第2次エバリュエーション調査報告（R／D協議）

Ⅰ 派遣の経緯

本年11月6日の協定終了を前に、先般派遣した福田ミッション（エバチーム）の勧告により、3年間協力することとなった。ついては、この間、最終Phaseとして、普及を中心として協力することとなった。

ハルディナート農場、Project Centre及びIAP地域等の基盤的な設備は一応終了し、最終的に普及組織の育成指導を行うこととしている。

54年度一般無償協力の一環として、浅井戸施設を5億円相当ジャナカプール地域に供与することになっている。これによりタライ平野全域の小規模かんがい方式による、水管理組織の強化育成を行うこととしている。

Ⅱ 団員・目的・日程

1. 団　員

団長	金津昭治	JICA農業開発協力部長
団員	山本公明	農林水産省海外技術協力官
〃	高間英俊	JICA農業技術協力課

2. 目　的

過去8年間（初期3年R／D、5年協定）の協力に引き続いて、新取極（R／D）により今后3年間協力するためR／Dに署名する。今后、普及組織の強化、普及組材の開発及びかんがい農業の導入を通して農民所得の増大、生活水準の向上を図る。

ついては、我が方は①Project Manager ②農業普及計画 ③栽培 ④かんがい ⑤農業機械 ⑥調整 を派遣する。

3. 日　程

昭和54年10月7日～10月16日

月　日	行　　動
10．7	成田発　バンコク着
8	バンコク発　カトマンドウ着
	姉歯アドバイザ、太田リーダー、高山調整員、斉藤所長と日程等打合せ
9	農業省、ネパリ局長訪問、討議
10	大蔵省　K.C. deputy－secretary 表敬訪問　（請訓電報発信）

月　日	行　　動
10.11	農業省カドカ次官訪問　午後、回電受ける。
12	大蔵省　H.S. Shrestha, Joint-Secretary（援助関係）訪問
	午後、ネパリ局長との間で、署名、夜レセプション
13	ジャナカプール訪問、ハルディナート農場、IAP、Project Center
	見学
14	East-West Highwayでカトマンドウへ。夜、ネ側主催レセプション。
15	カトマンドウ発　バンコク着
16	バンコク発　成田着
	団長は、タイにてかんがいプロジェクト調査

Ⅲ　討議の経過

直接の折衝相手は、Nepali, Director-General, Ministry of Food & Agriculture であり、他外務省及び大蔵省関係官とも接触した。

討議内容は、別紙のようであるが、主な相違点は、①日本側の指導助言及び技術的責任問題②日本人専門家中園芸であった。後者については、山地開発の可能性とも関連があり、慎重を極めた。園芸特に三葉の生産は山地の栄養改善、現金収入の増大のため重要であることを発言された。

討議の冒頭Man-power training について要請があった。これは、普及のリーダーとなる階層を日本の力で訓練したいとのことで、近隣国（インド、バングラデシュ及びパキスタン）の農業条件の似かよった地域で一定期間研修させたいとのことであり、それに必要なスカラーシップを日本で出してくれないかとのことであった。

討　議　一　覧　表

争　点	R／D番号	ネ　側　主　張　点	日　本　側　主　張　点	妥　協　点
① 日・ネの順番	本　紙	ネ側分につきネ・日に変える。	日本側は、日ネとし2部作成	右に同意
② ネパールの名称	本　紙 Attached Document (A.D.)	The Kingdom of Nepal	案では単にNepalであるが同意	ネ案に同意
③ 日本側の指導助言	A.D.Ⅵ－3	ⓐ 当初「協定のとおり、ネ・日理事長は計画の実施に関する技術上の問題について責任を負う。」と主張 ⓑ The Japanese experts and Nepalese counterpart officials will work together on technical matters for the implementation of the project and ……	ⓐ R／D案を主張 ⓑ The Japanese experts will work together with nepalese counterpart officials for the implementation of the project providing necessary technical	― 諸訓により、協議した結果ネ案に同意 guidance and advice and ……
③ 合同委員会	A.D.Ⅵ－4	Joint Committeeは既に設立されているので、2行目のestablishedを削除	同　意	右に同意
④ Master plan 1. Objectives 2. Activities	Aunex Ⅰ Master Plan	ⓐ in the areaをin the Project area ⓑ Activities (2)－(i)中 distribution of seeds to…からseedsを取る。これは、種だけに限らない由。	ⓐ 同　意 ⓑ 〃	右に同意 〃
⑤ 日本人専門家	Annex Ⅱ	ⓐ Experts Horticultureを加える ⓑ Agronomyの下に(Horticulture)を加える	ⓐ 加えられない ⓑ Noteに(2)とし、Agronomy Mentioned above includes horticulture.	― 日本案に同意
⑥ 供与機材	Annex Ⅲ	(6)のEquipment and……を取る	特に問題なし	同　意
⑦ ネ・カンターパート	Annex Ⅳ	Horticultureを追加	〃	同　意
⑧ ネ供与施設	Annex Ⅴ	案以外の施設の追加	〃	同　意
⑨ そ　の　他	―	R／D討議冒頭ネパリ局長は、man power training（第3国研修）について要請	第3回研修は、困難。聞き置いた	

Ⅳ 討議議事録

THE RECORD OF DISCUSSIONS
BETWEEN THE JAPANESE PROJECT FORMULATION TEAM
AND THE AUTHORITIES CONCERNED
OF HIS MAJESTY'S GOVERNMENT OF NEPAL
ON THE JAPANESE TECHNICAL COOPERATION
FOR THE JANAKPUR ZONE AGRICULTURAL
DEVELOPMENT PROJECT

The Japanese Project Formulation Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as JICA) and headed by Mr. Shoji Kanatsu, Director, Department of Agricultural Development Cooperation, JICA, visited the Kingdom of Nepal from October 8, 1979 to October 15, 1979 for the purpose of working out the details of the technical cooperation programme concerning the Janakpur Zone Agricultural Development Project in the Kingdom of Nepal.

During its stay in the Kingdom of Nepal, the Team exchanged views and had a series of discussions with the Authorities concerned of His Majesty's Government of Nepal in respect of the desirable measures to be taken by both Governments for the successful implementation of the above-mentioned Project.

As a result of the discussions, the Team and the authorities concerned of His Majesty's Government of Nepal considered that the Janakpur Zone Agricultural Development Project under the Agreement between the

Government of Japan and His Majesty's Government of Nepal signed at Kathmandu on November 7, 1974 has achieved its expected results and accordingly agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Kathmandu, October 12, 1979

12.OCT.1979

Mr. Shoji Kanatsu
Leader,
Japanese Project Formulation Team,
Japan International Cooperation Agency,
Japan

B. Nepali
12th Oct 79.

Mr. S.B. Nepali
Director General,
Department of Agriculture,
Ministry of Food and Agriculture,
His Majesty's Government of Nepal

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and His Majesty's Government of Nepal will cooperate with each other in implementing the Janakpur Zone Agricultural Development Project (hereinafter referred to as "the Project") for the purpose of increasing farmers' income and improving their standard of living through food production in Janakpur Zone.

2. The Project will be implemented in accordance with the Master Plan which is given in Annex I.

II. DISPATCH OF JAPANESE EXPERTS

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense services of the Japanese experts as listed in Annex II through the normal procedures under the Colombo Plan Technical Cooperation Scheme.

2. The Japanese experts referred to in 1 above and their families will be granted in the Kingdom of Nepal the privileges, exemptions and benefits including the following no less favourable than those accorded to experts of third countries working in the Kingdom of Nepal under the Colombo Plan Technical Cooperation Scheme:

(1) Identification card

Identification cards of the Japanese experts and their families, which will be issued by His Majesty's Government of Nepal, should contain an assurance that the Nepalese authorities concerned will assist them in performing their official functions.

(2) Road cess

The Japanese experts are exempted from road cess imposed in the Kingdom of Nepal.

III. PROVISION OF MACHINERY AND EQUIPMENT

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense such machinery, equipment and other materials necessary for the implementation of the Project as listed in Annex III, through the normal procedures under the Colombo Plan Technical Cooperation Scheme.

2. The articles referred to in 1. above will become the property of His Majesty's Government of Nepal upon being delivered c.i.f. to the Nepalese authorities concerned at the Kathmandu Airport and/or at the place on the Nepalese border and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to in Annex II.

IV. TRAINING OF NEPALESE PERSONNEL IN JAPAN

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expense the Nepalese personnel connected with the Project for technical training in Japan through the normal procedures under the Colombo Plan Technical Cooperation Scheme.

2. His Majesty's Government of Nepal will take necessary measures to ensure that the knowledge and experience acquired by the Nepalese personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

V. MEASURES TO BE TAKEN BY HIS MAJESTY'S GOVERNMENT OF NEPAL

1. In accordance with the laws and regulations in force in the Kingdom of Nepal, His Majesty's Government of Nepal will take necessary measures to provide at its own expense:

(1) Services of the Nepalese counterpart personnel, administrative personnel and other personnel as listed in Annex IV;

(2) Land, buildings and facilities as listed in Annex V;

(3) Supply or replacement of machinery, equipment, instrument, vehicles, tools, spare parts and any other

materials necessary for the implementation of the Project other than those provided through JICA under III above;

(4) Transportation facilities and travel allowance for the Japanese experts for the official travel within the Kingdom of Nepal;

(5) Suitably furnished accommodations for the Japanese experts and their families.

2. In accordance with the laws and regulations in force in the Kingdom of Nepal, His Majesty's Government of Nepal will take necessary measures to meet:

(1) Expenses necessary for the transportation within the Kingdom of Nepal of the articles referred to in III above as well as for the installation, operation and maintenance thereof;

(2) Customs duties, internal taxes and any other charges, imposed in the Kingdom of Nepal on the articles referred to in III above;

(3) All running expenses necessary for the implementation of the Project.

VI. ADMINISTRATION OF THE PROJECT

1. The Project will be implemented in accordance with an operational work plan to be formulated annually by the Janakpur Zone Agricultural Development Board (hereinafter referred to as "the JADB") established on September 18, 1972 (2nd Aswin, 2029) by an order under

the Nepalese Development Board Act 1956 (B.S. 2013) for the successful operation of the Project. The operational work plan so formulated shall be approved by the authorities concerned of the two Governments.

2. The JADB will be responsible for the implementation of the Project and will meet when necessity arises. The Japanese Project Manager referred to in Annex II will serve as an advisor to the JADB for the purposes of the Project. An official of the Embassy of Japan in the Kingdom of Nepal and the Resident Representative of JICA may attend the meetings of the JADB as observers.

3. The Japanese experts and Nepalese counterpart officials will work together on technical matters for the implementation of the Project and the Nepalese Project Manager will be responsible for the administration of the Project.

4. For the successful implementation of the Project, there will be a joint committee comprising of the Japanese experts and Nepalese counterpart officials. The joint committee will meet regularly at the Project sites and will receive general instructions from the JADB.

VII. CLAIMS AGAINST JAPANESE EXPERTS

His Majesty's Government of Nepal undertakes to bear claims, if any arises, against the Japanese experts

engaged in the Project resulting from, occuring in the course of, or otherwise connected with the discharge of their official functions in the Kingdom of Nepal except for those arising from the willful misconduct or gross negligence of the Japanese experts.

VIII. MUTUAL CONSULTATION

There will be mutual consultation between the two Governments on any major issues arising from, or in connection with this Attached Document.

IX. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be three (3) years from November 7, 1979.

ANNEX I

MASTER PLAN

1. Objectives

The Project is designed to increase farmers' income and to improve their standard of living in the Project area through diffusion of improved farming techniques suitable for local conditions.

In the Project following activities will be carried out to attain the above objectives in an effective manner.

2. Activities

(1) Promotion of agricultural extension

(i) Training of extension officers, workers and leading farmers;

(ii) Planning of extension services;

(iii) Reinforcement for extension organizations including Agricultural Development Offices.

(2) Improvement of extension materials

(i) Introduction of improved varieties and multiplication and distribution to farmers;

(ii) Practical experiment and demonstration of extension materials;

(iii) Improvement of traditional farming practices.

(3) Introduction of irrigated farming techniques

(i) Establishment and diffusion of suitable water management techniques at farm-level;

(ii) Fostering of water management organizations.

ANNEX II

JAPANESE EXPERTS

Category	Field
(1) Project Manager	
(2) Experts	Agricultural extension planning
	Agronomy
	Irrigation
	Farm machinery
(3) Liaison officer	

Note : (1) Some additional short-term experts in the fields mentioned above as well as others may be dispatched when necessary.

(2) Agronomy mentioned above includes horticulture.

ANNEX III

LIST OF THE ARTICLES

(1) Construction machinery and equipment and their spare parts

(2) Agricultural machinery and implements and their spare parts

(3) Pesticides and fertilizers

(4) Machine tools for repair work

(5) Tools and implements for testing work

(6) Vehicles

(7) Teaching materials including audio-visual aids

(8) Other necessary equipment, tools and materials to be mutually agreed upon.

ANNEX IV

LIST OF NEPALESE STAFF

Category	Field
(1) Project Manager	
(2) Counterpart officials	Agricultural extension planning
	Agronomy
	Horticulture
	Irrigation
	Farm machinery
(3) Liaison officer	
(4) Clerical and service personnel	
(5) Labourers	

Note: At least one Nepalese counterpart official will be provided for each Japanese expert mentioned in Annex II, category (2).

