:	
	Budget(please specif	
	Others (please speci	1. A statistical statistic statistical statistical statistica Statistical statistical statis Statistical statistical statis
	b) poliomyclitis	No comment
		ch one of the following items is not
	sufficient:	
	Equipments/machine	s(please specify:
	Spare parts(please s	
	Materials(please spe	
	Facilities(please spe	:cify:
	Operation system(pl	
	Staff(please specify:	
	Budget(please specif	
	Others (please speci	i fy: electronical constraints de les participations de la la constraint de
17 1	Janot the contempotelmashi	ines/spare parts for the Project been
27. 1 suffic	iently provided after the	Jananese cooperation?
20111	Tyes	No comment
	If 'No', please explain:	

28. Have the equipments/machines/spare parts for the Project been adequately maintained after the Japanese cooperation? adequately maintained after the Japanese cooperation? [Yes]No]No comment If 'No', please explain:

...t

29. Do you think that this measles/poliomyelitis vaccine production Project will make enough benefit to adopt self-supporting system? a) measles No comment and the second second Yes No If 'No', please explain: b) poliomyelitis b) pollomyentis []Yes []No If 'No', please explain: 30. Do you think that this poliomyelitis vaccine production Project will develop into consistent national production plant without import of foreign No comment vulks? []Yes []No If 'No', please explain: 31. Do you have an internal training system in FIOCRUZ to transfer the technology for biologicals production among staffs?]No No comment Yes Please explain:
 Yes
 INo
 INo
 Comment

 Please
 explain:
 年后,在这些人们的大量,增加的电源和基础。 第二 32 Do you think that you have mastered enough technology to maintain the activities for this Project? DNo comment No **Yes** If 'No', please explain: 33. Are you satisfied with your current situation in Biologicals Production Project? **No** []No comment []]Yes If 'No', what is the major problem for you? []Salary is not enough Lack of opportunities to improve your technology Others (please specify: 34. Do you plan to continue to work for this Biologicals Production Project? No comment Yes No If 'No', please explain:

[RELEVANCE]

This section is concerned with the relevance of the Project: i.e. whether the objectives of the Project are pertinent and worthwhile.

35. Have there been any major policy changes relating to the national vaccine production in Brazil?

Yes)	No	comment
President and the	Antendary 1	an a	- 「「「」」 たいでい	and the second second

If 'Yes', please explain:

36. Is the purpose of the project, to establish self-producing system of measles/poliomyelitis vaccines on a large scale, still relevant to the current needs of your country?

a) measles []Yes []No	□No comment
If 'No', please explain:	
b) poliomyelitis	
☐ Yes □No	Do comment
If 'No', please explain:	
37. Do you think that detailed pla	n of technology transfer and cooperation
between Japan and Brazil were a	dequately made after enough consultation
with Brazilian counterparts?	Filtr
[]Yes	No comment
If 'No', please explain:	사망가 영상사실 것 같아요. 김 가장 그가 가지가 가지 않는 것이다. 금요 같은 사망가 것을 수 있을까? 가장이 가지 가지 않는 것이다. 같은 사망가 있는 것 같아요. 그는 것 같은 것 같아요. 같이 같은 것 같이 같이 같아요.

38. Do you think that Japanese technology transfer and cooperation were made opportunely during the Project? Yes INo comment

If 'No', please explain:

39. Any other comment:

(Thank you for your cooperation)

THE JOINT EVALUATION STUDY ON THE JAPANESE TECHNICAL COOPERATION PROJECTS IN BRAZIL

BIOLOGICALS PRODUCTION PROJECT

QUESTIONNAIRE TO BENEFICIARIES(Health center, Hospital)

JAPAN INTERNATIONAL COOPERATION AGENCY SEPTEMBER, 1993

يستشرفها والمرجع والمالية والمرغر فركستها فالمتحربة وتكفها فبرعا فرافتهم بتؤخر مأرفا كالفاك حربت فالفاصرية الأ

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BACKGROUND OF RESPONDENT

Name:

Designation:

Division:

Organization:

महानेव समस्य देखें देखा हा जेन संदर्भ

Date: الذالم بتأبيا بأرج بأجرين يتوالد أمارك مارك تجريك

Following are the question on the Biologicals Production Project. This survey is being conducted by the Brazilian Government and the Japanese Government in order to make a post evaluation on the Brazil-Japan Technical Cooperation Project(1980-1985).

Kindly please tick (v) the most appropriate answer or write down your comments. Your cooperation would be highly appreciated and your cooperation would be fully confidential and used exclusively for this survey.

B-32

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[EFFICIENCY]

This section is concerned with the efficiency of the Project: i.e. how economically the inputs are translated into outputs. The second second

1. Did the Brazilian Government established appropriate vaccination system against measles/poliomyelitis during the Japanese cooperation?

مر وربع وربيه وربيه وربيه وربيه وربيه وربيه وربيه وربيه وربيه

Yes No comment

If 'No', please explain:

(i) measles 建制度的复数形式 a) Are the facilities for measles vaccination enough? Yes No comment If 'No', please explain:

b) Did they provide enough budget for measles vaccination? Yes INo Comment If 'No', please explain:

c) Did they provide enough manpower for measles vaccination?
 Yes
 No

 If 'No', please explain:

d) If you have any comments on the Brazilian vaccination system against measles, please explain:

(ii) poliomyelitis a) Are the facilities for poliomyelitis vaccination enough? Yes No Comment If 'No', please explain:

b) Did they provide enough budget for poliomyelitis vaccination? **Y**es No Comment If 'No', please explain: The de the states of the second

c) Did they provide enough manpower for poliomyelitis vaccination? ☐Yes ☐No Comment If 'No', please explain:

d) If you have any comments on the Brazilian vaccination system against poliomyelitis, please explain:

[EFFECTIVENESS]

This section is	concerned	with the c	ffectiveness	of the I	Project: i.e.	the	֥
extent whereby	the objecti	ves of th	e Project a	re succes	sful,		

2. Do you think that Japanese cooperation for the Biologicals Production Project has succeeded to supply measles/poliomyelitis vaccines on a large ICCCCucu to series and a series of the serie scale? a) maarlas

	[]Yes	(63	[]No	[]No	comm	ent	
	If 'No', j	please	explain:				
· · ·	b) polio Yes If 'No', j		No	[]No	comm	ent	
				 			an an trainn an

3. Do you think that Japanese cooperation for the Biologicals Production Project has contributed to strengthen the ability of quality control technology of measles/poliomyelitis vaccine? a) measles Yes DNo DNo comment

- If 'No', please explain:

							(<u>.</u>					
b)	poli	omy	elitis	5		 			 		in the second	
	Yes			N) .		DN	lo co	mme	nt		
ſſ	'No'.	plea	se e	xplain								

[IMPACI]

This section is concerned with the impact of the Japanese cooperation for the Biological's Production Project: i.e. direct or indirect, positive or negative. shgati Afadoi

4. Have the vaccines supplied by this Biologicals Production Project contributed to the improvement of preventive measures against measles/poliomyelitis?

- a) measles
- DNo Comment Yes
- If 'No', please explain:

b) poliomyelitis Yes If 'No', please explain:

5. Have the measles/poliomyelitis vaccines supplied by this Biologicals Production Project been distributed all over the country to meet the demand in Brazil?

a) measles

☐Yes ☐No If 'No', please explain: []No comment

b) poliomyelitis If 'No', please explain:

No comment

6. Do you think that Japanese cooperation for the Biologicals Production Project has succeeded to supply measles/poliomyelitis vaccines at a moderate price?

a) measles

Yes []No comment

i na sente a serie de la construcción de la construcción de la construcción de la construcción de la construcc La construcción de la construcción d

If 'No', please explain:

b) poliomyclitis []Yes []No If 'No', please explain:

7. Do you think that Japanese cooperation for the Biologicals Production Project has contributed to the improvement of preventive measures against measles/poliomyelitis in Brazil?

a) measles []Yes No If 'No', please explain:

[No comment

b) poliomyelitis []Yes []No If 'No', please explain:

No comment

8. Do you think that Japanese cooperation for the Biologicals Production Project has contributed to the improvement of vaccination system in Brazil? DNo comment []Yes If 'No', please explain:

9. Were there any other social/economical contribution by the Japanese cooperation for the Biologicals Production Project? []No []No comment **Yes**

الله أحد التي يريد المراجع المراجع المراجع من المراجع عن يريد بالمراجع المراجع المراجع المراجع المراجع المراجع محمد عند منذ المراجع المراجع من عند منه المراجع منه منه المراجع عن يريد بالمراجع المراجع المراجع المراجع المراجع