ANNEX V

LIST OF LAND, BUILDINGS AND FACILITIES

1. Land
   - (i) for the Project Centre and housing
   - (ii) for Hardinath Agriculture Farm
   - (iii) for the Centre in Sindhulimadi
   - (iv) for the Horticulture Farm, Janakpur

2. Buildings
   - (i) Project Centre
     - (a) Office
     - (b) Housing
     - (c) Training facilities
     - (d) Workshop and other necessary facilities
   - (ii) Hardinath Agriculture Farm
     - (a) Office
     - (b) Shed for machinery and equipment
     - (c) Store-house for farming materials
     - (d) Housing and dormitory
     - (e) Other necessary facilities
   - (iii) Centre in Sindhulimadi
     - (a) Office
     - (b) Housing
     - (c) Other necessary facilities
   - (iv) Horticulture Farm, Janakpur
     - (a) Office

(b) Housing

(c) Irrigation and drainage facilities

(v) Agricultural Development Offices (5)

付　属　資　料

資料－I

EVALUATION REPORT

ON

THE JANAKPUR ZONE

AGRICULTURE DEVELOPMENT PROJECT

A BRIEF NOTE

JULY 1979

EVALUATION TEAM

JAPAN INTERNATIONAL COOPERATION AGENCY

Contents

I. Foreword

Now that the Agreement on the JADP has become near to an end, the Japanese Government sent our Team this time to carry out the evaluation survey on the performances of the Project which have been attained in past 8 years and which should be done, if any, in foreseeable future after the termination of the Agreement.

The Team has been suggested to work jointly with the Nepalese side and cooperatedly with the experts of the both sides in order to get as much efficient achievements as possible.

This suggestion proved very meaningful and effective and has made us realize the intimate cooperation being much appreciative and fruitful.

Of course, the evaluation survey was made for further betterment of the Projected area, not for the evaluation itself.

The methods of evaluation may vary with the standpoints of those who are in charge of the survey, and also with the characteristics of evaluation itself, scientific or practical.

In the light of the jointed work, the practical method of evaluation was preferred to a sophisticated one, which was left for further research when the necessary data have been collected enough to meet the demand.

The Nepalese Government has before elaborated the work of evaluation on the Project and pointed out various important matters, which have benefited our work this time to a great and tangible extent although considerable amount of points still remain uncleared about the farmers response as well as the Project level.

One more point which interested our Team so much is the Long Term Plan of Development, directing the path of future effort to be done in the Project area.

The evaluation works were friendly and fruitfully discussed in a joint meeting, proceeding one by one in the Sub-Project mentioned in the Agreement, pointing out the views and comments of the both sides, Nepalese and Japanese.

Frankly speaking, the implementation of the Project has been considerably shifted to an infrastructural side, and the Project's functions including extension have begun relatively in recent years, which are keenly desired to become vastly intensive from now for meeting the farmer's demand.

II. Evaluation and Implementation

1. Evaluation on the sub-projects

1) Hardinath Agriculture Farm

act.1 Multiplication and distribution of improved seed and seedlings of various crops for extension work.
Almost completely achieved the target. (Table 1)

act.2 Expreriment and demonstation for the introduction and extension of improved farming techniques of paddy, wheat and other crops.

Activities are being carried out intensively, and performances are also being successful. (Table 2)

act.3 Education and training of extension officers JT/JTA, agri-assistants and leading farmers. (Table 3)
Activities are almost satisfactory leaving some problems as follows:

(1) Improvement of curriculum to meet farmer's needs and real farming practice and making much of practical exercise in training.

(2) Quantitative and qualitative level - up of the teaching staff.

Past Interim Evaluation noticed that the farm has been completely successful ..... good evaluation was given (1976). Such good evaluation might be visualized not only in past but also at present.

2) Intensive Irrigation Agriculture Programme Area (IAP area)

act.1 Guidance on farming techniques including the improvement of the agricultural infrastructure in the form of introduction of the tube-well irrigation system and improvement of terminal works of water management in the 420 ha. paddy field area.

(1) 9 tube-well facilities have been established as planned.

(2) Almost of irrigation canal was completed, but 2,735 m

of main irrigation canal has been constructed for 3,858 m of planned canal.

Accordingly, the achievement of it is 71%.

act.2 Improvement of traditional farming practices and guidance on improved farming techniques acceptable to farmers at an extension plot.

Progress was recognized in the change of cropping pattern and increase of crop production, and considerable economic effects are estimated. (not yet accounted intensively) (Table 4, 5)

act.3 Guidance on the formation of farmers'organizations and their activities for effective farming techniques at an extension plot.

(1) Farmers organizations have been established, while their effective activities have not been undertaken yet.

(2) Trail plots were established in farmers fields, and effective data on the fertilizer application practices were obtained.

1. To meet shortage of water yield, proper countermeasures should be taken, which will be discussed later in III-2.

2. To achieve better performance on the introduction and extension of new techniques to the IAP area, good cooperation should be made between the staff in the project center and Hardinath A.F.

3. To complete irrigation canal left unconstructed, such measures as promotion of purchasing materials like cement etc. should be taken as early as possible.

3) Rapti Model Farm

act.1 Introduction and demonstration of improved farming techniques of paddy, wheat and other upland crops.

Activities were observed as planned, and the performances were nearly complete.

act.2 Multiplication and demonstration of improved seeds and seedlings of various crops for extension.

Though the performances were not favourable at early stage, they have been noticed well developed in its last 2 years.

act.3 Extension of improved farming techniques in the vicinity of the Farm in cooperation with the Agricultural Development Office.

The activities were not made smoothly and effectively because of the Farm being not included in the agricultural extension system.

The Farm was handed over to HMG side in Aug. 1978, leaving the followings to be kept in mind:

(1) Strengthening of staffs and man-power.
(2) Appropriate maintenance of farm machinery.
(3) Consideration for blast of paddy due to high humidity in the growing period of late paddy.

4) Extension and other activities in Hilly area in Janakpur Zone.

act.1 Implementation of a round trip guidance activities by Nepalese extension workers and Japanese experts for the improvement of cultivation method of food crop and introduction of horticulture, animal husbandry and commercial crops.

(1) All activities in Sindhuli Farm especially in production and distribution of seeds and seedlings are well done.

(2) And also extension activities are carried on intensively under close cooperation with JADP and ADO staffs, especially in the fields of horticulture and small irrigation, resulting in good reputations from farmers' level.

(3) In order to promote the activities in newly constructed facilities of the extension center, strengthening of man power and introduction of educational materials are essential.

And besides, the extension activities should be enlarged from a plot to the whole extension area.

act.2 Formation of a regional agricultural development programme under the long-term comprehensive delelopment plan of HMG of Nepal.

Hilly area development surveys were carried out five times by the joint team between Japanese and Nepalese - experts.

The final joint survey was conducted in May this year, its report is now under preparation, which is expected to point out the intensive strategies and their priorities for Hilly Area Development.

5) Project Center

(1) In order to achieve good performances of project activities, intimate connection or cooperation among agriculture sector and other ones is needed at the administrative level of the central as well as the zonal Governments.

(2) And also close communication among project center, ADOS, AIC SAJHA and other organizations concerned in agriculture sector are essential for effective function of the project.

6) A case study on 'the grass-roots' Effects on the Extension Activities in past five years:

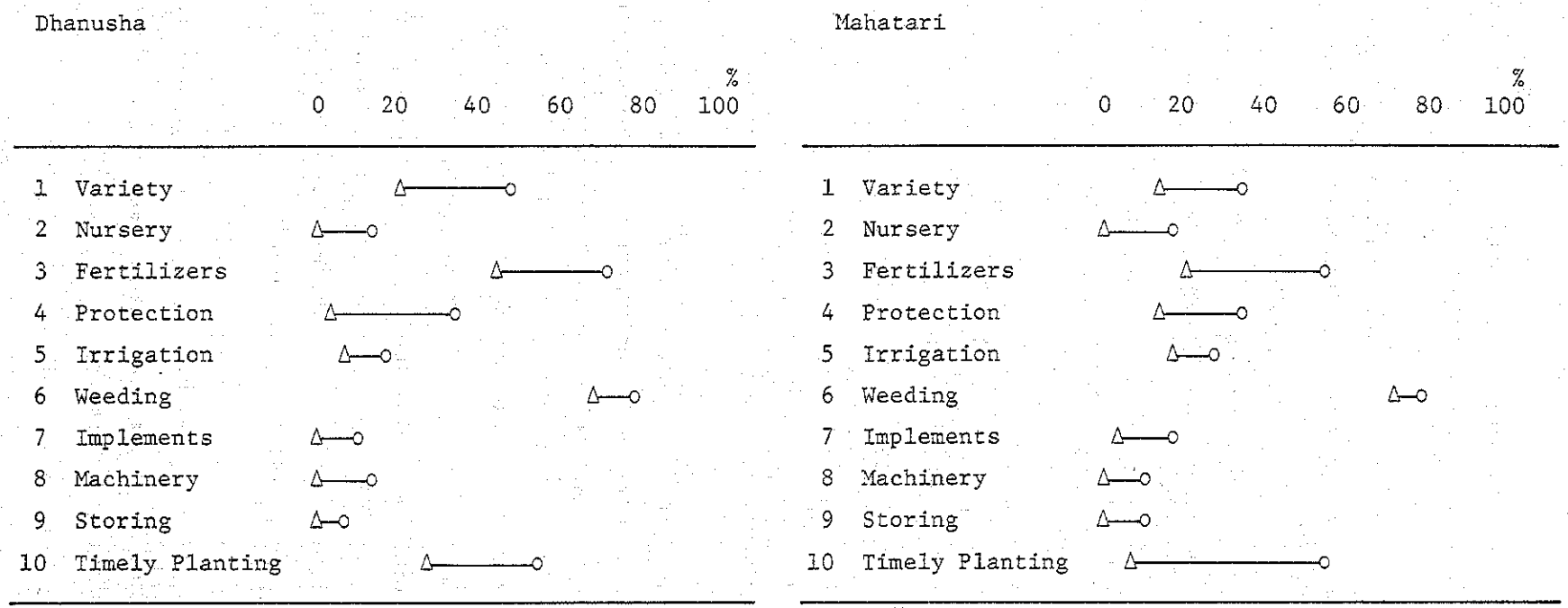
This time the Evaluation was conducted mainly at the 'project level', and on the other hand, the effects of the extension activities on the Farmers level' were surveyed by an interview method only from the standpoint of technical progress in past five years.

The study was carried out for 3 days by interviwing the ADOs of the four Districts - Dhanusha, Mahotari, Sarlahi and Sindhuli resulting in a summary.

(Tab - i)

Technical Advancement of 'Grass - Roots' Level in Past 5 Years

- Progress of Extension Activities -

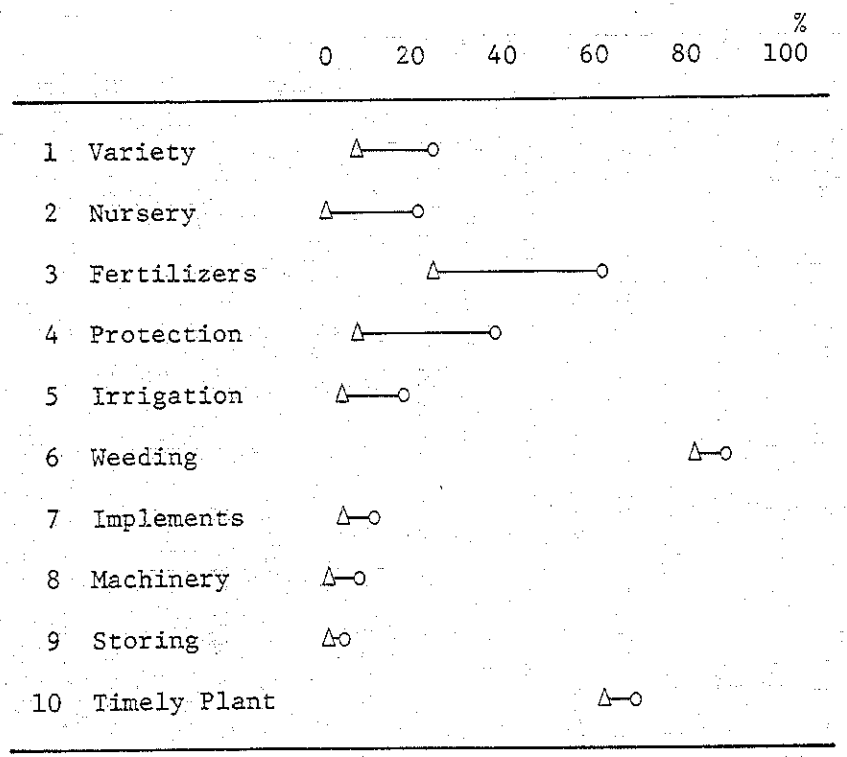


Note : Δ Farmers level of 5 years ago (1973 - 74)

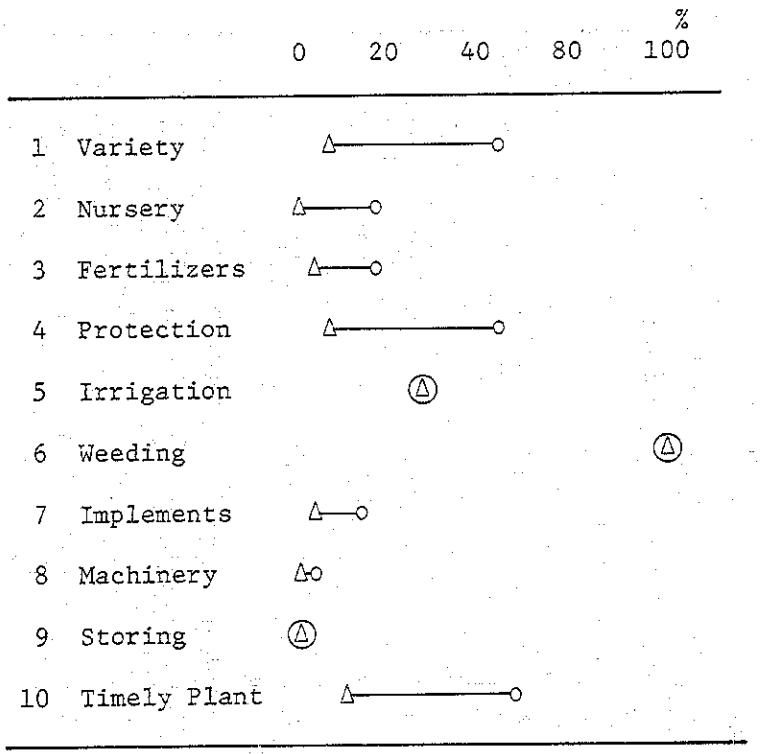
o " Present time(1978 - 79)

(Tab - ii)

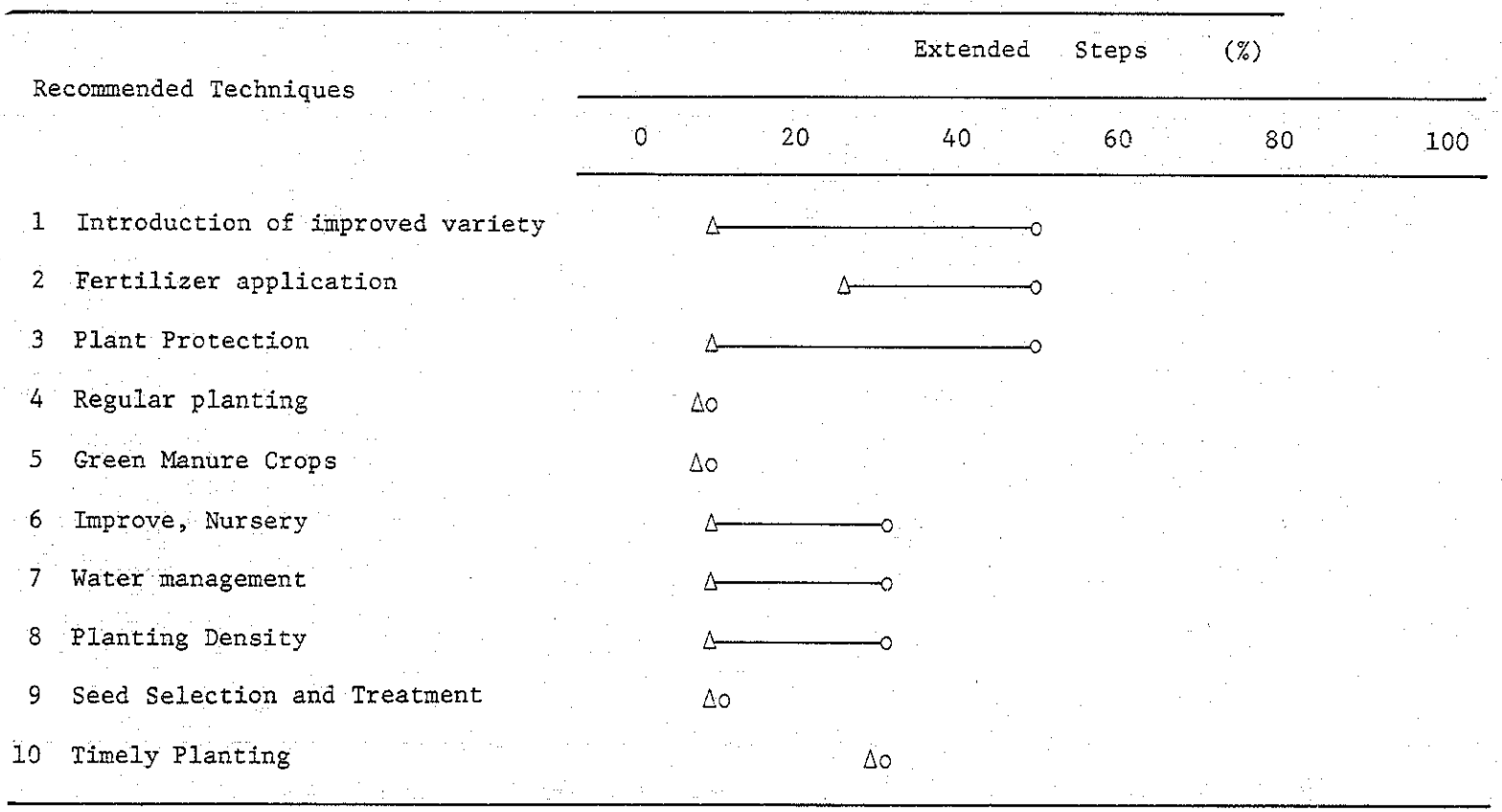
Sarlahi



Sindhuli



(Tab - iii) Recommended Techniques and Extended Steps in I A P Area



Note : Δ - Farmers level of 5 years ago (1974)

o - " present time (1979)

2. Implementation of the project

1) Construction of facilities

Construction of facilities has been satisfied in quantity. However, there are some faults such as lack of special attention to the natural climatic features in Tarai, that is heavy rains and violent solar radiation. Especially in the living and working quarter of the center, daily works are so much disturbed by the inproper disposition of the building - such as both sides east and west opened to sunshine. (Table 6)

2) Machinery and implements

(1) Most of the machinery and implements have been provided which were asked by JADP. (Table 7)

(2) By changing a way of transportation of those machinery and implement in 1977 from road to air the expense of H.M.G. for transportation was greatly reduced, besides, man-power troubles and damages on the way from Calcutta to Nepal were also decreased. Thus, transportation and timely supply of equipment have been much improved.

(3) Some of farm machinery have been supplied too much without meeting proper utilization programme, as the last Evaluation team mentioned, Visitors and farmers have suspicious impression about the only disposed non-working machinery in the machinery godown. (The Interim Evaluation)

In future, effective and reasonable utilization of them should be considered for suitable extension activities of ADOs etc.

(4) Demand of spare parts are too much sometimes, while special notice must be paid to the quantity depending on the frequency of needs and troubles (priority of spare parts) before demanding them to make their reasonable supply.

(5) Since 1977, after the Interim Evaluation (APSC), special attention has been given to the arrangement of concerned documents and good maintenance of machinery and implements. And these treatments are now being recognized much improved, which are to be more accelerated to meet favourably the

time of hand over.

(6) Considering the hand over of the project, machinery should be selected from the view point of easiness of supply of spare parts and etc. at the local or domestic level. This is a very important suggestion for achieving self-reliance in future.

3) Performance of training in Japan

(1) JICA (authorities) has a specific attention to the acceptance of trainees to Japan from JADP, Nepal, and the number of participated trainee amounted to 26 (106 man/month) since the starting of JADP. (Table 8)

(2) Attention must be paid to a fact that some trainees who had no direct relation with JADP were despatched, and some times trainees from JADP greatly delayed for participation which must be improved in future.

(3) In order to strengthen the activity and good development of the Project, frequent transfer of staff who had participated in the Training Course in Japan are earnestly desired to be readjusted.

(4) It is sometimes said that the performances of Japanese Training courses are not necessarilly applicable to their own circumferences, excluding the Drilling/Boring Engineering Training Course. Such opinion seems to have been expressed by the trainees from tropical countries, where there are too much difference in natural agro-climatic and socio-economic conditions from Japan.
The JICA authority has already paid deep attention to such valuable opinion, and is now considering how to manage such problem.

4) Extension/Information Services cum Follow-up the Training activity
Considering insufficient contact with farmers "Farmers News" has been issued and provided continuousely/periodically since

1977 (issued no.1 no.26). (Table 9)

Here are three major features/aims of the publication of "Farmers New" that is :

i) Information/guidance services
ii) follow-up the training activity
iii) to meet the farmers needs

In order to meet the farmers needs, a column "Question & Answer" has been attempted/undertaken additionally.

"Farmers News" being provided not only to concerned organisations, officers, extension workers, but also whole leading farmers who had participated formally in the training course of JADP. (accounted more than 1,000 so far).

Although, the number of participated farmers trainees may increase year by year, the "Farmers New" ought to be provided during their whole life. This is an innovated/created and a significant idea for a follow-up way to the past/ex-participated trainees.

It seems that on the performance of "Farmers New" publication good evaluation may be given.

5) Training activity in JADP

(1) The special emphasis has been given to training after Interim Evaluation (after 1977) and its performances could be evaluated to a certain extent. (Table 10, 11)

(2) It is not desirable to carry out training without practical field work.

(3) It is necessary to improve shortage of qualified teaching staff, and insufficient training materials and uninternational curriculum.

(4) Proper evaluation is required to grasp the after-effect of training.

(5) Semi-outdoor lecture room needs improving soon.

(Hardinath Agriculture Farm)

6) Dispatch of Japanese experts

Among the Japanese experts who have been assigned following the Agreement, an expert of farmer's organization has not yet sent, which causes the delay of the activities of this field.

An expert on soil and fertilizer was assigned, but only for short time of three months. The expert on other fields have been dispatched reasonable in accordance with Agreement. (Table 11, 12)

7) Personnel arrangement of Nepal side counterparts

Qualified gazetted officers are strongly desirable from the view point of effective technological cooperation. (Now only 7 gazetted officers out of 17 staff have been assigned at the time of June 1979.) In this connection, betterment of personnel arrangement is desired. (Table 13)

8) Project cost.

Amount of actual expenditure up to FY 77/78 from FY 71/72 is Rs. 24,572,000 and about 65% of it - about Rs. 16,000,000 is borne from K.R. counterpart fund provided from Japan (Table 14)

The actual expenditure for past seven years has been developed favourable excluded one year - 77/78 Fiscal Year due to the decrease of expenditure for cement.

It seems that the budget of local-cost has been well considered, and KR Fund is used effectively to meet the expenditure of the local-cost. But an attention should be paid/taken to the low percentage of actual expenditure compared with the approved amount of the Budget. (Table 15)

9) Other cooperation activities

(1) Dispatch of the Survey Team

16 teams have been dispatched and taken part of the project since preliminary survey in March 1970 to evaluation team in June 1979. (Table 16)

(2) Financial cooperation

Provision of equipment, dispatch of experts and acceptance of Nepalese officers for training are now being categorized as three main components of the project cooperation. In addition to them financial cooperation of K.R. fund and grant aid have also been utilized effectively for the project. (Table 6)

III Specific Comments

1. Concept of irrigation in wet and dry seasons.

In principle, especially in humid areas as in most Southeast Asian countries, irrigation is practised at first for stablizing the production in wet season and then in dry season as much area as possible, depending on the amount of water available.

In that meaning irrigation in the IAP should be done in the wet season at a reasonable stage of water management in which canal system must be so provided as to hold at least 50-60 m/ha of its density.

As a next step, irrigation area in the dry season shall be increased gradually by saving water requirement in wet as well as in dry seasons.

In short, it should be kept in mind that irrigation and drainage aim at their highest function when available water is seen as much as possible.

In the IAP area, good distribution system of canals must be provided at the earliest time.

2. Increase of water supply in Hardinath and IAP areas.

1) IAP

Following countermeasures are considered for increasing the water-supply in IAP area.

#1 Cleaning of the strainer of the existing deep tube wells to avoid decreasing of water yield.

#2 Water use control by setting a valve to recharge the ground water.

#3 Pumping up from the existing deep tube wells.

#4 Additional installment of shallow tube wells.

To select a suitable countermeasure, technical and economic feasibility should be examined in advance.

2) Hardinath

A means to meet the water shortage is about the same considered in the IAP area.

3. Active participation of the ADOs in the JADP

Now that the main function of the Project has been greatly shifted to the hands of the ADOs, intimate cooperation between the both must be more and more intensified to make the Project fruitful to a great extent.

IV. General subject to be improved.

1. Nepalese side proposed the following facilities, equipment and implements to be supplied,

   1) Facilities and equipment,

      Soil laboratory, Veterinary dispensary, ADO sub-center buildings, JTA houses, 4-H club houses, etc.
      Seed processing unit, vegetable seed cleaning unit, etc.

   2) Experiment and measurement implements,
      Soil-testing kit, Moisture tester, Hydrometer.

   3) Education and training aid,
      Audio-visual aids, Movie projector, Tape recorder, Slide Projector, etc.

   4) Recopy machine,

   5) Others
      Portable generator,

2. Japanese side proposed strongly the clinic facilities to be installed.

V. Specific Subjects to be considered

1. Shallow Tube Well Programme

Development of ground water in the plain of Janakpur Zone has aimed at the utilization of aquifers lying from 60 m to 170 m below the ground surface. On the other hand, water source of shallow tube well is aquifer locating from 20 m to 40 m under the ground surface.

This programme consists of using easy drilling work and getting water by simple pumping set. And as farmers of three to five members are related with a well, implementation of the programme seems to be easy. However, merit of the programme depends on the existence of good aquifers and water head corresponding to head of a pump.

In Janakpur Zone, shallow tube wells exist in some area south of Sarlahi district, and near Janakpur city they were made by loan of ADBN, and favoured with good shallow aquifers and higher water heads.

But, technically, the preparatory surveys like test drilling, electrical sounding (distance log), pumping test and observation of water level are indespensable for extending vastly the shallow tube well and making the programme successful.

In addition, continuous observation of water level and systimatic collection of technical informations are necessary in order to avoid decreasing of water discharge due to interference of well and troubles of well and pump.

2. Hill Area Development Plan (including the Link Road between Sindhuli and Tarai.)

The importance of the hilly area development has been well understood and also the means to visualize that importance have been oftern discussed, such as the increase the production of food staff, cash crops in horticulture, livestock etc.

And the Link Road between Sindhuli Mali and Tarai which has been

desired for long time, is considered a must to vitalize the activities of hilly people. The road will be a main artery, along which all living commodities are to be transported and traded, up and down.

The road needs not to be a standard road as it is usually called, but only "Jeepable" one, which will be designed much cheaper than the former.

The importance and necessity of constructing this Link Road make those concerned believe that the road is surely worth investigating the possibility of its construction.

VI. Final Remarks

In conclusion, as repeated before many often, the cooperated project must be implemented by active and concrete efforts of the Nepalese Government that should be a main part not a counterpart in the activities of every section of the Project.