If 'Yes', please exp	olain:	og hand the of a star	
10. Do you think that J Production is broadly re []]Yes [If 'No', please expl	cognized in Brazil?]No 🗌 No		the Biologicals
و ميد المحد الله الله الله الله الله الله الله الل		• • • • • • • • • • • • • • • • • • •	
11. Have you had any m Biologicals Production []Yes [If 'Yes', please exp	Project?]No []No plain:	comment	
[SUSTAINABILITY] This section is concerne extent of the Biological			
sustainability after the 12. Does the Brazilian (Biologicals Production I measles/poliomyelitis v a) measles	Japanese assistance Government have the Project to continue accine production?	was completed. consistent policy its activities of	
sustainability after the 12. Does the Brazilian (Biologicals Production I measles/poliomyelitis v a) measles	Japanese assistance Jovernment have the Project to continue accine production?	was completed. consistent policy	
sustainability after the 12. Does the Brazilian (Biologicals Production I measles/poliomyelitis v a) measles []Yes []Yes []Yes [] 'No', please expl b) poliomyelitis	Japanese assistance Jovernment have the Project to continue accine production?]No []No ain:	was completed. consistent policy its activities of	
sustainability after the 12. Does the Brazilian (Biologicals Production I measles/poliomyelitis v a) measles [Yes [If 'No', please expl b) poliomyelitis [Yes [If 'No', please expl - 13. Have the Brazilian for measles/poliomyelitis and inoculating persons i	Japanese assistance Jovernment have the Project to continue accine production?]No []No ain:]No []No ain: Government establis such as the distri	was completed. consistent policy its activities of comment comment	for the
sustainability after the 12. Does the Brazilian (Biologicals Production I measles/poliomyelitis v a) measles [Yes [If 'No', please expl b) poliomyelitis [Yes [If 'No', please expl 4. 13. Have the Brazilian for measles/poliomyelitis and inoculating persons i a) measles	Japanese assistance Jovernment have the Project to continue accine production? No No ain: No No ain: Government establis such as the distri n need of ? No No	was completed. consistent policy its activities of comment comment	for the
sustainability after the 12. Does the Brazilian (Biologicals Production I measles/poliomyelitis v a) measles [Yes [If 'No', please expl b) poliomyelitis [Yes [If 'No', please expl 4. 13. Have the Brazilian for measles/poliomyelitis and inoculating persons i a) measles [Yes [If 'No', please expl b) poliomyelitis	Japanese assistance Government have the Project to continue accine production? No INC ain: Government establist such as the distring in need of ? No INC ain:	was completed. consistent policy its activities of comment comment hed pertinent vac oution and keepin	for the cination system ig of vaccines

14. Is the purpose of the project, to establish self-producing system of vaccines on a large scale; still relevant to the current needs of your country? a) measles a) no comment b) poliomyclitis b) poliomyclitis b) poliomyclitis b) poliomyclitis b) rest b) no comment If 'No', please explain: b) poliomyclitis b) poliomyclitis b) poliomyclitis c) rest c) measles c) rest b) neesles c) rest c) measles c) rest c) measles	[RELEVANCE] This section is concerned with the objectives of the Project are perf	e relevance of the Project: i.e. whether the tinent and worthwhile.
□Yes □No □No comment If 'No', please explain:	vaccines on a large scale, still re a) measles Yes	levant to the current needs of your country?
 15. Do you think that Japanese technology transfer and cooperation were made opportunely during the Project? a) measles Yes No No comment b) poliomyelitis Yes No No comment b) poliomyelitis Yes No Comment b) poliomyelitis Yes No b) poliomyelitis Yes No Comment b) Any other comment: Any other comment: 	□Yes □No	
opportunely during the Project? a) measles Yes INo INo comment b) poliomyelitis Yes INo INo comment if 'No', please explain: 16. Any other comment:		
Yes No Ino Comment If 'No', please explain: No comment Yes No Ino If 'No', please explain: Ino Ino 16. Any other comment: .	opportunely during the Pro	echnology transfer and cooperation were made ject?
b) poliomyelitis Yes DNo If 'No', please explain: 16. Any other comment:	□Yes	□No comment
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(Thank you for your cooperation)	If 'No', please explain: 16. Any other comment:	
(Thank you for your cooperation)	If 'No', please explain: 16. Any other comment:	
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₿- 37	If 'No', please explain: 16. Any other comment:	

THE JOINT EVALUATION STUDY ON THE JAPANESE TECHNICAL COOPERATION PROJECTS IN BRAZIL

BIOLOGICALS PRODUCTION PROJECT

INTERVIEW SHEET TO OFFICIALS

JAPAN INTERNATIONAL COOPERATION AGENCY SEPTEMBER, 1993

Name: Where the control of the William Real and the State of the State

BACKGROUND OF RESPONDENT

Designation:

Division:

Organization:

Date:

Following are the question on the Biologicals Production Project. This survey is being conducted by the Brazilian Government and the Japanese Government in order to make a post evaluation on the Brazil-Japan Technical Cooperation Project(1980-1985).

We would like to have an interview on this sheet.

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11:00.05

Kindly please tick (v) the most appropriate answer or write down your comments. Your cooperation would be highly appreciated and your cooperation would be fully confidential and used exclusively for this survey.

[EFFICIENCY] - Deline Beach englished in the last state of the

This section	is concern	ed with the	efficiency	of the Pro	ect: i.e.	how
economically	the input	s are transl	ated into	outputs.	an de la calan. Regione	

1. Do you think that the Japanese cooperation was implemented with enough linkage with the other related project of related organization?

No comment No Yes

If 'Yes', please list those projects: Name of Project Implementing Organization ender der dem Statistic

[EFFECTIVENESS]

This section is concerned with the effectiveness of the Project: i.e. the extent whereby the objectives of the Project are successful.

2. Do you think that Japanese cooperation for the Biologicals Production Project has succeeded to supply measles/pollomyelitis vaccines on a large re all the state of the second scale?

a) measles

DNo comment Yes No If 'No', please explain:

				ه بیش ایشیر میں ادری میں میں مرد میں بینے ایر اور ایر ا	
6) poliomyel	itis			1996년 2016년 28년
Ľ	JYes	DNo	[]No	comment	
If	'No', please	explain:	1. 读样 生产工具		

3. Do you think that Japanese cooperation for the Biologicals Production Project has contributed to strengthen the ability of quality control of the measles/poliomyelitis vaccine production?

a) measles	그는 그는 가지 않는 것이 같이 많이	「持ち」「白いら」ことです	11月11日 二十	かわい 一般 ほんしょうかい	
		and the second second	. <u>.</u>		
TIVes	- No		[]No	comment	÷

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If 'No', please explain:

[]No	com	nent

b) poliomyelitis []Yes

If 'No', please explain:

[]No comment

4. Do you think that Japanese cooperation for the Biologicals Production Project has contributed to implement the National Vaccination Programme? No comment **No** Yes If 'No', please explain:

5.	Were you satisfied with the training skill/knowledge of Japanese experts? a) Scientific Subject
	☐Yes If 'No', please explain:
 -	b) Technical/Practical Subject
	Yes
•	If 'No', please explain:
6.	Were the facilities (space, utilities etc.) adequate during the Japanese
co	operation?
	If 'No', please explain:
т. -	
7.	Have the production equipment/machines been sufficiently provided during
	: Japanese cooperation?
	If 'No', please explain:
	에 가지 같은 것 같이 있습니다. 그는 물건은 것 않는 것 것 같은 것을 물건을 통했다. 이 가지 것을 것 같은 것 같은 것 같은 것 같은 것 같은 것은 것 같은 것 같
	Have the production equipment/machines been adequately maintained ring the Japanese cooperation?
• •	Yes INO INO comment
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-	
f B	MPACT]
Th	is section is concerned with the impact of the Project: i.e. direct or lirect, positive or negative.
9. Pre	Do you think that the Japanese cooperation for Biologicals Production oject contributed to the improvement of the technology of other kind
	ccine production in Brazil?
	If 'Yes' or 'No", please explain:
	. Have the vaccines supplied by this Project contributed to the provement of preventive measures against measles/poliomyelitis?
	a) measies Yes INo Comment
· ·	

If 'No', please explain:

b) poliomyelit	is
Y es	[]No
If 'No', please	explain:

No comment

11. Do you think that Japanese cooperation for the Biologicals Production Project has contributed to reduce the foreign financial burden of Brazil? []Yes []No Comment If 'Yes' or 'No", please explain:

12. Have you ever had a chance to transfer the FIOCRUZ's measles/poliomyelitis vaccine production technology to the other biologicals production system? []No comment

No []Yes

- a) If 'Yes', what type of technology did you transfer to them? Quality test
 - Machine maintenance/management/operation
 - Others (please specify:
- b) If 'No', what was the major hindrance for transfer?, please explain:

13. Do you think that Japanese cooperation for the Biologicals Production Project has contributed to the improvement of vaccination system in Brazil? []No comment

If 'No', please explain:

14. Have the measles/pollomyelitis vaccines supplied by this Biologicals Production Project been distributed all over the country to meet the demand in Brazif? 영국 이 승규는 영국

a) measles

- ☐Yes ☐No ☐No comment If 'No', please explain:

b) poliomyelitis

b) poliomyelitis [Yes []No []No comment If 'No', please explain:

15. Do you think that Japanese international contribution to the Biologicals Production is broadly recognized in Brazil? []No comment []]Yes

If 'No', please explain:

16. Have you had any negative impacts from the Japanese cooperation for the Biologicals Production Project?

IVes
INO
INO
INO
If 'Yes', please explain:

17. Were there any other social/economical contribution by the Japanese cooperation for the Biologicals Production Project?