Especially now at the time that the Agreement is nearly terminated, the key functions of the Project must have become to be managed entirely by the hands of the Nepalese side, and it is surely believable that such stage of the management will be favorable achieved in near future.

(Table 1)

Target/Achievement of Crop Production in the Three Farms, JADP, in 1977/78

Item/Crops	Hardinath Agri. Farm			Rapti Model Farm			Sindhuli Farm		
	Annual Target (k.g.)	Annual Production (k.g.)	Annual Target / achievement (%)	Annual Target (k.g.)	Annual Product (k.g.)	Annual Target / achievement (%)	Annual Target (k.g.)	Annual Product (k.g.)	Annual Target / achievement (%)
Paddy Seeds	90,000	138,787	154	3,000	2,280	76	-	900	-
Wheat Seeds	70,000	54,732	78	3,000	6.335	211	-	970	-
Maize Seeds			-	1,200	1,443	120			
Pulses Seeds	1,100	1,495	136	1,500	2,214	148	30	66	220
Vegt. Seeds	100	139	139	400	927	232		27	
Vegt. Seedlings	-	-	-	-	-	-	No.18,000	No.69,710	387
Other Crop Seed	300	309	103	-	915	-	-	13	-
Grafted Plants	5,000	5,006	100	-	-	-	-	-	-
Fresh Vegt. Plants	600	1,987	331	10,000	32,838	328	-	5,041	-
Fresh Fruits	1,940	2,973	153	-	-	-	-	-	-
Trial/Demonstration (No)	43	45	104	4	4	100	29	37	128

(Table 2)

Trials and demonstrations conductd in Hardinath Agriculture Farm

(1973/74 - 1978/79)

Item	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79
1. Trials/Experiments 1) Time of planting				1(p). 1(w)		
2) Varietal Comparative Trial			2(p). 2(w)	2(p). 1(w)	1(p). 1(w)	
3) Long Term Fertility Trial	1(p). 1(w)	1(p). 1(w)	1(p). 1(w)	1(p). 1(w)		
4) Water management Trial			1(p). 1(w)			1(m)
5) Fertilizer Trial				2(p). 1(w)	1(p). 1(w)	2(p). 1(w)
6) Variety X Irrigation Trial						1(p)
7) Farmers Field Trial				3(p). 2(w)		1(p). 2(w)
2. Demonstration 1) Improved Variety				5(p). 7(w)	11(p).10(w)	
2) Cultural Practices				2(p)		
3) Comparison of local Varieties.				2(p)		
4) Effect of Chemical fertilizer and compost				5(p). 7(w)	10(p).10(w)	
5) Cropping pattern				1		

Note: The figure shows number of trials and demonstrations.
P.W.M. indicate Paddy, Wheat and Maize respectively.
Demonstrations were mainly conducted in farmers field.

(Table 3)

Education and Training at Hardinath Agriculture Farm

(1978 - 1979)

Term					
From	to	Days	Participants	Member	Subject
1978: 28,Aug.	1978: 6,Sept.	10	Leader Farmers	15	Farm-Machinery (power-tiller)
20,Sep.	26,Sep.	7	Leader Farmers	22	Winter Crops (Wheat, Maize)
18,Oct.	24,Oct.	7	Leader Farmers	18	Winter Crops (Wheat, Maize)
6,Nov.	15,Nov.	10	Leader Farmers	11	Farm-Machinery (Power-tiller, Pump)
20,Nov.	26,Nov.	7	Leader Farmers	24	Farm-Machinery (Pump, Sprayer)
18,Dec.	1978:24,Dec.	10	Agriculture Assist-ants.	18	Agriculture Practical Exercise
1979: 1,Jan.	1979:10,Jan.	10	Agriculture Assistants	18	Agriculture Practical Exercise
26,Mar.	1,Apr.	7	Leader Farmers	18	Summer Crops (Paddy, Maize)
TOTAL		98		169	

(Table 4)

Target/Achievement of Land use and Crop Production in IAP Area

	Before Project Period 1974			Programme in 1979			Production in 1979			Target/Achievement in 1979		
	Area (ha)	Production (t)	Land use %	Area (ha)	Production (t)	Land use %	Area (ha)	Production (t)	Land use %	Area (ha)	Production (t)	Land use %
Paddy:	408	756	100	529	1,544	129	498	1,046	121	94	68	94
a.Early paddy	37	48	9	140	350	34	97	228	23	69	65	68
b.Main Season	372	708	91	389	1,194	95	401	818	98	103	69	103
Wheat	57	45	14	250	525	62	59	79	14	24	15	23
Pulses	194	76	47	210	126	51	71	37	17	34	29	33
Maize							63	126	15			
Others	18	12	4	6	3	1	26	?	6	440	?	600
TOTAL	677	889	165	995	2,198	242	717	1,288	175	72	59	72

(Table 5)

Economic Effect of Water-use in IAP area

(:X 10^3 RS)

	Before Project Period 1974/75			1976/77-1978/79		
	Gross Income	Expenditure	Income	Gross income	Expenditure	Income
Paddy Early paddy	73.30	55.61	17.69	297.6	190.1	147.5
Normal paddy	1059.06	560.00	499.05	1249.3	602.2	647.9
Wheat	86.15	59.29	26.86	272.2	224.6	157.6
Maize				77.4	31.2	46.2
Pulses	307.72	36.81	270.91	100.2	12.8	87.4
Total	1,526.23	711.72	814.51	1996.7	910.9	1,085.8

(Table 6)

Economic Cooperation

(Figure in '000 US$) (Figure in '000 Yen)

Fiscal Year	KR Fund	Grant	* JICA
1971	200		
1972	300		1,900
1973	250		3,400
1974	350		6,200
1975		89,900	8,000
1976	600	150,000	5,200
1977			7,800
1978			13,300
Total	1,700	249,900	43,800

Grant: (1) 89,900,000 Yen; For Shindhuli Agricultural Extension Center

(2) 150,000,000 Yen; For Warehouse

(3) *JICA; not include a provision of machinery & tools.
excluding the provided machinery & tools (vide table - 7)

(Table 7)

Provision of Machinery Implements & Materials from Japan (JICA)

(Fig. in '000 Yen)

Fiscal Year	Amount	Main Equipments
1972	44,913	cranetruck, dumptruck, tractor, hand tractor, agro chemicals and fertilizer
1973	94,185	drilling machine, pipe, hand tractor, pumping set, farming tools
1974	27,287	only transportation cost and insurance pay (carry over)
1975	71,244	jeep, pumping set, pipe
1976	123,150	truck, micro bus, bulldozer, tractor, hand tractor
1977	98,878	truck, micro bus, tractor, combine
1978	36,515	instrument, irrigation materials
(1979)	(27,500)	(Plan)
Total	523,772	

(Table 8)

Trained Counterparts in Japan

(Fig. in person)

Course Fiscal Year	1972	1973	1974	1975	1976	1977	1978	1979	
High class course			1	1	2	2			
Group course	2	1		3	3		2		
Special course		1		2	2				
Total	2	2	1	6	7	6	2	(1)	
(M/M*)	18	3.5	0.75	38	33.5	25	10		26 persons 106 M/M

* M/M : Number of man per month

(Table 9)

J.A.D.P. Publication List
****
(Farmer's News)

S.NO.	PUBLICATION DATE	SUBJECT
1.	30 April, 1977	- C.H. 45 Paddy
2.	30 April, 1977	- Save Paddy from Gundhi Bug.
3.	22 May, 1977	- Save paddy from Hispa.
4.	10 June, 1977	- Importance of Mango.
5.	5 July, 1977	- Save paddy from Blast.
6.	12 July, 1977	- Enemies of storage grains & their control.
7.	8 Aug., 1977	- Grow Mung.
8.	3 Sept., 1977	- Save paddy from Rice mealy bug.
9.	14 Sept., 1977	- Grow tomato in winter.
10.	2 Oct., 1977	- Cauliflower cultivation.
11.	6 Oct., 1977	- Grow Maize in Winter
12.	18 Oct., 1977	- Improved varieties of wheat R.R.21
13.	15 Nov., 1977	- Oilseeds in winter.
14.	15 Dec., 1977	- Project Inauguration.
15.	30 Dec., 1977	- Care of pumping set engine.
16.	28 Jan., 1978	- Take profit from Fosa cultivation
17.	28 Mar., 1978	- a. Use compost. - b. Main insects of maize and their control.
18.	28 Apr., 1978	- Cucurbits cultivation.
19.	29 May, 1978	- Farming of chandina variety of Paddy.
20.	30 June, 1978	- Rice Mealy bug.
21.	31 July, 1978	- Grow more paddy by controlling insect pest.
22.	1 Oct., 1978	- Treat the seed of wheat.
23.	30 Nov., 1978	- First Annual ceremony report of JADP.
24.	3 Feb., 1979	- Take profit from sugarcane cultivation.
25.	27 Feb., 1979	- How to establish orchard.
26.	28 Apr., 1979	- Nursery Bed preparation of Paddy.

(Table 10)

Training Performance for Past 4 Years (1975-79)

(Excluded outside Trainings-used this Centre's facilities)

S.N Course	1975/76	1976/77	1977/78	1978/79	Total
1. ADO Inservice Seminar	-	-	26	28	54
2. JT.JTA Inservice	34	100	17	25	176
3. Agri. Assistant pre service	-	122	94	29	245
4. Agri. Assistant Inservice	-	-	67	18	85
5. Leader Farmers	57	230	169	309	765

Publications (Farmer's News £ Progress Reports)

1. Farmer's News (issue No.)	-	6	14	6	26
2. Reports	-	1	2	4	7

(Table 11)

Dispatched Japanese Experts from JICA

a. Field-wise Performance

Term \ Fiels	Senior Adviser	Project Manager	Agronomy	Farm Management	Irrigation	Agro-Machinery	Extension	Liaison Officer	Total
Long term Experts (over one year)	2-(62)	3-(90)	5-(140)	2-(48)	4-(75)	2-(78)	2-(109)	1-(61)	21-(663)
Term \ Fiels	Drilling	Construction Design	Hill Development	Farm Management	Soil Fertilize	others			
Short term Experts (within one year)	4-(15)	3-(10)	4-(10)	1-(6)	1-(3)	5-(14)			18-(58)
								Total	39-(721)

Remarks: Fig: person (Fig)=M/M; Number of man per month
During the cooperated term since 1976, the despatched long term Japanese experts are 21 persons, or 663 M/M, and the dispatched short term Japanese experts are 15 persons, or 58 M/M, total 39 persons or 72 M/M

Dispatched Experts in each fiscal year

Fig: person

		1971	1972	1973	1974	1975	1976	1977	1978	(1979)
Long term Expert	dispatched	1	6		2	3	4	3	5	
	continuance		1	7	7	9	10	11	7	10
	return					2	3	6	2	
Short term Experts	dispatched			1	4	2	3	4	5	2
	continuance					3		2	2	2
	return			1	1	5	1	1	5	2

(Table 12)

Un-dispatched Period of Japanese Experts
(From Nov.7th 1974 to June 30th 1979)

Field	Undispatched period	Months	Undispatched percentage
Senior Adviser	1977.12.31 - 1978.3.30	3	5.4
Project Manager	1978.3.16 - 1978.3.30	0.5	0.9
Agronomy	None	0	0
Farm Management	1975.11.30 - 1978.6.29	(25 - 6)* 19	34.2
Irrigation	1976.10.16 - 1976.7.30 1978.7.13 - 1978.6.29	4.5	8.1
Agro-Machinery	1977.11.30 - 1978.6.30	7	12.6
Soil Fertilize	All Term	(55.5 - 3.5)* 52	93.7
Extension	1978.12.18 - 1979.6.30	6	10.8
Farmers' Organization	All Term	55.5	100
Liaison Officer	None	0	0

* excluding the despatched period of short term expert.

(Table 13)

Companion Sheet of Japanese Experts and Counterparts (June 1979)

Section	Name of Japanese Experts		Counterparts	
			Gazetted	Non-Gazetted
Manager	S.OTA		1	0
Economy	M.OTA		0	JTA 1
Extension	-		2	TT 2 JTA 1
Agronomy	T.SHIBATA		2	0
Horticulture	T.KONDO	K.SHINODA	1	JTA 1 FA 3
Irrigation	Y.EBIHARA	K.SATO	1	Overseer 1
Machinery	E.MATSUMOTO		0	Head Mechanic 1
KATHMANDU OFFICE				
Senior Adviser H.ANEHA Liaison Officer K.TAKAYAMA				

(Table 14)

Project cost

J.A.D.P.

(in '000 Rs.)

	71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80
1. Recurring									
(Operational)									
H.M.G.	-	-	862	1279	1528	1925	2169	2180	3062
Japan	36	276	-	-	-	-	-	-	-
Sub-Total:-	36	276	862	1279	1528	1925	2169	2180	3062
2. Non-Recurring.									
(Fixed)									
H.M.G.	-	-	518	72	115	152	67	16	10
Japan	218	447	2900	3401	3001	4842	944	10744	11511
Sub-Total:-	218	447	3418	3473	3116	4994	1011	10760	11521
3. Grand-Total:-	254	723	4280	4752	4644	6919	3180	12940	14583
4. In percentage (%)	100	100	100	100	100	100	100	100	100
Recurring	14	38	20	27	33	28	68	17	21
Non-Recurring	86	62	80	73	67	72	32	83	79

Note:- (1) The above figures upto year 77/78 indicates actual Expenditure whereas that of year 78/79 is approved budget and 79/80 is proposed one.

(2) Non-Recurring JAPAN is K.R. counterpart Fund.

(3) Upto 77/78 F/Y

Recurring	8,075,000 Rs.	(HMG 7,763,000	Japan 312,000)
Non-Recurring	16,677,000 Rs.	(HMG 924,000	Japan 15,753,000)
Total -	24,752,000 Rs.	(HMG 8,687,000	Japan 16,065,000)
	(100) %	(35) %	(65) %

(Table 15)

Actual Budget

(Fig. in'000 Rs.)

	76/77	77/78	78/79
(1) Approved Budget	9,712	17,499	12,940
(2) Machinery & Tools	2,500	5,800	5,800
(3) (1) - (2)	7,212	11,699	7,140
(4) Actual Expenditure	6,919	3,180	3,600
(5) Non-used (3) - (4)	293	8,519	3,540
Non-used rate (5)/(3) × 100%	4%	73%	49%

Remarks:

(1) FY 78/79:

Upto 7th June 1979

(2) Machinery & Tools:

Estimated figures provided from Japan

(Table 16)

Dispatched Survey Team by JICA

Survey team	Date	Duration	Leader	Member (Person)	Objects
1. Preliminary survey team	Mar. 3,1970	28 days	Dr.H.FUKUDA	6	Formulation of the cooperation flame.
2. Implementation planning team	Nov. 1970	42 days	Dr.H.FUKUDA	8	Formulation of the Implementation plan.
3. The 1st Detailed design Team	Oct., 1971	45 days	Dr.H.FUKUDA	13	Detailed design in Tarai area.
4. Operational planning consulting Team	Aug.16,1972	18 days	Mr.S.NISHIMURA	4	Planning of project operation during R/D.
5. The 2nd Detailed design Team	May. 9,1973	45 days	Mr.T.KIMURA	7	Detailed design for hill area.
6. Operational planning consulting Team	May.15,1974	15 days	Mr.S.WATANABE	3	Planning of Project operation.
7. Technical guidance Team	Mar. 5,1975	21 days	Dr.H.FUKUDA	5	Guidance for IAP area & Hill area development.
8. "	Mar.25,1975	13 days	Dr.S.NAKADA	4	Agricultural Extension.
9. "	Sept.1,1975	10 days	Mr.H.ITO	4	Irrigation Engineering.
10. "	Mar.23,1976	18 days	Mr.Y.TOKUNAGA	4	Guidance and planning for hill area development.
11. "	Nov.24,1976	8 days	Mr.M.NAKAHARA	1	Future operational planning.
12. "	Apr. 5,1977	16 days	Dr.H.FUKUDA	4	Guidance for second half period of cooperation.
13. "	Nov.21,1977	34 days	Mr.Y.CHIKITA	4	Maintenance and repairment of machi machinery.
14. "	Apr. 4,1978	16 days	Mr.TOOIKAWA	3	Formulation of Hill area development.
15. "	Feb.26,1979	16 days	Mr.S.KANATSU	4	"
16. Evaluation team	June 20,1979	20 days	Dr.H.FUKUDA	6	Evaluation of the project

資料－II　ネパール側エバリュエーションチーム報告書

JANAKPUR ZONE AGRICULTURE DEVELOP MENT PROJECT
Casual ovservation & further need of
the Project

Janakpur Agriculture Development Project at present has many types of work varying from Irrigation to Hardinath farm, Sindhuli farm, Janakpur Hortionaltural farm & Agriculture Extension activities spreeding in 5 districts i.e, Dhanmaha, Mahottary, Sarlahi, Sindhuli & Remechhap. Remechhap district has been taken this year under the project.

Methods used:- Project evaluation has been completed in 7 days joinlly by Japanese & Nepalese Team. The whole group was divided in to two, one group locking around Irrigation & its potentialities & the other group visited I.A.P. area, Hardinath farm & discussion with A.D.C.s of Sarlahi, Mahottary, Sindhuli & J.T.s from Dhanusha. Questionaire were also used to collect their responses. Farm manager of Sindhuli, Hardinath were also interviewed as well as defferent officials of the project in cluding Nepalese project manager.

Reactions of Nepalese Team:-

1.A.- Irrigation deep tubewells numbering nine producing 78 liter/second water which is not sufficient to Irrignte even part wise 420 Hacters of land. Irrigation channels are still incomplete but construction work are in progress. Water distribution has to be well organized & regularlsed for better cropoing pattern. Areas have to be divided for early & late paddy as well as wheat & other crops to the benefit of the farmers. To have better discharge of water from the deep tube wells, wells have to be energised to Irrigate the command areas.

B._ Around I.A.P. or in potenlial areas of Dhanusha, Mahottary & Sarlahi deep or Shallow tube wells should be considered in the coming years to show the impact of the project.

2.A.- Infrastructures at Naktajhijh is nearly complete & the project activ activities must go extensively & intensively in the districts. But there

are still some construction work needed. Officials residences, subcentres, panchayat centres have also to be constructed & Agriculture Extension work has to be intensified which is now the second phase of the project.

B.- In Hilly areas of Sindhuli & Ramechhap, horticulture, vegetable seeds cultivation as well as livestock improvement especially Veterinary services has to be popularised. Food grain cultivation must also be intensified in the project Supervised districts.

There has been some very good work in extension but still more has to be done.

3.A.- Hardinath farm is doing excellent jobs in coop production & training activities. There are two tube wells which could not cops with the water requirement of the farm in the lean months so if two more deep tubewells are fixed in the farm, it could relieve the water shortage in time of need.

B.- Sindhuli Agriculture farm has come into production as well as in training activities. Vegetables seedlings are being sold to the farmers & is showing the impact in the farmer's Vegetable interest. To have better training at the farm, centres some specialist have to be posted.

C.- Horticulture farm at Dhanisha is in nice shape & could come up to supply the plants to the farmers.

4.- Naktajhijh centre has been figured as regional centre for Training and services, There are occomodation facilities for the trainers but lecture rooms were not figured in the construction work. It should be fullpleged training centre of central region where constant training all the year round could be held. So there is need for training hall, teaching & training materials which could cater the requirements of present well furniched training centres. Some more accomodation facilities have to be created. Hardinath farm has residential facilities for the training but clase room work is done in the shed so class room facilities have to be created too. Lab. facilities for soils, seeds, equipment for plant prodection has to be availed to run a service centre.

5.- There are numbers of Vehicles, Tractors & other equipments for daily operations but spare parts shortage are creating a big problem. It could be advisable to have 20% of the value of equipment as a spare parts at J.A.D.P.

6.- To excellerale hill agriculturial development i.e, to supply agricul-turial inputs & help in marketing the farmers produce a link all weather road from high way to Sindhuli is very much neceesary. It should be facourabled considered is further development colloboration.

Nepalese Team Members

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2.	Mr. R.C. Gupta	- Agri. Ext. Chief, Division of Agri. Ext. & Training Department of Agriculture.
3.	Mr. T.N. Singh	- Ceo-hydrologist, Dept. of Irrigation.
4.	Mr. C.karmacharya	- Agri. Information Officer, Division of Agriculture, Information, Department of Agriculture.
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Sub-project wise Evaluation Components under the Idea of two Major Sectors of Project Function and Activities

Major Sector	1. Project Centre	11. Hardinath Agri Farm	111. Rapti Model Farm.
A. Project per se.- Arrangement of basic Project Function-Physical Economic & personnel components.	A-1-1 Buildings 1-2 Facilities. 1-3 Equipments/Implements 1-4 Personnel (manpower) 1-5 Maintenance and custoday of materials. 1-6 Linkage with concerned supporting agencies.	A-11-1 Buildings 2 Facilities. 3 Equipments/Implements. 4 Personnel 5 Field Arrangement 6 Maintenance 7 Linkage with supporting agencies.	A-111-1 Buildings. 2 Facilities 3 Equipments/Implements. 4 Personnel 5 Field arrangement 6 Maintenance. 7 Linkage with supporting agencies.
B. Project Acivities for grass-roots.- Chart for 'grass-roots' Measurement of Effects due to the project activities	B-1-1 Basic survey & Investi Investigations 1-2 Trainings. a) Officers. b) Extention workers. c) Leading farmers. 1-3 Extension activities a) Publications b) Information activities 1-4 Support of A.D.O.S	B-11-1 Experiments/trials 2 Demonstration, Exhibition. 3 Trainings a) Extension workers. b) Leading farmers c) Agro-Mechanics. d) Farmers 4 Production of crops. 5 Production & distribtuion of seeds & seedlings.	B-111-1 Trials. 2 Demonstration. 3 Training/guidance of Farmers. 4 Production of crops 5 Production and distribution of seeds & seedlings.

IV. IAP area	V. Hill Development.	VI. A.D.Os.	VII. Sindhuli Farm &
A-IV-1. Irrigation Facilities	A-V-1. Basic survey & Investigation	VI-A-1. Buildings.	VII-A-1. Buildings.
2. Discharge of water	2. Planning of Hill Agri. Development.	2. Facilities.	2. Facilities.
3. Systematic organization of farmers for effective use of water	3. Preliminary trial of fruit cultivation - distribution/ planting of Japanese Fruit sapplings.	3. Equipments Implements.	3. Equipments. Implements.
4. Extension activities		4. Personnels.	4. Personnels.
5. Maintenance of facilities.			
B-IV-1. Revolution of farmers intention.	B-V-1. Peripatetic guidance	VI-B-1. Demonstration	VII-B-1. Trial & Demonstration.
2. Cropping pattern.	2. Trial of small Irrigation Project.	2. Extension services.	2. Production & distribution of seeds & seedlings.
3. Crop production		3. Guidance of farmers. a) Group b) Individual.	3. Other services for farmers.
4. Economic Analysis a) Inputs/Outputs. b) Cost/Benefits.		4. Information Services.	
5. Level up of living standered.			

JADP Evaluation／協力効果測定 interview の質問事項（案）

1979.6月

NEPAL side

H.M.G.Officials	JADP：Manager	JADP：Staff	ADOs.Districts	Ext.Workers.JTs.JTAs.	Panchayats	Leading Farmers	
(1)Projectの効果・評価の概要 評価の基準	(1)Project の効果、日本側の （協力効果）	(1)Section別の業績、反省、自己評価	(1)District 別Inputs 主要業績	(1)JADPとのつながり 依存度	(1)JADPとのつながり 依存度、利用度	(1)JADPとのつながり 依存度、利用度	一般の農家は Q－№2 ＋ №3 （省略）
(2)Project活動の自主的定着度／N．Side hand over 迄、後の問題点、補強分野	(2)Centre 運営・機能定着の程度と hand over 迄、後補強事項	(2)計画／目標に照らし未到達分野対応策	(2)計画／目標で未達成分野 活動進展度	(2)Training 受益 具体的場面	(2)"Grass-roots"side からのJADP活動の評価	(2)農民側からみたJADP・ADO・Ext. worker の活動	
(3)Extensionする場合の重点指向方向の確認	(3)BOAD／Joint Meeting に対する評価 活用度	(3)活動の8本柱： Training.Appl. Research & Extension 毎の自己標価	(3)活動阻害主要因	(3)農民の接触の程度：強度：感応	(3)過去5カ年間の変化：生産・技術・所得・生活・農民意識の面で	(3)Training その他 JADP活動から受けた具体的収益	
(4)現地における他の関係諸機関との協力体制	(4)日本側との協調 日本側Expentsに対する不満	(4)現地側／日本側 業績評価寄与率	(4)今後の展望と短期計画	(4)活動助長条件と阻害要因	(4)JADP活動に対する意見・希望	(4)自らの営農内容の過去5年間の　のうち、JADPのServiceによるもの	
(5)"Bench mark" study 結果を活かし、近い将来Post-Era. する意思の有無	(5)Management のmain impeding factor	(5)上記以外は Section／sub project 別、作成	(5)上記以外はQ－№1による（次のページの附表）	(5)JADPへの要望	(5)上記以外の技術的分野ではQ－№1による	(5)技術的事項はQ－№2、№3による	

JAPAN side	Embassy	Adviser	Leader	Experts	JOCV	NOTE（Question の Main Points）
〔Post (1)Interviewの実際に当っては、この趣旨に則り、応答し易いように工夫する。 （抽象的表現項目） (2)総括とりまとめの場合は、協定／条項に準じ更に体系的評価基準によって評価を試みる。*	(1)評価概要と評価基準 (2)N側の協調性 (3)Ext. の場合の方向 (4)希望、提言事項 (5)将来の展望	(1)Ad.　の評価、現地側評価、夫々の評価基準 (2)評価の他国との比較 (3)日本側Expertsの活動に対する意見 (4)現地側／専門家に対するAd.内容 (5)Ext. の場合のAd.の必要性・理由	(1)計画（含・修正）と進展度、自己評価 (2)Project活動定着度、補強必要分野 (3)Sub-Project毎の評価、目標達成度 (4)Grass-roots技術の定着度 (5)将来の展望	(1)計画　果 自己評価 (2)目的未達成分野とそれへの対応 (3)Section別の日本側／現地側の寄与率 (4)個々の活動阻害要因と対応策 (5)東京 side への要望	(1)協定／条項に照らし、目的達成度 (2)JADP派遣隊員活動の評価 (3)N側からの要請の経過に対応 (4)Ext. の場合の Kath. 長としての意見 (5)JICA＋JADP side への希望	A．Project活動自体： 自主的活動機能の定着程度 2－3年間補強必要分野 当初の協定／条項重視 B．技術の定着： 主対象をIAPとし、併せて可能な限りProject 全 area を含める。人的・物的・社会・経済的 ― 生産・技術・収益・生活面で、5年間の変化・推移の把握につとめる。 C．Projectの評価と日本側協力効果を可能な限りの区別を試みる。

資料－Ⅲ　エバリュエーションに関する考察

1. 目　　的

当年１１月６日（約４カ月後）の協定期間満了を間近かにひかえた段階で、過去約５カ年間（準備期間を加えると約７年間）にわたり実施してきた本事業の活動成果を分析評価することを主目的とし、併せて現協定満了後の取扱いについて検討し、その結果を両国政府関係機関に対し、提言することを目的とする。