[SUSTAINABILITY]

This section is concerned with the sustainability of the Project: i.e. the extent of the Biologicals Production Project development for self sustainability after the Japanese assistance was completed.

18. Does the Brazilian Government have the consistent policy for the Biologicals Production Project to continue its activities of measles/poliomyelitis vaccine production after the Japanese cooperation?

a) measles

∐Yes □No comment

If 'No', please explain:

b) poliomyelitis []Yes []No If 'No', please explain:

DNo comment

19. Does the Brazilian Government have the consistent policy for the administration of FIOCRUZ to continue its activities of measles/poliomyelitis vaccine production after the Japanese cooperation?

 IVes
 INo
 INo
 INo

 If 'No', please explain:

20. Does the measles/poliomyelitis vaccine production Project have enough resources to continue its activities?

a) measles

□Yes □No

If 'No', please specify which one of the following items is not cient: Equipments/machines(please specify: Spare parts(please specify: sufficient:

Spare parts(please specify:

[]Materials(please specify:

[]Facilities(please specify:

Liracinties(please specify:]Operation system(please specify:]Staff(please specify:]Dudget(please specify:]Others (please specify: oliomyelitis s []No []No comment

b) poliomyelitis Yes

If 'No', please specify which one of the following items is not sufficient:

Equipments/machines(please specify:

Spare parts(please specify: Materials(please specify: Facilities(please specify:)

Facilities (please specify: Operation system(please specify: Staff(please specify: Budget(please specify: Others (please specify:) 21. Do you think that this measles/pollomyelitis vaccine production Project will make enough benefit to adopt self-supporting system?

a) measles

a) measies []Yes If 'No', please explain:

b) poliomyelitis If 'No', please explain:

22. Do you think that this poliomyelitis vaccine production Project will develop into consistent national production plant without import of foreign

[]Yes []No If 'No', please explain:

23. Do you think that FIOCRUZ Foundation have an enough ability to adopt internal training system to transfer the technology for biologicals production

LIYes []No []No comment Please explain:

24 Do you think that counterparts for the Japanese cooperation have mastered enough technology to maintain the activities of this Project?

DNo comment Yes

If 'No', please explain:

25. Do you have any opinion to establish self-sustaining system of this Project?

[]No comment No Yes

If 'No', please explain:

[RELEVANCE] This section is concerned with the relevance of the Project: i.e. whether the objectives of the Project are pertinent and worthwhile.

26. Have there been any major policy changes relating to the national vaccine production in Brazil?

□No []No comment Yes

If 'Yes', please explain:

27. Is the purpose of the project, to establish self-producing system of measles/poliomyelitis vaccines on a large scale, still relevant to the current needs of your country?

a) measles

[]Yes []No []No comment. If 'No', please explain:

b) poliomyelitis DNo Comment TYes If 'No', please explain:

28. Do you think that the detailed plan of technology transfer and cooperation were adequately made after the enough discussion between Japanese parts and Brazilian parts?

No comment No Yes

If 'No', please explain:

29. Do you think that Japanese technology transfer and cooperation were made opportunely during the Project? Yes No No comment

30. Any other comment:

a B-45

(Thank you for your cooperation)

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THE JOINT EVALUATION STUDY ON THE JAPANESE TECHNICAL COOPERATION PROJECTS IN BRAZIL

BIOLOGICALS PRODUCTION PROJECT

INTERVIEW SHEET TO MANAGERS

et de

JAPAN INTERNATIONAL COOPERATION AGENCY SEPTEMBER, 1993

BACKGROUND OF RESPONDENT

Name:

Designation:

Division:

Organization:

Date:

Following are the question on the Biologicals Production Project. This survey is being conducted by the Brazilian Government and the Japanese Government in order to make a post evaluation on the Brazil-Japan Technical Cooperation Project(1980-1985).

We would like to have an interview on this sheet.

Kindly please tick (v) the most appropriate answer or write down your comments. Your cooperation would be highly appreciated and your cooperation would be fully confidential and used exclusively for this survey.

[EFFICIENCY]

This section is concerned with the efficiency of the Project: i.e. how economically the inputs are translated into outputs.

the first states and the

1. Do you think that Japanese cooperation for the Biologicals Production Project succeeded to realize measles/poliomyelitis vaccines on a large scale?

No No comment Yes If 'No', please explain:

2. Do you think that Japanese cooperation for this Project contributed to strengthen the ability of quality control on the biologicals production for measles/poliomyelitis?

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t straggeriche

[]No Comment. Yes If 'No', please explain:

3. Did the Japanese Government provide enough input for the measles/poliomyelitis vaccine production Project?

(i) measles

a) Was the machines/equipment/materials adequate? Yes INO No comment If 'No', please explain:

b) Was the counterpart training in Japan adequate(in general)? Yes DNo If 'No', please explain:

c) Was the technology transfer from Japan to Brazil adequate? ☐Yes ☐No If 'No', please explain:

d) Was the level of technology transferred from Japan to Brazil adequate? DNo comment []No Yes If 'No', please explain:

e) If you have any comments on the Japanese inputs, please explain: 网络理想起来的

(ii) poliomyelitis

a) Was the machines/equipment/materials adequate? []No Comment []Yes If 'No', please explain:

b) Was the counterpart training in Japan adequate(in general)? ÚYes LNo comment If 'No', please explain:

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c) Was the technology transfer from Japan to Brazil adequate? Yes No comment If 'No', please explain:

d) Was the level of technology transferred from Japan to Brazil والمحافظة والمتأو بتناعيه والمراجب والمراجب المراجبة والمحافية adequate? **Yes** []No No comment If 'No', please explain:

e) If you have any comments on the Japanese inputs, please explain:

والمتحد والمحمد والمحمد والمتحد والمتحد والمحمد و

4. Did the Brazilian Government provide enough input for the measles/poliomyelitis vaccine production Project?

(i) measles

Yes No a) Are the facilities(space, utilities etc) adequate? []No No comment Yes If 'No', please explain:

b) Did they provide enough budget for the Project? If 'No', please explain:

c) Did they provide enough manpower for the Project? No Yes DNo comment []No Yes nezione de la c If 'No', please explain:

d) If you have any comments on the Brazilian inputs, please explain:

(ii) pollomyelitis
Yes No
a) Are the facilities(space, utilities etc) adequate? Yes Done avoided If 'No', please explain:

b) Did they provide enough budget for the Project? Yes No comment If 'No', please explain:

c) Did they provide enough manpower for the Project? C) Did tatoy pro-Yes No []Yes []No Comment If 'No', please explain:

محت مستحديت مرب ستركث بنيع ومستنبعها شبوهي عثو سترا d) If you have any comments on the Brazilian inputs, please explain:

5. Do you think that the vaccination against measles/poliomyelitis was practiced by the Brazilian Government effectively after the Japanese cooperation?

a) measles DNo Comment Yes

☐Yes LINo
If 'No', please explain:
b) poliomyelitis
☐Yes □No □No comment
If 'No', please explain:

6. Do you think that the Project was given enough support from the other

sections of M.O.H.? If 'No', please explain:

7. Do you think that Japanese cooperation schedule adequately made for implementation?

DNo comment []No Yes If 'No', please explain:

8. Do you think that the Japanese cooperation was implemented with enough linkage with the other related project of related organization?

	Yes	L_INo	lightet a A L⊴No	comment
•	If 'Yes',	please list those	projects:	

Name of Project

Implementing Organization

[EFFECTIVENESS]

أسروهم ومناديته وتناريت وتناريت ومترجته فتتوجب وتمواجع والترجي والمراجع الترجيب والمراجع

This section is concerned with the effectiveness of the Project: i.e. the extent whereby the objectives of the Project are successful.

9. Do you think that Japanese cooperation for the Biologicals Production Project has succeeded to supply measles/poliomyelitis vaccines on a large scale?

a) measles

Yes No comment If 'No', please explain:

b) poliomyelitis []Yes []No If 'No', please explain:

10. Do you think that Japanese cooperation for the Biologicals Production Project has contributed to strengthen the ability of quality control in the measles/poliomyelitis vaccine production?