上記目的により本調査の性格は事後評価策、中間評価的なものであり、その方法も両者併用方式となる。

2. 調査の形式 ― 現地側との合同調査形式採用

本調査が、ただに事後評価だけでなく、終了後の扱い、即ちプロジェクトの延長を想定した場合の展開方向をも併せて検討すべき、一種の事前評価でもあるので、このエバリュエーションの成果をたかめるため、現地側との“Ｊｏｉｎｔ-ｗｏｒｋ”様式を採用することとした。しかし事前の相互打合せ期間が甚だ短かく、国内における細部打合、計画立案期間も余りにも僅かで、Ｊｏｉｎｔ-ｗｏｒｋ としての事前準備甚だ不十分なままに現地に乗り込んだことと、更に現地調査期間が余りにも短かく、併せて、本調査の一つのメインポイントでもあるＩＡＰ地区農家対策の経済効果測定が、社会・政情不穏のため限られた範囲しか実施できず、計画変更のやむなきにいたったため、真に効果的な“Ｊｏｉｎｔ-ｗｏｒｋ”の実をあげ得なかったことは甚だ遺憾とするところである。僅かに、同地区の実態並びに地域内の各デストリクト対象の技術普及度の過去５年間の推移について、関係者及びＡＤＯを通じて情報の収集、更に、本プロジェクトとして1977年以降も重視されるにいたったトレーニングのグラス・ルーツにおける効果測定は実施にいたらず、その手法について合同討議し、被訓練者対策のアンケート調査モデルを作成し得たにすぎなかったことは、その理由のいかんにかかわらず遺憾とするところである。

3. 本調査で採用された手法の特色

プロジェクトの評価手法として、従来のそれに対して新たに本調査で採用された特色の主なものは次の５点に要約される。

(1) いわゆる慣行方式に把われないで、しかも前年度ＪＩＣＡ報告（農計画、ＪＲ７９－４）を参考としその実用性の検討、更にその不備と思われる点を補足・追加し、その内容の充実をも併せて考慮する。

(2) 上記報告書でも明確でない「評価」と「効果測定」との関係をある程度明確にし（従来混

同されがち）、評価の体系化を試みたこと。即ち、この種プロジェクトの真の目的"農業開発のための技術普及基礎の確立"に立脚し、当該プロジェクト協力終了時点の評価対象としては、時間的推移とともに累積・増幅する経済的・社会的効果よりも、プロジェクト構成主要素及び活動業績を主対象とし、評価／効果測定対象事項の体系化を主軸としてプロジェクトの分析、情報収集の類域化、部分評価の試みがとり入れられた。

(3) 目標達成方式による評価では目標（Target）のおき方が一つのポイントとなる。目標が明示されている項目についてはそれによるが、そうでない場合に対する一つの試みとして、現地のスタッフ・専門家による「想定目標」と、それへの接近度の「自己評価」を全員からアンケート調査方式で記入提出させ、それに若干のエバリュエーターの制断を加えて、部分評価表を作成し、総合評価への誘導を試みた。

(4) ＯＥＣＤその他外国機関の recommendation にしたがって（質的項目の数値的表現）評価の Indicator として、全評価対象項目について、百分率表示法を試みた。数字で示される項目（数量的）については比較的抵抗なく、その説得性も高いが、そうでない事項については客観性を欠く。しかし、その実態を把握すれば、合議により、かなりの接近値で表示できそうである。

(5) 現地調査は現地側ネ国とのＪoint-work 形式をとり、調査期間の短い点を補うため若干の試みを加え、更にネ国側で３年余前に実施したプロジェクトの中間評価の結果との比較検討により最終評価が試みられた。

4. プロジェクト評価／効果測定作業手順

全体構想：前年度ＪＩＣＡ刊「プロジェクト効果測定に関する調査報告書」（普及プロジェクト編）を参考とし、それに若干の補足、一部新たな手法を加え、効果測定だけでなく、プロジェクト評価の体系化を試みようとした*。

事前準備：

国内：プロジェクトの目的／Objective & Target, activities に対する理解、調査のねらい、方法に関する意識の統一・合意、プロジェクトの分析、調査項目、面接調査表の立案作成

現地：現地の実情に基づき上記原案の修正、現地側との合意により具体的調査実行計画の

＊プロジェクトの評価対象／評価コンポネンツは大別して、プロジェクトレベルと農民レベルの両局面があり、両者は関連するが、上記の報告書は後者を主対象とした効果測定手法作業の結果であって、前者のプロジェクトレベルの成果の評価を扱ったものでなく、今回の調査における手法の試みは、上記報告書の補足的意味を兼ねるものである。

作成、作業分担のとりきめ

現地調査：上記の実行計画により実施

資料収集：諸記録の収集、報告書類及び刊行物に併せて、新たな試みとしてプロジェクト関係者（全スタッフ及び専門家）に対し質問表を示し、その回答を求め、両国マネジャーがそれにコメントを付して提出方を要請。（内容別紙）

面接調査：調査対象職種別に予め調査事項を準備し（別紙）、ただに面接だけでなく、各人からの情報収集の（上記及び下記）ポイントを明らかにした。

アンケート調査：上記の調査表の他、対農民の「Trainingの効果測定」の一方法として、アンケート調査表のモデルを作成（現地側共同）、その調査実施を示唆（時間的余裕なく）。

諸資料の整理：現地においては現地対象の報告書作成上の大筋にとどめ、詳細は帰国後。

評価作業：

評価の体系化：評価基準はProject Level と Farmers Level に大別し、夫々の評価 Components をきめ体系化をはかる。

但し、Project Level は、Project Body と Project activityに区分し、夫々内容毎の評価を、Farmers Level は効果測定を主対象とする。

目標の設定*：当初もしくは修正目標の明確なものはそれにより、そうでない項目は、プロジェクトのスタッフ及び専門家夫々の想定目標（Target）によることとした。

評価指標：計画段階で明示されている事項は、それへの接近度を百分率で、その他の事項は、上記の想定目標に対する達成度もしくは逆に業績積上げ程度を推定%で示す方式を採用することとした。

部分評価と総合評価：評価 Components 毎に百分率で表わされた評価指標を Project Level と Farmers Level の両大別区分毎に集計。平均値で夫々の目標達成度を示すこととする。

当初（協定）目標達成度と中途の修正目標に対する達成度に区分した夫々の評価を試みることにする。

現地実施の中間評価との比較：最終評価として、1976.2～3月に実施されたネ国側の自主的評価結果と対比して、その後の変化・推移を記録することにする。

*計画策定時、次の3様の目標を想定することが好ましい。

ambitious target

probable target

most probable target

評価の場合、設定目標が上記の何れかを考慮すべきである。

5. 評　　価

(1) プロジェクトの目標（Objective）と評価の枠組み

評価の手法と手順については、この調査で採用された特色とともに前章で既に述べられており、ここでは評価実施上の重要ポイントとして、このプロジェクトが特殊な経過をたどり、転換期（前節）を境として性格・内容の変化があったため、この変化に基づくプロジェクト目標の明確化とそれによる評価の枠組みについてふれることにしよう。

先ず、転換期の前と後との間のプロジェクトの性格と活動内容、重点方向の変化により、評価対象の扱いが問題となる。即ち、対象を当初の計画だけとするか、それとも転換後の修正・追加された事項を主とするか、それとも当初を主とし、それに後者を従として加えるか、の三様のいづれによるかである。文籍によれば[3]、他国の事例では当初説と修正重視説に分かれているが、ここでは両者の併用、即ち当初計画並びに修正・追加を含めて、評価対象の分析、調査項目の選定を行った。Sub project 対象のそれが英文によるチャートであり、対職種（人）関係のそれが和文による「質問事項」である。

また、このプロジェクトの目標（Objective）及び下位目標（Subobjective）の目標（Target）が明確でないことに対する評価実施上の対応が、次の重要なポイントとなる。（個別小目標については前節に記載）　このことは、このプロジェクトの転換期に赴任した前リーダーによって指摘され[13]（総合報告書№9）、また現地ネ国実施の中間評価[1] Interim Report of the "Evaluation of the JADP" A.P.S.C.Nepal(1976) でも次のように述べられている。Purpose of the Project の項で、"no specific Objectives of the Project are outlined in the Agreement"。さらに、"Yet, looking at its present shape, the Project seems to cover the following fields" として各 Sub-project 毎の活動内容の項目を Agreement の Annex から総括して記録している。

前リーダーは赴任前に Agreement をレヴューし、このことに気づき、着任直後、これをこのプロジェクト運営上の一つの欠陥とみなし、当時のプロジェクトの実情に照らし、Objective と target の再検討を試み、諸般の活動の体系化と個々の活動分野の位置づけを明らかにした。当時の転換期における着想と現地における計画の変更は次のレポートに記録されている。"The Next Phase of Development of the JADP Activity — Innovation of the activity and the concrete Programme in the coming 2～3 years; 1977～'79.

本調査結果に基づくプロジェクトの評価に当っては、上記の記録を参考とし、さらにJICA報告書（JR.79－4）に準拠して、そのObjective 及び Subobjectives の tar-

gets を決定することとした。

以上の作業過程を経て、評価に必要なプロジェクト全体の流れを整理し、プロジェクト評価のための論理的枠組みを試みたのが次の附表である。また、この枠組みと前年度の効果測定手法調査報告書のなかで、農業普及プロジェクトの特性に立脚して案出・提示されたアイデアによって評価作業を進め、評価結果を整理して表示したのが次節の附表である。

A Logical Frame Work for the Evaluation of JADP

- Modified the USAID matrix/moded (1975); Citeo from N.lmboden (1978) (3)

	Program Goal (High Level Goal)	Objective (Project Level)	Subobjective (Sub-Project Level)	Target (Purpose)	Input (schedule)	Output (Result)
Original Pattern - Agreement	increase of farmers income and improving their standard of living.	no specific objectives are outlined in the Agreement( )	Hardinath A.F.I.A.P. area Rapti M.F Hills develop.	not clear in the So-called Target	Schedule/activities are described in the each sub-project respectively (Table ...)	
Modified Pattern - under the actual status of the Project ongoing activities (1977~)	increase of farmers income and improving their standard of living.	In order to achieve Agricultural Area Development of Janakpur Zone establishment of Strengthening of Agricultural Extension Work/Programme	1.Establishment of Project Body 2.Strengthening of Project Activities 3.Establishment of strengthening of Extension Programme of new techniques for farmers	Establishment of the Project activities per se settlement of improved techniques to farmers level	Buildings Facilities etc. including irrigation facilities etc. . . . . (Table ...)	

NOTE: Regarding the Subobjective of general Agricultural Extension Project, following three 'pillars' are indicated under the view point of its specific features of the activities.( )

(1) Applied Research, Survey & Innertigation, (2) Training, and (3) Extension.( )

協定にかかげられた" for the purpose of increasing formers income and improving their standard of living "は、評価の一般的図式にあてはめると、Project の Objective（多くの場合はそのように理解されている）とするよりも、むしろ、上位目標（Programme Goal）に相当し（APSC, Nepal の見解も同様）、更にSub-project 毎の活動項目は（協定の Annex による）Purposes もしくはInputsの大項目として扱うべきものである。

Purposes もしくはInputs の小項目のなかには目標（Target）が明示されているものもあることは別紙のとおりである。（とくにＩＡＰ地区について）

6. 部分評価と総合評価

前項で設けられた論理的枠組みのなかの、下位目標（Subobiective）のターゲット、即ちプロジェクト活動の定着と農民レベルの改良技術の定着の二大目標別に評価対象項目を整理すれば、前者ではプロジェクトの成果が対象となり、後者では効果測定の結果が対象となる。

プロジェクト活動の成果については 表－1の諸項目のうち調査を行った事項の要約をⅣ－2にかかげ、農民レベルの効果については、技術普及の度合いのみについて 図表示したのが表－3である。更にＩＡＰ地区対象の農民レベルのプロジェクト効果測定結果についてはやや詳しく別節で整理し論じられている。

これらの個々の項目についての部分評価結果を先づSub-project別に、プロジェクトレベルと農民レベル毎の評価コンポネンツとして始めて表示したのが表－5（Evaluation chart）である。この部分評価チャートの下部に、参考として3年余前にネ国側で自主的に行った中間評価の要点だけを書きそえておいた。

「附」　ネ側の自主的中間評価の評価基準と成果を高めるための助言／示唆

1. 評価の基準：評価の基準とか指標らしきものは記述されていないが、全体から窺知される。それは次のとおりである。

特　色　a．目標／目的に対する計画の妥当性、規模、経費など

b．目標／計画に対する達成の度合い

c．かなり巾広い関係各層からの意見の聴取による総合的制定

d．業務管理及び平素の服務状況に対する評価

e．将来の評価を科学的にするための" benchmark study "*の重視

2. 助言／示唆：前記の対比表を要約、最要点摘出

a．計画と実行をこの国の実情と推移に応じ考慮の上で常に改良するがよい

b．地域開発を目標とする限り、限られた灌漑地とかポテンシャルパンチャットだけを対象としてはよくない。

c．トレーニングに対しては更に重視すべきである。

d．責任者の熱意、とくに積極的指導（部下に対する）の重要性

「注」＊" benchmark study "の記録は下記の和訳参照。

「ネパール王国かんがい・食糧・農業省によるジャナカプール農業開発計画に係るベンチマーク兼中間評価調査報告書」ＪＩＣＡ，1979．2月　（農計画　ＪＲ，79－1）

上記は" benchmark "を主とした報告書で評価を主とした。本報告の中間報告書は和訳し下記に記録されている。

「ネパール農業開発計画」総合報告書№9，1978．4月．ＪＩＣＡ．ＪＲ78－5．

e．業績の整理刊行、農民及び普及員へのサービス

f．ハンドオーバーを考えて措置を早くから

7. Project の評価に関する提言

(1) 協定の結び方と Agreement について

Project 現地担当者だけでなく Evaluator もが Project の porpose-Objective の判断に苦しむような agreement を作成しないように、とくに留意すべきである。