[]No] No comment Yes If 'No', please explain:

1997 - 19

b) poliomyelitis Yes INo If 'No', please explain:

11. Do you think that Japanese cooperation for the Biologicals Production Project has contributed to implement the National Vaccination Programme? []No comment Yes If 'No', please explain:

12. How do you evaluate counterparts' skill and knowledge just after the training with Japanese experts and current one? After cooperation Current Low Moderate High No comment Low Moderate High : 🛄 👘 Π a) Overall 2월 **전** 이 문 : m \square b) Understanding ÷-of vaccine production **[**] \Box c) Simple device handling \square \square \Box d) Machine operation twa 🗍 🔄 🖓 ି 门 ି ହି 1 e) Machine maintenance f) Understanding of the methods of i anti. quality test 13. Were you satisfied with the training skill/knowledge of Japanese experts? a) Scientific Subject DNo comment TYes If 'No', please explain: b) 'Technical/Practical Subject ÍÝes If 'No', please explain: مروحه محمد مند ومناجب والمرجمة مند فيد ومرجمة وشد السراحين ومناجب مند ومناجب مناجب ومناجب ومناجب ومناجب ومناجب ومناجب ومناجب ومناجب 14. Were the facilities (space, utilities etc.) adequate during the Japanese cooperation? If 'No', please explain: 가는 것이 있는 것이 있다. 가지 않는 것이 있는 것이 있는 것이 있는 것이 있는 것이 있는 것이 있는 것이 있다. 같은 것이 같은 것은 것은 것이 있는 것이 같은 것이 있는 것 15. Have the production equipment/machines been sufficiently provided during the Japanese cooperation? DNo comment []No []Yeş If 'No', please explain:

16. Have the production equipment/machines been adequately maintained during the Japanese cooperation?

If 'No', please explain:

[IMPACT] This section is concerned with the impact of the Project: i.e. direct or indirect, positive or negative.

n na haran da kuran d An ang kuran da kuran d 17. Do you think that the Japanese cooperation for Biologicals Production Project contributed to the improvement of the technology of other kind vaccine production in Brazil? []No comment

FÎŶes No

If 'Yes' or 'No", please explain:

at at a back to

18. Have the vaccines supplied by this Project contributed to the database improvement of preventive measures against measles/poliomyelitis? a) measles

[]No comment Yes []No If 'No', please explain:

b) poliomyelitis [Yes]No INo comment If 'No', please explain: b) poliomyelitis

19, Do you think that Japanese cooperation for the Biologicals Production Project has contributed to reduce the foreign financial burden of Brazil?

DYes DNo comment

If 'Yes' or 'No", please explain:

20. Have you ever had a chance to transfer your technology to the staffs of a other biologicals production system?

DNo comment Yes No

a) If 'Yes', what type of technology did you transfer to them?

Quality test

Machine maintenance/management/operation

Others (please specify:

b) If 'No', what was the major hindrance for transfer?, please explain:

21. Do you think that Japanese cooperation for the Biologicals Production Project has contributed to the improvement of vaccination system in Brazil?
 Implete the property of the p

B-52

22. Have the measles/poliomyelitis vaccines supplied by this Biologicals Production Project been distributed all over the country to meet the demand in Brazil?

a) measles	
ÚYes ElNo	[]No comment
If 'No', please explain:	
b) poliomyelitis Yes INo If 'No', please explain:	[]No comment
	ected impacts on the Biologicals Production on for the Biologicals Production Project?
24 Have you had any negative in	pacts from the Jananese cooperation for the

24. Have you had any negative impacts from the Japanese cooperation for t Biologicals Production Project? []Yes []No []No comment If 'Yes', please explain: the

25. Were there any other social/economical contribution by the Japanese cooperation for the Biologicals Production Project?

[SUSTAINABILITY]

This section is concerned with the sustainability of the Project: i.e. the extent of the Biologicals Production Project development for self sustainability after the Japanese assistance was completed.

26. Does the Brazilian Government have the consistent policy for the Biologicals Production Project to continue its activities of measles/poliomyelitis vaccine production after the Japanese cooperation?

a) measles []Yes []No []No comment If 'No', please explain:

b) poliomyelitis If 'No', please explain:

27. Does the Brazilian Government have the consistent policy for the administration of FIOCRUZ to continue its activities of measles/poliomyelitis vaccine production after the Japanese cooperation?

[]No comment Yes Ver di

If 'No', please explain:

28. Does the measles/poliomyelitis vaccine production Project have enough resources to continue its activities?

a) measles

 $(1)^{-1}$

DNo Comment Yes

ا جنو است الحد ويند بنية السر المحدودية بينه بعد ومنو بين ومد ومنه وعن المربوع من ومن ويتو وشو بين وين ويت وي و

If 'No', please specify which one of the following items is not cient: Equipments/machines(please specify: Spare parts(please specify: Materials(please specify: Facilities(please specify: Operation system(please specify: Staff(please specify: Budget(please specify: Others (please specify:) sufficient:

b) poliomyelitis

iomyelitis Yes

If 'No', please specify which one of the following items is not sufficient:

Equipments/machines(please specify:

Spare parts(please specify:

Materials(please specify:

UFacilities(please specify; Operation system(please specify:

 Staff(please specify:

 Budget(please specify:

Others (please specify:

29. Have the equipments/machines/spare parts for the Project been sufficiently provided after the Japanese cooperation? □Yes □No comment If 'No', please explain:

B-54

30. Have the equipments/machines/spare parts for the Project been adequately maintained after the Japanese cooperation?

If 'No', please explain:

31. Do you think that this measles/poliomyelitis vaccine production Project will make enough benefit to adopt self-supporting system? a) measles No comment **No** Yes If 'No', please explain: b) poliomyelitis Ves If 'No', please explain: 32. Do you think that this poliomyelitis vaccine production Project will develop into consistent national production plant without import of foreign vulks? 방법을 가능하는 일반 방법은 If 'No', please explain: ality and the set 33. Do you have an internal training system in FIOCRUZ to transfer the technology for biologicals production among staffs?
 Yes
 No

 Please explain:
 이 전 이 가지 않다. 34. How do you think the capacity of FIOCRUZ to maintain and improve the 34. How do you muk me on many and a second s 26.96.12.91 35 Do you think that counterparts for the Japanese cooperation have mastered enough technology to maintain the activities of this Project? **No Comment** If 'No', please explain: n de la seconda de la seco A filma de la seconda de la

36. Do you think that counterparts continue to work for this Biologicals Production Project?

If 'No', please explain:

37. Please let us know the mechanism of making an annual budget plan? n en en en de la serie de la s La serie de la s

38. Do you have any opinion to establish self-sustaining system of this Project?

No comment []Yes No LJYes Lino If 'No', please explain:

[RELEVANCE]

This section is concerned with the relevance of the Project: i.e. whether the objectives of the Project are pertinent and worthwhile.

39. Have there been any major policy changes relating to the national vaccine production in Brazil?

[]Yes []No

If 'Yes', please explain:

No comment

이 그는 것을 수요? 정도에 여자는 일도가 물었는 것을 같아요? 40. Is the purpose of the project, to establish self-producing system of measles/poliomyelitis vaccines on a large scale, still relevant to the current needs of your country? a) measles

No comment []]Yes

If 'No', please explain:

b) poliomyelitis []Yes []No []No comment If 'No', please explain:

그는 친구가 있는 것을 잘 가 들고 있는 것을 가 물었다. 41. Do you think that the detailed plan of technology transfer and cooperation were adequately made after the enough discussion between Japanese parts and Brazilian parts?

🗍 Yes 🔅 []No No comment

If 'No', please explain:

42. Do you think that Japanese technology transfer and cooperation were made opportunely during the Project? []Yes []No No comment

If 'No', please explain:

لى وقد الله التي تعاديد من وقد جنو الترجة التي وقو وترجي ويو

43. Any other comment:

(Thank you for your cooperation)

Virvie Herrich

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THE JOINT EVALUATION STUDY ON THE JAPANESE TECHNICAL COOPERATION PROJECTS IN BRAZIL

BIOLOGICALS PRODUCTION PROJECT

INTERVIEW SHEET TO PROFESSIONALS

JAPAN INTERNATIONAL COOPERATION AGENCY SEPTEMBER, 1993

المرح هذه المرح مين عند معتر منه عند عليَّ عند عند عن المرح من المرح من المرح عن عمر ولكن عنه رسي المرح عنه عنه المرح من عنته عنه عنه عنه عنه عنه عنه المرح من المرح من المرح من المرح عن المرح عنه ولكن عنه وسي

BACKGROUND OF RESPONDENT

Name:

Designation:

Division:

Organization:

Date:

Project(1980-1985).

Following are the question on the Biologicals Production Project. This survey is being conducted by the Brazilian Government and the Japanese Government in order to make a post evaluation on the Brazil-Japan Technical Cooperation

We would like to have an interview on this sheet.

Kindly please tick (v) the most appropriate answer or write down your comments. Your cooperation would be highly appreciated and your cooperation would be fully confidential and used exclusively for this survey.

ان میں بیان کے بعد میں ایک ایک ایک بیان کی ہے۔ 1999ء - میں بیان کی میں میں میں ایک ایک کی جانب کی کی کی جانب کی ایک کی کی کی کی کی کی کی کی کی کر ایک کی کی کی

[EFFECTIVENESS]

This section is concerned with the effectiveness of the Project: i.e. the extent whereby the objectives of the Project are successful.