(2) 事前評価と中間評価の重視

実施機関としては進行中の Project に対しては Post Evaluation よりも中間評価を先ず最も重視し、発足前の Project に対しては上記の Agreement 起案のベースとなる appraisal をより合理的、intensive に計画すべきである。（注－①，②）

(3) 指導班（指導調査団）派遣の改訂

これまで毎年のように派遣されている必要以上と思われるグループ編成の指導班は、前記と関連してこれを改め、中間評価調査団として5年の Project では 2／3 年目に、3年の Project では 1.5年目に派遣し、形式的でなく intensive な monitoring evaluation をする。

指導班はとくに現地の要請に基づく分野のみに限定し、その時期はとくに定めない。

(4) 評価専門の「課」の設置

従来の外部からの、その都度の「借上げ方式」の評価調査団編成から実施機関（JICA）中心の編成ができるよう、JICA内に評価専門部もしくは「評価課」を設け、常時評価手法の開発研究に当らせる。特定分野についてのみ外部からの協力を求める。（注－③）

「注」① appraisal 重視の国・機関：オーストラリア（過去）、フランス、USAID（比較的前進の動向）

② 中間評価重視の国・機関：オーストラリア（現）、オーストリア、オランダ、スエーデン、スイス、EEC

Post evaluation 重視の国：西ドイツ（但し2年に1回中間評価）以外は実施機関よりも、研究機関、大学で対象とする場合が多い。

③「評価課」をおいている国：スイス、オーストリア、カナダ、西ドイツ（各国とも関係省庁内に）

④ 現地体験者の参加を重視する国：西ドイツ、スイス、USID

〔1973 現在〕

「附」　本調査から得られた教訓その他

教　　訓

(1)　プロジェクトの body & activities／performance を主対象として評価しようとする場合、事前にその実情を把握しているときは今回のように3週間で十分であるが、そうでない場合は少くとも1カ月を必要とする。更に、

(2)　農民レベルの効果測定を重視する場合は、現地側との"Joint-work"形式とし、事前協議（細部計画作成）のため少くとも1カ月前から具体的作業に入り、できれば1名は約1週間前に派遣するがよい。現地調査の期間は、調査内容・巾・地域にもよるが、一応ランポン方式に準じてよかろう。

(3)　評価調査団のなかに現地体験者を加えることの意義を、数カ国で以前から提唱されていたが、この趣旨にそって今回の新しい試みはとくに評価されたところで、今後もこの方針をつづけることがよかろう。とくに事前準備期間が短かく、また現地における調査期間が不十分な場合、現地体験者の参加は甚だ有意といえる。

特によかった事

(1)　現地側 — とくに日本側で評価調査のための事前資料準備が周到に行われていたこと。現地ネ側の協力も十分であったこと。

(2)　団長を中心として、その方針に基づき諸作業が円滑、順調に進められ、短期間の合理的活用が図られたこと。調査団員全員健康保持、不調による支障のなかったこと。

遺　憾　事

(1)　ネ国の政情・社会不安のため農民レベルの効果測定が限られた範囲しか実施できなかったこと。

(2)　事前にネ国側の都合を打診したにもかかわらず、直接責任者の不在で将来方向について十分な目的達成できなかったこと。

(3)　雨季入りのため Hills area 調査ができなかったこと。

(4)　"Joint-survey"のため、折角5/6名の係官指名されていたが、事前の連絡なく計画・実施の面で真の"Joint-work"の実をあげるにいたらなかったこと。

引用・参考資料（評価関係）

(1) APSC : Evaluation on the JADP; (Interim Report) Nov. 1976

(2) APSC : Benchmark cum Evaluation on JADP. Dec. 1977

(3) Imboden, N : A Management Approach to Project Appraisal and Evaluation — with special reference to non-directly productive projects, OECD, 1978

(4) JADP : Report on Activities and Performances of JADP; 1972-'76'. (Progress Report No.1), Nov. 1977

(5) JADP : Performances of the Inaugulation Function JADP; Nov.25-29, 1977, (Progress Report No.2) Mar. 1978

(6) JADP : Performances and Activities of JADP, (Progress Report No.3), Sep. 1978

(7) JADP : JADP Long Term Plan (proposal), 1978

(8) JADP : JADP 協力中間報告、1979，6月

(9) JICA : ネパール農業開発計画、総合報告書No.9，1978，4月

(10) JICA : プロジェクト協力効果測定に関する調査報告書（普及プロジェクト編）
11 JR79-4，1979，3月

(11) Pant, Y.P. & Jain, S.C.: Long term Planning for Agriculture in Nepal, 1972.

(12) Pant, Y.P. : Planning Experiences in Nepal — Planning for Prosperity, 1975.

(13) Suetsugu, I: The Next Phase of Development of the JADP Activity — Innovation of the activity and the concrete programme in the coming 2-3 years; 1977-'79, Jun, 1977.

(14) Suetsugu, I.: A Brief Report on the Agricultural Development of Hills in Janakpur Zone — A Suggestion to frame the 'Grass-roots' planning in Sindhuli and Ramechhap Districts under the Leadership of new Sindhuli Extension Centre of JADP, Jan. 1978.

21st June, 1979.

Mr. R.B.Thapa and Mr. S. Ota,
Project Manager,
J.A.D.P.

Dear Sir,

I have the pleasure to inform you that I had a research plan to acquire from all Nepalese officials, section chiefs, Japanese experts and other appropriate officials (ADOs etc.) concerned their views on following points:

(1) Past performances of their sections/4 farms/5 ADOs during the past five years since starting this project. And the estimated approached distance (%) from the programme target.

(2) How they think of the future prospects regarding the impeding factors in achieving full activities in their sections/fields stated above especially on the physical, economic and personal components.

(3) How Japanese side should be in order to meet those desired situation on achieving the establishment of JADP completely/ strongly.

(4) Practical procedures in your speciality to make effective handing over of the project to the Nepalese side, now that the agreement has become near to the end.

(5) In case of extending the present cooperation with the Japanese government, what matters are most essential technically and financially ?

I would like to use the views obtained through this research as one of the basic data when we discuss with the officials of H.M.G. and arrangement in the final report of the evaluation executed.

Therefore, I shall be grateful if you could be kind enough to take following arrangement:

(1) To distribute the questionnaire to the afore said Nepalese officials and Japanese experts.

(2) To collect their answers.

(3) To forward to me their answers together with your comment on each by June 1979

Thanking in advance for your cooperation,

Yours sincerely,

Dr. H. Fukuda
Evaluation Team Leader.

The Style/Model of Description.

Name : Section/Farm/ ADO district

Term of the post : From To years

and evaluation attempted perse.

1. Part Performance: (Mention briefly as well as concretely)
   (1) ..... estimated % approached to target
   (2) ..... "
   (3) ..... "

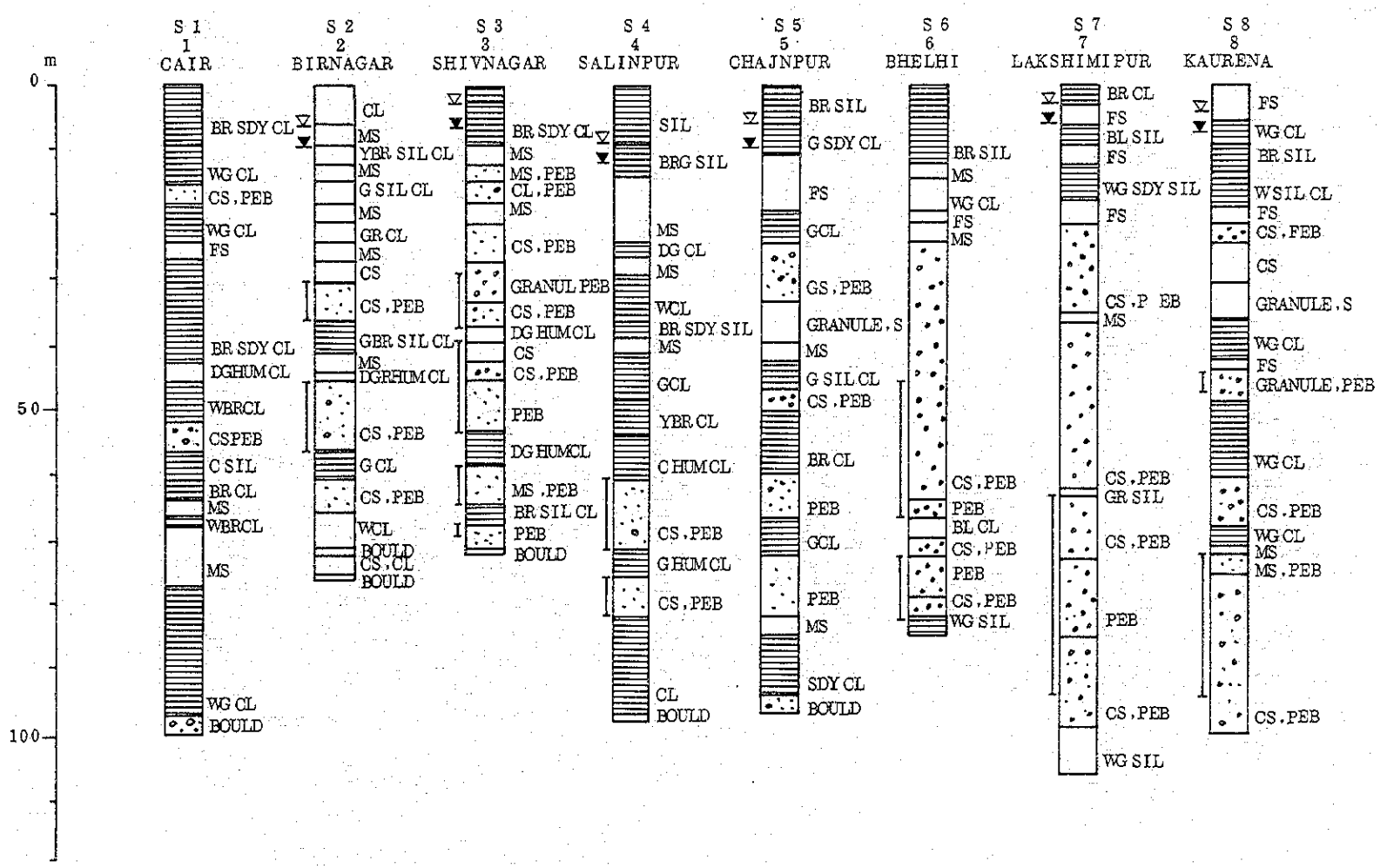
2. In order to achieve full marking target mentioned above following points are to be proposed:
   (1) Physical components:
       facilities
       implements/equipments
       others
   (2) Strengthen the personal components
   (3) Others impeding components/factors to be improved.

3. Other components - for achieving the establishment of JADP completely by the self reliance of Nepal side only.

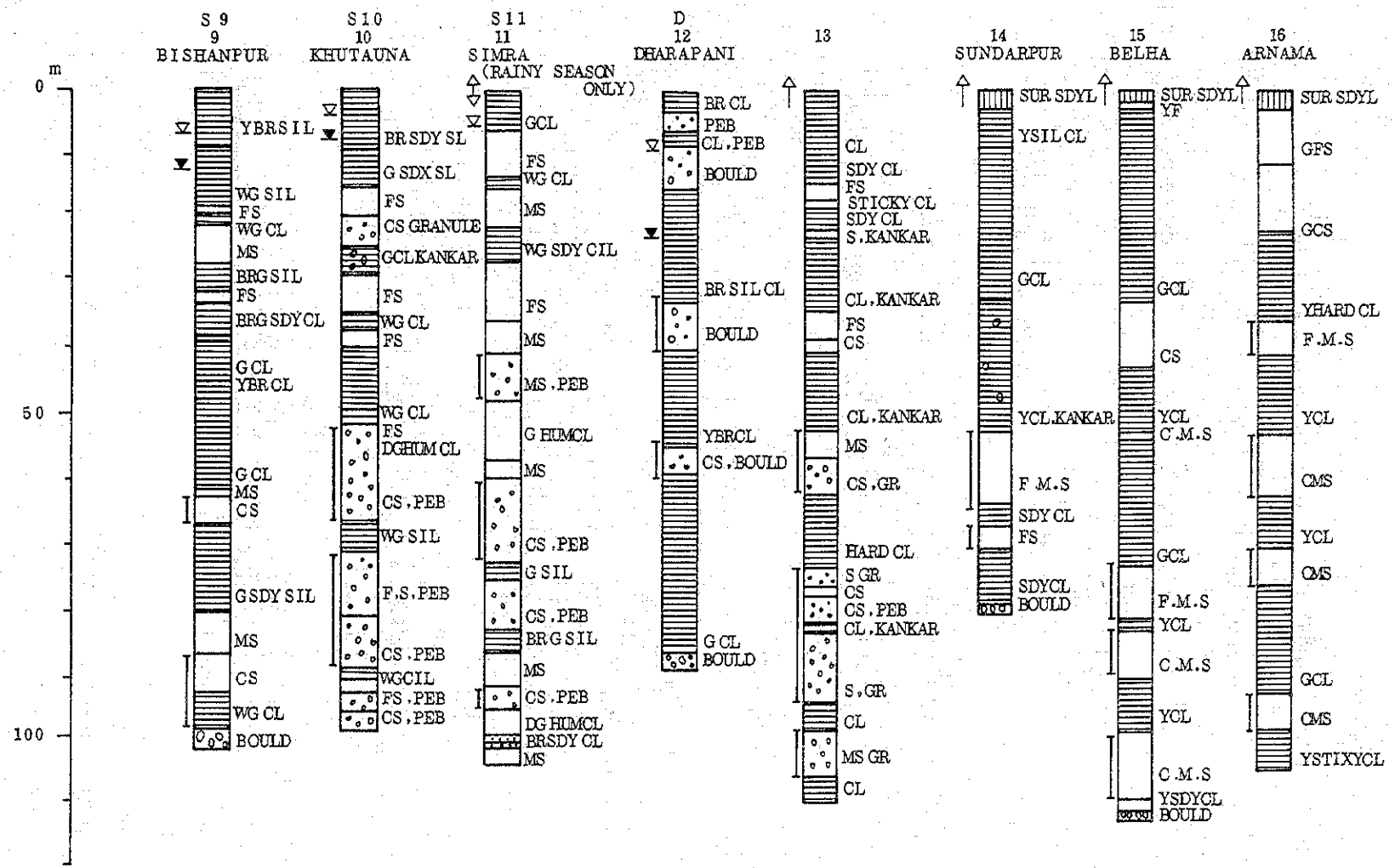
Papers to be used each one only total 3 papers.