1. Do you think that Japanese cooperation for the Biologicals Production. Project has succeeded to supply measles/pollomyelitis vaccines on a large scale?

a) measles			r==1	
Yes	1910 - 1910 - 1910 - 1910 - 1910 - 1910 - 1910 - 1910 - 1910 - 1910 - 1910 - 1910 - 1910 - 1910 - 1910 - 1910 -	No		comment

B-58

If 'No', please explain:

b) poliomyelitis	
Yes INo	No comment
If 'No', please explain:	

2. Do you think that Japanese cooperation for the Biologicals Production Project has contributed to strengthen the ability of quality control of the measles/poliomyclitis vaccine production? a) measles

a) measles No Comment If 'No', please explain:

b) poliomyclitis []Yes If 'No', please explain:

3. Do you think that Japanese cooperation for the Biologicals Production Project has contributed to implement the National Vaccination Programme? []Yes []No []No comment If 'No', please explain:

4. Do you think that technology transfer from Japanese experts to Brazilian counterparts were carried out successfully? · 是我们不知道你是不是是一个人的

a) measles

DNo comment Yes

If 'No', please explain:

b) poliomyelitis []Yes []No []No comment If 'No', please explain:

自己的 网络属桥 网络布兰海峡 推

[IMPACF]

This section is concerned with the impact of the Project: i.e. direct or indirect, positive or negative.

5. Do you think that the Japanese cooperation for Biologicals Production Project contributed to the improvement of the technology of other kind vaccine production in Brazil? No comment Yes No

	ase explain:		
للجيد ومع منك منك منه فيتركيم فليرتبث وتع منه وتتهميتها			
Have the vaccines sup preventive measures	plied by this Pro against measles	ject contributed to the /poliomyelitis?	improvement
a) measics	No	No commént	
If 'No', please expla	in:		
b) poliomyelitis			
∐Yes If 'No', please expla	TTT - E EE COURTE DE LE T	No comment	
. Do you think that Jap	anese cooperatio	for the Biologicals P	oduction
roject has contributed to	o reduce the form	eign financial burden o	f Brazil?
If 'Yes' or 'No", plea			
n Brazil? a) measles []Yes []] If 'No', please expla	an the state of th	No comment	
b) poliomyelitis []Yes []] If 'No', please expla	No in:	No comment	
. Do you think that Jap roject has contributed to	anese cooperation	1 for the Biologicals P	roduction m in Brazil?
	No	No comment	
If 'No', please expla	いたい たない ション・シュアカ かいたいたい		an a
		ه الدي المان المانية المانية المانية المانية بالمان المانية والمان والمان ومانية والمان والمان والمان	
0, Do you think that Ja roduction is broadly rec	cognized in Braz	il?	
0, Do you think that Ja roduction is broadly rec	cognized in Braz No E ain:	il?	
	ananese internatio	nal contribution to the	Biologicals

for the Biologicals Producti [Yes]No If 'Yes', please explain:	No comment
12. Have you had any other for the Biologicals Producti []Yes []No If 'Yes', please explain:	□No comment
13. Regarding the improvem measles/poliomyelitis, did ye cooperation for the Biologic []Yes []No If 'Yes', please explain:	No comment
[]Yes	しょうそう 見かせ ほうして ちちょう たいしょう ないない なない ためいたい うちょう しょうかいしょ
If 'Yes', please explain [SUSTAINABILITY] This section is concerned wi extent of the Biologicals Pr	DNo comment
If 'Yes', please explain [SUSTAINABILITY] This section is concerned wi extent of the Biologicals Pi completed. 15. Does the Brazilian Gove Biologicals Production Proje measles/poliomyelitis vaccin	L.No comment
If 'Yes', please explain [SUSTAINABILITY] This section is concerned wi extent of the Biologicals Pr completed. 15. Does the Brazilian Gove Biologicals Production Proje	LINO comment ith the sustainability of the Project: i.e. the roduction Project impact after the assistance was rnment have the consistent policy for the ct to continue its activities of
If 'Yes', please explains [SUSTAINABILITY] This section is concerned wi extent of the Biologicals Pr completed. 15. Does the Brazilian Gove Biologicals Production Proje measles/poliomyelitis vaccin a) measles []Yes []No	LINO comment ith the sustainability of the Project: i.e. the roduction Project impact after the assistance was rnment have the consistent policy for the ct to continue its activities of le production after the Japanese cooperation? []No comment

16. Does the measles/pollomyclitis vaccine production Project have enough resources to continue its activitles?

a) measles

[]Yes

No comment []No

If 'No', please specify which one of the following items is not sufficient:

Equipments/machines(please specify: Spare parts(please specify:

Materials(please specify:

Facilities(please specify:

Operation system(please specify:

Staff(please specify:

Budget(please specify:

Others (please specify:

b) poliomyelitis

b) poliomyelitis Yes INO INO comment If 'No', please specify which one of the following items is not sufficient:

Equipments/machines(please specify:

Spare parts(please specify:

Materials(please specify:

EFacilities(please specify:

Operation system(please specify:

Staff(please specify: Budget(please specify: Others (please specify:

17. Do you think that this measles/poliomyelitis vaccine production Project will make enough benefit to adopt self-supporting system?

a) measles

[]No comment **Yes** No

If 'No', please explain:

)

b) poliomyelitis []Yes []No If 'No', please explain:

的复数形式的复数形式 18. Do you think that this poliomyelitis vaccine production Project will develop into consistent national production plant without import of foreign vulks?

Yes If 'No', please explain:

Do comment

19. Do you think that FIOCRUZ Foundation have an enough ability to adopt internal training system to transfer the technology for biologicals production among staffs?

No comment Yes []No

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Please explain:

20 Do you think that counterparts for the Japanese cooperation have mastered enough technology to maintain the activities of this Project? []Yes []No

If 'No', please explain:

21. Do you have any opinion to establish self-sustaining system of this Project?

Yes []No If 'Yes', please explain:

[RELEVANCE]

This section is concerned with the relevance of the Project: i.e. whether the objectives of the Project are pertinent and worthwhile.

22. Have there been any major policy changes relating to the national vaccine production in Brazil?

No comment []Yes []No If 'Yes', please explain:

23. Is the purpose of the project, to establish self-producing system of measles/poliomyelitis vaccines on a large scale, still relevant to the current needs of your country?

a) measles []Yes DNo If 'No', please explain:

[]No comment

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والمحاجبة المحدومية منبو بلتم المبو ويبيد ومحامدو بنبي وسواجين وسواجين وسر b) poliomyelitis b) pollomyellus If 'No', please explain: If 'No', please explain:

د هم و به مهند و مربع مند بند من من الله بعد الجروان و مراقبه الله الله الله الله الله من من الله و من من الله و من الله و بر مارد و من الله الله من من الله بعد الله بعد الله الله الله الله الله من من الله و من من الله و مر

24. Do you think that Japanese technology transfer and cooperation were made opportunely during the Project? []No []No comment Yes If 'No', please explain:

25. Any other comment:

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(Thank you for your cooperation)

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ANNEX-C

Scope of Work for the Joint Evaluation C-1 Record of the Seminar for the Joint Evaluation Study C-14 SCOPE OF WORK FOR A JOINT EVALUATION STUDY ON

JAPANESE TECHNICAL COOPERATION PROJECTS IN

THE FEDERATIVE REPUBLIC OF BRAZIL

AGREED UPON BETWEEN BRAZILIAN COOPERATION AGENCY AND

THE JAPAN INTERNATIONAL COOPERATION AGENCY

Brasilia, June 30, 1993.

- <u>1</u>9 - 1

Mr.JOSÉ MANOEL DE AGUIAR MARTINS Director of International Cooperation National Service of Industrial Apprenticeship - SENAI Federative Republic of Brazil

Mr. ALBERTINO ALEXANDRE MACIEL FILHO General Coordinator for Special Affairs on Health Ministry of Health Federative Republic of Brazil

Mr.YASUO MUKAI Mining and Industrial Development Specialist Institute for International Cooperation Japan International Cooperation Agency

Mr.CARLOS ROBERTO CRISTALLI Executive Director Brazilian Cooperation Agency-ABC Federative Republic of Brazil

The Japan International Cooperation Agency (hereinafter referred to as "JICA") had a series of discussions with the Brazilian Cooperation Agency (hereinafter referred to as "ABC") and Brazilian governmental organizations concerned on the scope of work of a joint evaluation study on the Japanese technical cooperation projects carried out in Brazil (hereinafter referred to as "the Study"). As a result of the discussions, both ABC and JICA agreed to conduct the Study and finalized the scope of work.

1. Objectives of the Study

The objectives of the Study are:

- (1) To identify the achievements and problems of two projects, referred to as "the Projects", mentioned in Section 4,
- (2) To share common findings and understandings on the evaluation results of the Projects, and
- (3) To utilize the findings to improve the planning of future projects in Brazil.

The Study covers all stages of the Projects, such as the planning, implementation and post project situation.

2. Organization

The Study Team consists of an Evaluation Team and a Work Team.

- (1) ABC and JICA each organize their own Evaluation Team.
 - Both Evaluation Teams will consult with each other on the arrangement and implementation of the Study and take joint responsibility for the Study.
- (2) Each Evaluation Team will nominate and supervise a group of consultants as a Work Team in order to execute the Study.

Organizational Chart of the Study Teams

<Brazilian Study Team>

<Japanese Study Team>

Brazilian Evaluation Team

Brazilian Work Team

Japanese Evaluation Team

Japanese Work Team

The list of members of the Evaluation Teams is attached in ANNEX 1,

3. Methods of the Study

- (1) The Japanese Study Team will define and prepare the following:
 - a. Logical Framework
 - b. Indicator Table
 - (data table regarding the verifiable indicators specified in the Logical Framework)
 - c. Question sheets for interview survey
 - d. Questionnaires (for questionnaire survey)
 - The Brazilian Study Team will be responsible for the following:
 - a. Preparation of Name List (names and addresses of the persons who are to be interviewed or given the questionnaire survey)
 - b. Completion of the Indicator Table prepared by the Japanese Study Team c. Questionnaire survey
- (2) The interview survey will be carried out jointly by both Study Teams, using the question sheets.
- (3) The results of the questionnaire and interview survey together with the reports and materials collected through the Study will be jointly analyzed and shared in order to identify the achievements and problems of the Projects.
- (4) Drafts of two evaluation reports (hereinafter referred to as "the First Drafts"), based upon the data and information analyzed and compiled, will be prepared separately by the Brazilian Study Team and the Japanese Study Team.
- (5) Using the First Drafts and the presentation materials prepared, both Study Teams will present in the joint seminar each side's findings and understandings on the evaluation results of the Projects, including the recommendations for future projects.
- (6) Based on the First Drafts and the results of discussions from the joint seminar, the Final Report will be drafted by the Japanese Study Team, and confirmed by the Brazilian Study Team.
- 4. Projects to be Evaluated

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The two projects to be evaluated are as follows: (1)SENAI Electrical and Electronic Vocational Training Center Project/SENAI/MG (2)Biologicals Production Project/FIOCRUZ

They are chosen from projects undertaken with the technical assistance of JICA.

5. Evaluation Items

The Study will focus on the following aspects of the Projects.

- (1) Efficiency
- (2) Effectiveness
- (3) Impact
- (4) Sustainability
- (5) Relevance
- 6. Expenses of the Study

JICA will bear the expenses necessary to hire consultants for the Work Teams. Items of major expense are included in ANNEX 2.

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ABC and JICA will consult with each other regarding other expenses necessary for the Study.

7. Terms of Reference of the Consultants

ABC will finalize the draft of the Terms of Reference (TOR) prepared by JICA for the Brazilian Consultants in the Joint Evaluation Study.

8. Implementation Schedule

The Study will be conducted according to the work schedule attached in ANNEX 3. 지수 생님 공연

9. Report Preparation and Submission

The following reports will be prepared in English:

(1) First Drafts (by the mid December, 1993);

separately prepared by each Study Team, one draft by the Brazilian Study Team and the other by the Japanese Study Team.

(2) Final Report (by the end of February, 1994): drafted by the Japanese Study Team and confirmed by the Brazilian Study Team.

The Final Report will be submitted to the Brazilian Study Team.

ANNEX 4 and ANNEX 5 provide Terms of Reference on the Joint Evaluation Study and Contents of the Final Report (tentative), respectively.

ANNEX 1

List of Members of the Evaluation Teams

BRAZIL:

1 NELSON DE OLIVEIRA	Brazilian Cooperation Agency - ABC Ministry of Foreign Relations
2 JOÃO BAPTISTA RISI JÚNIOR	Ministry of Health
3 JOSÉ LAZARO DE BRITO LADISLAU	National Health Foundation
4 OTÁVIO PINHEIRO OLIVA	Oswaldo Cruz Foundation (FIOCRUZ)
5 GERALDO EUSTÁQUIO DE OLIVEIRA	SENAI/NATIONAL
6 ERICH ROBERT GANS	SENAI/MG

JAPAN:

1 Mr. Yasuo Mukai	Mining and Industrial Development Specialist
	Institute for International Cooperation
	Japan International Cooperation Agency
2 Mr. Yoshitaka Fujita	Evaluation and Post Project
	Monitoring Div., Planning Department
	Japan International Cooperation Agency
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	방법은 이것을 통하였다. 상품을 통하는 것을 위한 이것은 사람들은 이것이다. 사람은 것은 것을 위한 것이다.

ANNEX 2

Items of Major Expenses for Hiring Consultants

1. PERSONNEL EXPENSES

1.1. Consulting Fee

1.2. Administration of Questionnaire Survey

1.3. Secretarial Staff Services

2. TRAVELING ALLOWANCE

2.1. Vehicle Rental

2.2. Travel Allowance for Questionnaire Survey

3. MISCELLANEOUS EXPENSES

3.1. Communication (e.g. mail, telephone, courier)

3.2. Printing, Sending Reports, etc.

ANNEX 3

						oint Work in eparate Worl	
Brazilian Study Team	Aug. 93	Scp.	Oct.	Nov.	Dec.	Jan. 94	Feb.
 Survey preparation 1.1 LF & IT¹ 1.2 Questionnaires² 1.3 Name list 1.4 Quest. survey³ 1.5 Data collection 			(Oct. 4				
 1.6 Quest. collection⁴⁾ Survey 2.1 Interview survey 2.2 Data analysis 2.3 First Drafts 			 5.1.1 	Oot. 26)	(Nov. 10-	• • • • • • • • • • • • • • • • • • •	
3 Seminar 3.1 Preparation 3.2 Present.at Seminar ⁵⁾ 4 Final Report			(0	¢¢. 15Dao	(Jan. 26-	-Fêb; 1)	
Evaluation Tcam Work Team		**	*****	**	****	**	
Japanese Study Team	Aug.93	Sep.	Oct.	Nov,	Dec.	Jan.94	Feb.
 Survey preparation 1.1 LF & IT¹ 1.2 Questionnaires² 1.3 Name list 1.4 Quest. survey³ 1.5 Data collection 1.6 Quest. collection⁴ 2 Survey 2.1 Interview survey 		(Aus. 25 (S	60.14		(Nov. 10 -		
2.2 Data analysis 2.3 First Drafts 3 Seminar 3.1 Preparation 3.2 Present.at Seminar ^a 4 Final Report						 c. 9) Feb. 1) eb. 15 - 4Feb. ; 	20)
Evaluation Team Vork Team	그는 것은 가지 않는 것이 있어?	\$*** ** \$***			** **	**	****

Work Schedule

= LEGEND

F

REMARKS

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1) Logical Framework and Indicator Table

2) Question sheets for the interview survey and questionnaires

- 3) Questionnaire Survey; Questionnaires shall be distributed.
- 4) Questionnaire collection; Those questionnaires distributed shall be collected.
- 5) Presentation at Seminar; Both Study Teams shall present their own findings and understandings from the joint evaluation study.

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Terms of Reference on the Joint Evaluation Study

1 Projects to be Evaluated

Both the Brazilian and Japanese Study Teams agree to conduct a joint evaluation study of the following Projects:

- (1) SENAI Electrical and Electronic Vocational Training Center Project/ SENAI/MG
- (2) Biologicals Production Project / FIOCRUZ
- 2 Evaluation Items

The Study focuses on the following aspects of the Projects:

- (1) Efficiency: to judge the appropriateness of the means, methods, time period and cost required to achieve the results. Efficiency is concerned with the transformation of input into output, in terms of time, cost and the use of other resources.
- (2) Effectiveness: to examine the degree to which the project purpose is being achieved, by comparing the original planned targets with the results actually achieved, and to analyze the factors and conditions which have led to the differences, if any.
- (3) Impact: to analyze development effects including possible negative effects brought about by the project. These effects shall be evaluated mainly from the viewpoint of 1)operational and managemental, 2)technical, 3)economic, and 4)social aspects. Impact refers to the positive and negative effects, anticipated or not, on the concerned sector or on overall development within the recipient country.
- (4) Sustainability: to assess the likelihood of the objectives of the project continuing after the project assistance is over. Sustainability shall be evaluated mainly from the viewpoint of 1)operational and managemental, 2)technical, and 3)financial aspects.
- (5) Relevance: to examine the relevance of the project designs set up at the time of project preparation and those revised during project implementation, in accordance with changes in project circumstances. This is called project rationale. Based on an examination of the above points (1) to (4), the relevance of the project can be discussed. Relevance is also related with whether or not the socio-economic needs are still existent to justify the continuation of the project. Here

3 Work Program

The Brazilian Evaluation Team and the Japanese Evaluation Team should have their respective Study Teams organized by August 18, 1993; one week prior to the joint evaluation work.

A detailed description of the joint evaluation is as follows:

(1) <u>Survey Preparation (August 25, 1993 - October 26, 1993)</u>

A. The First Term of Survey Preparation ____

(August 25, 1993 - September 14, 1993)

a. Logical Framework and Indicator Table

A set of Logical Frameworks, data tables of the verifiable indicators specified in the Logical Framework (Indicator Table) will be prepared by the Japanese Study Team and then sent to the Brazilian Study Team.

b. Question Sheets for Interview Survey and Questionnaires

A set of the question sheets for the interview survey and questionnaires written in English will be prepared by the Japanese Study Team. Regarding the questionnaires for the Beneficiaries, they are to be translated from English into Portuguese by the Brazilian Work Team.

Those targeted for the interview survey and for the questionnaire survey are as follows:

- 1) Beneficiaries from the Projects, such as local farmers, local companies and multi-national corporations operating in Brazil.
- 2) Counterparts (including staff) who worked or who are presently working on the Projects in Brazil.
- 3) Managers belonging to project implementing agencies who have been in supervising positions within the Projects.
- 4) Officials belonging to ABC, Ministry of Health (MOH) and SENAI/National who have been in supervising positions within the Projects.
- 5) Professionals from universities, think-tanks and economic organizations, who are specialized in the fields of the Projects in Brazil.

In principle, the target groups for the questionnaire survey are the following: <u>Beneficiaries</u>, <u>Counterparts</u> and <u>Japanese</u> <u>Experts</u>. Interview surveys will be conducted with the following people: <u>Managers</u>, <u>Officials</u> and <u>Professionals</u>. Before the second term of survey preparation, the Logical Framework, Indicator Table and question sheets for the interview survey and questionnaires prepared by the Japanese Study Team in the previous term are to be examined by the Brazilian Study Team. The Japanese Study Team will, if necessary, correct them as a result of comments from the Brazilian Study Team.

B. The Second Term of Survey Preparation (October 6, 1993 - October 26, 1993)

a. Name List

The Brazilian Study Team will specify the names and addresses of the persons who should be interviewed. The Brazilian Study Team will also specify the names and addresses of the persons to whom questionnaires should be distributed. The Name List will be promptly sent to the Japanese Study Team by fax for agreement.

As for the former Japanese experts who had been engaged in the Projets, the Japanese Study Team will examine their names and addresses.

b. Questionnaire Survey

The Brazilian Work Team will distribute the questionnaires prepared by the Japanese Study Team to the persons listed on the Name List, following a phone call requesting their cooperation with the questionnaire survey. As for the Japanese Experts, the Japanese Study Team will conduct the questionnaire survey in Japan.

c. Data Collection

The Brazilian Work Team will fill in the Indicator Table prepared by the Japanese Study Team, collecting data from statistics of the project implementing agencies and secondary data published by the Brazilian government, academic institucions, etc. Soon after completion, the filled-in tables should be sent to the Japanese Study Team by fax.

In the case that some indicators are considered inappropriate, these can be changed by the Brazilian Study Team with explicit reasons given.

d. Questionnaire Collection

One to two weeks after the delivery of the questionnaires, the Brazilian Work Team will collect the questionnaires, after making a confirmation call. The Brazilian Work Team will translate the questionnaires written in Portuguese into English and send them to the Japanese Study Team.

(2) Survey (November 10, 1993 - December 9, 1993)

<u>The Brazilian Evaluation Team will provide the workroom which both</u> <u>Study Teams can jointly use for the survey in Brazil.</u>

a. Interview Survey (for about 2 weeks)

The question sheets for the interview survey will be filled in through the interview of the persons listed on the Name List, jointly or separately, if necessary, by the Brazilian Work Team and the Japanese Work Team. The Brazilian Work Team will make a record of each interview meeting and send it to the Japanese Evaluation Team. One of the Brazilian Work Team members will join the interview survey as a English-Portuguese translator, make a record of each interview meeting and send it to the Japanese Evaluation Team.

If needed, during this stage, the Brazilian Work Team will re-collect data on the indicators added to the Indicator Table as a result of discussion between both Study Teams at the initial stage of the field survey.

b. Data Analysis (for about 1 week)

The question sheets from the interview survey and questionnaires, together with reports and materials collected through the Study, will be analyzed and compiled jointly by both Work Teams and shared with each other, in order to identify the achievements and problems of the Projects.

c. First Drafts (for about 1 week)

The Brazilian Study Team and the Japanese Study Team will separately prepare draft evaluation reports in English (the First Drafts), based upon the data and information analyzed and compiled by both Work Teams at the previous stage.

The prepared reports are to be exchanged and comments given by the other team. The reports are to be revised as a result of the comments received.

(3) <u>Seminar (December 15, 1993 - February 1, 1994)</u>

a. Preparation (December 15, 1993 - December 24, 1993)

The Brazilian Study Team will identify guests and extend an invitation to them to attend the joint seminar. The confirmed guests list should be sent to the Japanese Study Team.

The First Drafts should be circulated beforehand to all the possible guests by the Brazilian Work Team, preferably more than one week prior to the seminar.

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b. Presentation at Seminar (January 26, 1994 - January 28, 1994; January 31, 1994 - February 1, 1994)

The Brazilian and Japanese Study Teams will hold the joint seminar in Brazil, whereby, using the First Drafts and, if necessary, handouts prepared for the seminar, both Study Teams will present their own findings and understandings from this evaluation study, including recommendations for future projects.

The Brazilian Work Team will draw up a record of the questions and answers, comments and discussions made in the seminar.

1933.1.49A (4) Final Report (February 14, 1994 - February 28, 1994)

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요즘, 말을 좋고 말

After the joint seminar, the Brazilian Work Team will promptly send the seminar record to the Japanese Study Team.

Based on the First Drafts and the record of the seminar, the Japanese Study Team will prepare a draft Final Report in English. It will be corrected and confirmed by the Brazilian Study Team.

Contents of the Final Report are tentatively shown in ANNEX 5.

Contents of the Final Report (tentative)

1 BACKGROUND

- 1.1 Objectives of the Joint Evaluation Study
- 1.2 Evaluation Methods
- 1.3 Team Composition
- 1.4 Work Procedure
- 1.5 Project Summary
 - 1.5.1 SENAI Electrical and Electronic Vocational Training Center Project/ SENAI/MG
 - 1.5.2 Biologicals Production Project/FIOCRUZ

2 EVALUATION FINDINGS

- 2.1 SENAI Electrical and Electronic Vocational Training Center Project/ SENAI/MG
 - 2.1.1 Implementation Efficiency
 - 2,1.2 Attainment of the Project's Objectives
 - 2.1.3 Impact of the Project
 - 2,1.4 Sustainability of the Project
 - 2.1.5 Relevance of Initial Planning
 - 2.1.6 Results and Recommendations gained
- 2.2 Biologicals Production Project/FIOCRUZ
 - 2.2.1 Implementation Efficiency
 - 2.2.2 Attainment of the Project's Objectives
 - 2.2.3 Impact of the Project
 - 2.2.4 Sustainability of the Project
 - 2.2.5 Relevance of Initial Planning
 - 2.2.6 Results and Recommendations gained

3 GENERAL RESULTS AND DISCUSSIONS

4 GENERAL RECOMMENDATIONS

ANNEX

- 1 Interview and Questionnaire Survey Results
- 2 List of Interviewees

Record of the Seminar for the Joint Evaluation Study

On February 9th, 1994, JICA - Japan Agency for International Cooperation and FIOCRUZ - Oswaldo Cruz Foundation, held the "Seminar on the Joint Evaluation Study on the Biologicals Production Project", at Bio-Manguinhos/FIOCRUZ, in Rio de Janeiro, Brazil.

Participants presently and/or formerly involved in the Project (officials, managers, professionals, beneficiaries and counterparts), as shown in the "List of Participants" (page 3) attended.

The Seminar was carried out according to the "Agenda" (page 2). Presentations were followed by discussion with participants and the "rapporteur".

The information, comments and suggestions presented at the Seminar were very useful for the common understanding of the evaluation methodology and results, and should be taken into consideration for planning future Brazil/Japan cooperation projects.

(Main Speakers)

Chairman

Carlos Médicis Morel President of FIOCRUZ

Yasuo Mukai

Co-Chairman

Brazilian side

Leader of the JICA Study Team Nelson de Oliveira

Brazilian Cooperation Agency - Ministry of External Relations

João Quental Director, Bio-Manguinhos/FIOCRUZ

Valerie R. Chaves Consultant

Japanese side

Yoshitaka Fujita JICA

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Kanji Oshino Consultant

Agenda of the Seminar on the Joint Evaluation Study **Biological Production Project**

Rio de Janeiro, February 9th, 1994.

ALC: NO

	Rio de Janeiro, February 9th, 199
09:45	Arrival of participants and guests
10:00 - 10:30	Opening Addresses by Carlos Médicis Morel, President of the Oswaldo Cruz Founda- tion/FIOCRUZ and
	Nelson de Oliveira, Representative of ABC - Brazilian Cooperation Agency Ministry of External Relations
10:30 - 10:40	Address by Masaharu Torii, Director of JICA/Rio de Janeiro
11:00 - 11:20	"Objectives of the Study" presented by Yasuo Mukai
11:20 - 11:50	"Methodology, Study Team and Work Procedure", presented by Yoshitaka Fujita/JICA
12:00 - 13:45	(Lunch)
4:00 - 15:45	Biologicals Production Project:
	"Project Summary "presented by João Quental - Bio-Manguinhos/FIOCRUZ
	"Evaluation Results" presented by Valerie Rumjanek Chaves - Consultant (Brazilian side) Kanji Hoshino - Consultant (Japanese side)
	"Recommendations "presented by João Quental
5:45 - 16:00	Questions and Answers
6: - 16:15	Coffee Break
6:15 - 16:45	Discussion
6:45 - 17:00	Closing addresses by - Nelson de Oliveira - Yasuo Mukai

LIST OF PARTICIPANTS

Carles Medicis Morel Willy Dscak Yesos Mukai Booardo Martins Joss Quental Nelsso de Olivoira Kanji Hishiuo Kebaryoshi Sulo Valerio Rumjanek Chaves Yoshizaka Pujita Mamharu Tonii Hermann Schatznayr Merco Antonio Moreira Lenna Bertollo Arruda Wilson Alves de Paula Terresinha Elisa S. do Briso Amanni Persina Clama Soaties Viga Beleza Vicira do Andrade Eveniles Ferreira Peulo Cervalho Darcy Hokama Geerge Mann Carlos Albero Nogueiza Banadito Couto de Silva. Maasel Carqueira Repato Marchovsky Fátima Velloso da Silva Marin da Luz F. Leal Van Lucia A. Boug Refeel Guimardes Arter R. Couto Luis Antonio da Cunha Elizae Cabral Raposo Maria das Gracas Danelli Mioko Fujita IndeM alledeel Meria Eunice Antunes Desizo Milagros Maria Beatris do Oliveira Carlos Maunicio Andrea Good Lina Hele da Becho Mouma Edurdo Maranhão Lesia Bomma Wilma Moutinbo Femando Comos Pedro Jorge Comos Claudia Dias

President, PIOCRU2 -President, Butantan Foundation JICA Vice-President, PIOCRUZ Director, Bio-Manguinhos ABC/MRE - Brazilian Cooperation Agency JICA - Consultant JICA (Branilia) ABC/JICA ЛСА JICA (Rio de Janeiro) IOCAFIOCRUZ - Director, Virology Department PASNI - Immunization Program - MOH PASNI - Immunistation Program - MOH Messles Laboratory, Bio-Manguinhos Messles Laboratory, Bio-Manguinhos. Mesales Laboratory, Bio-Manguinhos Measles Laboratory, Bio-Manguinhos Messles Laboratory, Bio-Manguinhos Measles Laboratory, Bio-Manguinhos Measles Laboratory, Bio-Manguinhos Mesales Laboratory, Bio-Manguinhos Measles Labor story, Bio-Manguinhos Measles Laboratory, Bio-Manguinhos Measles Laboratory, Bio-Manguinhos Messles Loboratory, Bio-Manguinhos Measles Laboratory, Bio-Manguinhos Messlee Laboratory, Bio-Manguinhos Measles Labor atory, Bio-Manguinhos Measlee Laboratory, Bio-Manguinhos Measles Laboratory, Bio-Manguinhos Measles Laboratory, Bio-Manguinhos Measles Laboratory, Bio-Manguinhos Messles Laboratory, Bio-Manguinhos Messles Loboratory, Bio-Manguinhos IOC/FIOCRUZ Bio-Manguinhos Bio-Manguinhos **Bio-Maoguinhos** Bio-Menguinhos Bio-Manguinhos Bio-Manguinhos Bio-Manguinhos Epidemiologist - National School of Public Health Bio-Manguinhos Bio-Manguinhos Professional Bio Mauguinhos Bio-Manguinhos

Official Professional

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1. Opening address - Carlos Médicis Morel, President of FIOCRUZ

Dr. Morel opened the joint Seminar and delivered welcoming remarks. In his address, he mentioned the success of the Biologicals Production Project and he expressed his wish that this Seminar, rather than a closure, would be the beginning of new technical cooperation projects. He added that this cooperation might be extended to other areas and he gave the example of the soon to be inaugurated regional FIOCRUZ unit in Manaus, which presents interesting challenges and possibilities for international cooperation in the Amazon region.

2. Nelson de Oliveira, representative of ABC - Brazilian Cooperation Agency -Ministry of External Relations

After his opening remarks, Mr. Oliveira explained ABC's role in the technical cooperation system. He emphasized the reasons for the successful results of this project mainly, the seriousness and the commitment of JICA/ABC/FIOCRUZ.

3- Mr. Masaharu Torii - Director of JICA/Rio de Janeiro

Mr.. Torii explained the role of JICA and remarked on the fact that Brazil is the first country in the world in terms of technical cooperation received from Japan. This cooperation, he went on to say, includes training. consultants, donation of equipment and other modes of support.

He also stressed the importance of evaluating this kind of cooperation, and that this survey should always be carried out bilaterally.

4. Mr. Yasuo Mukai, Leader of the Japanese study team

Mr.. Mukai introduced himself, and remarked on the fact that he had formerly worked in the field of technical cooperation in Brazil, and was thus greatly interested in the results of the Biologicals Production Project evaluation.

Mr.. Mukai stressed the importance of the efficiency and effectiveness of technical cooperation and that the pursuit for quality should be permanent. He added that social commitment is fundamental, since ultimately the financial resources allocated are a result of taxes collected in both countries.

He also mentioned that evaluation should be carried out continuously, as feedback for future projects. He added that the objective of this evaluation is, therefore, the identification of points which should be improved for future cooperation.

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Finally, he commented on the succesful work carried out with SENAI.

5. Bio-Manguinhos - Counterpart. Mr. Yoshitaka Fujita/JICA

Mr., Fujita briefed participants on the methodology carried out for the evaluation study, and analyzed its five focal points: efficiency. effectiveness. impact, sustainability and relevance.

He also dwelt on the composition of the work teams, both on the Brazilian and Japanese side.

Mr.. Fujita explained in detail the "logical framework" procedure utilized for the evaluation study and its working schedule. He concluded his presentation with comments on the stages of the evaluation study: preparatory stage; field research; seminar and final report.

6. Dr. João Quental, Director of Bio-Manguinhos/FIOCRUZ

Dr. Quental resumed the afternoon session of the Seminar with a summary of the Biologicals Production Project, which began in 1980, when a new strategy against vaccine-preventable diseases was launched by the Brazilian Government.

He stressed the importance of the project regarding improvement of vaccine production and distribution. He added that the project was timely and thus received incentives from several Government sources: MOH, FIOCRUZ and FINEP, a project-financing agency.

7. Mrs. Valerie R. Chaves, Consultant

Mrs. Chaves said that, as the issues addressed in and the numbers obtained from the evaluation study were on record in the reports distributed by participants and would be dealt with by Mr. Oshimo, she would comment on some overall aspects that had arisen from the interviews and questionnaires.

Mrs. Chaves explained that this was the first time that a comprehensive evaluation was carried out in Brazil within the technical cooperation framework, be it multilateral or bilateral. She stressed the importance and the innovative aspect of interviews carried out with professionals involved with the project at all levels.

Mrs. Chaves went on to remark on an interesting fact which arose from the evaluation study: that views exposed by former officials, professionals, managers and counterparts were compatible with those by people presently working within the project in these categories irrespective of their different academic, technical, scientific, political backgrounds, and despite the 10 years elapsed since completion of the project.

She also mentioned that the results of the evaluation reflected not only the success of the project, but that some flaws, however minor, were also detected and presented in the report, without detracting from the success of the endeavor.

8. Dr. João Quental

Dr. Quental raised a point regarding equipment maintenance. Brazilian technicians emphasized the need for more intensive training in maintenance, specially because there are no technical representatives from the Japanese manufactures of this specific equipment in the Brazil; ian market. He added that there was a problem concerning the lack of spare parts and he addressed the issue of the need for translating manual on the equipment into English.

He suggested that the TCTP should be further strengthened, as a means of transferring knowledge and technology, through the dispatch of experts and donation of instruments and materials.

He proposed that a monitoring system should be implemented, since new technological improvements developed in Japan should be transferred to Brazilian counterparts.

Dr. Quental remarked that ABC had urged that the flow of information be improved mainly concerning projects submitted to JICA and not approved, as well as the reasons for denial.

Finally, Dr. Quental addressed the issue of future cooperation, which is desirable for production of biologicals such as the acellular pertussis vaccine, the triple viral vaccine and the recombinant DNA Hepatitis B vaccine.

9, Mr. Yasuo Mukai

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Mr.. Mukai presented the recommendations contained in the report from the Japanese side and recalled what he had mentioned earlier in the morning session about the objectives of the evaluation study, in that the recommendations are of capital importance for establishing the guidelines for future cooperation.

Mr.. Mukai emphasized the importance of the TCTP and recommended that it be included in the final report.

10. Closing addresses were delivered by Nelson Oliveira and Yasuo Mukai.

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