資料Ⅳ　現存深井戸の地質柱状図

LITHOLOGICAL LOGS OF EXISTING TUBE WELLS (1)



LITHOLOGICAL LOGS OF EXISTING TUBE WELLS (2)



LITHOLOGICAL LOGS OF EXISTING TUBE WELLS (3)

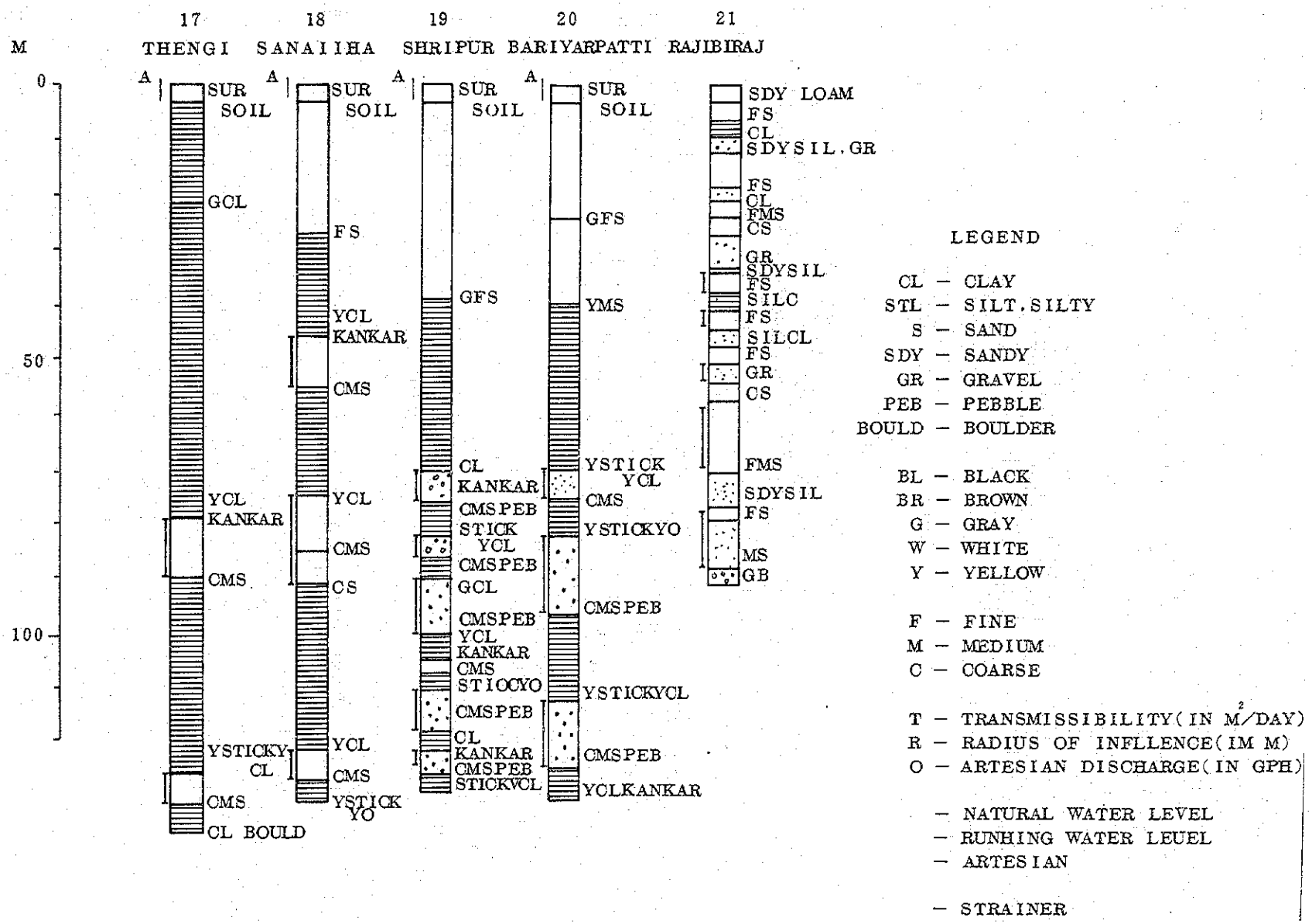
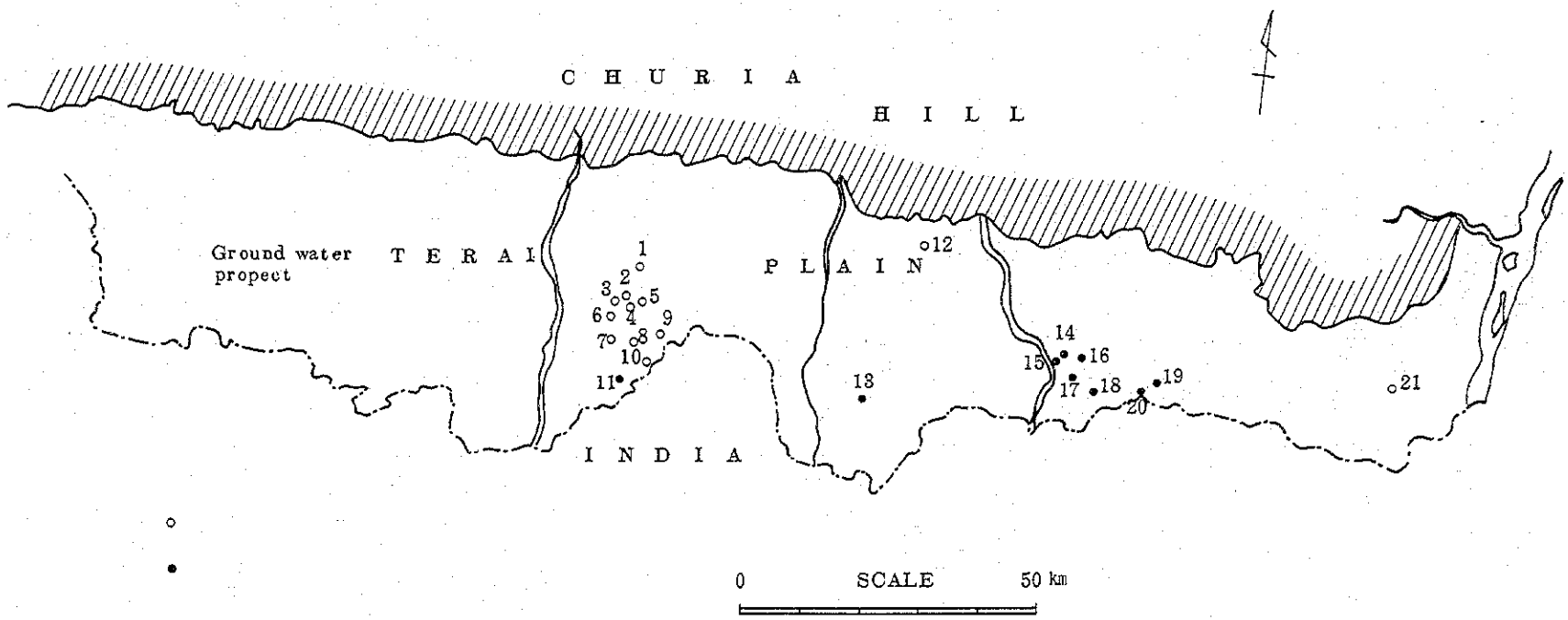


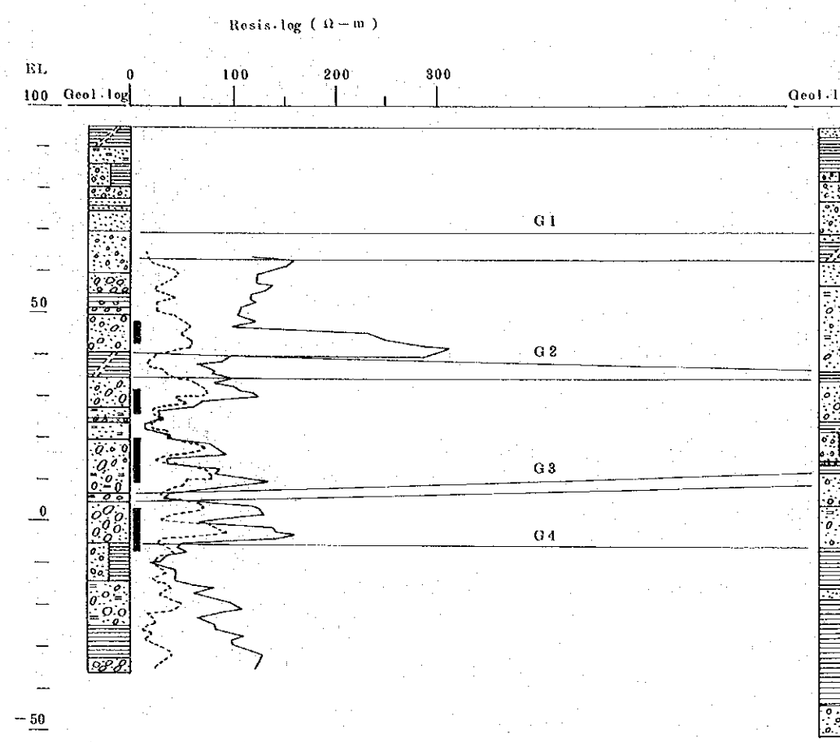
Table 2. Pump-test data on existing tube wells

Well No.	Location	Diameter (mm)	Depth (m)	N.W.I. (m)	Drawdown (m)	Discharge (m^3/d)	Specific capacity ($m^3/d/m$)	Transmissivity (m^2/day)
1	Cair	200	101					
2	Birnagar	200	77	6.40	3.35	5,750	1,720	1,170
3	Shvinagar	200	73	3.35	3.05	6,150	2,020	2,580
4	Chainpur	200	98	6.10	3.66	6,320	1,730	2, 90
5	Salimpur	200	99	9.14	4.88	4,570	936	1,200
6	Bhelhi	200	85					
7	Hakahmipur	200	107	2.74	3.05	6,950	2,280	3,060
8	Kaurena	200	101	4.27	3.05	5,930	1,940	2,485
9	Dishampur	200	104	7.32	5.49	3,820	700	900
10	Khutauna	200	101	4.27	3.66	5,670	1,550	2,020
11	Simra	200	107	2.13	3.05	6,670	2,190	2,930
12	Dharapani	200	96	15.0	14.63	120	80	100
13	Janakpur	200	119	artesian	—	—	—	
14	Sundarpur	200	87	〃	15.2	1,120	70	90
15	Belha	200	122	〃	25.9	1,150	44	60
16	Arnama	200	114	〃	16.76	2,840	170	230
17	Thengi	200	138	〃	14.94	3,900	260	360
18	Sanaita	200	132	〃	13.72	2,560	190	250
19	Shripur	200	—	〃	—	—	—	—
20	Bariyarpatti	200	132	〃	5.79	5,700	980	1,320

LOCATION OF EXISTING TUBE WELLS



I.A.P. TUBE WELL No.6



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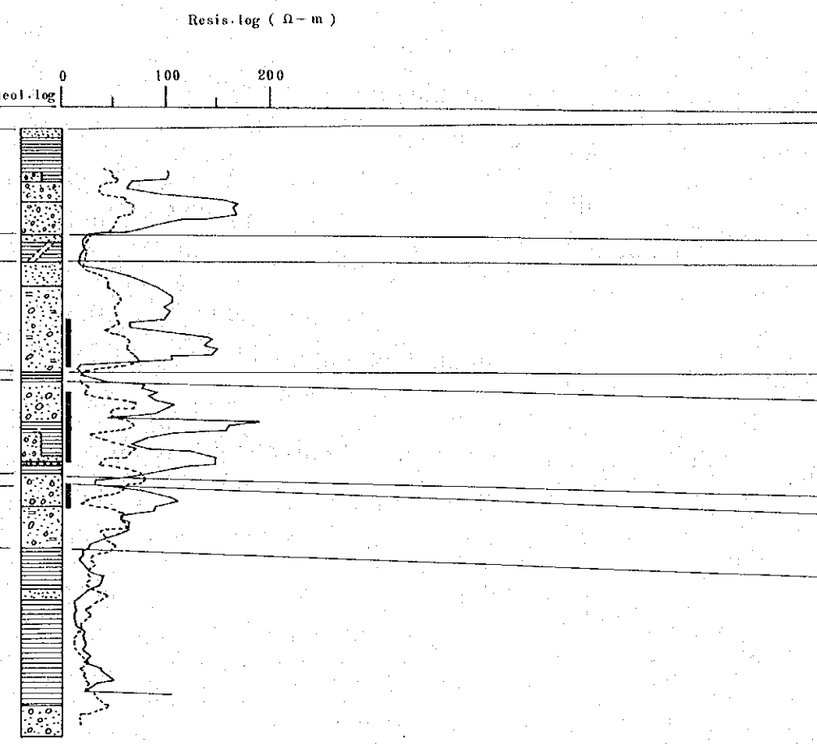
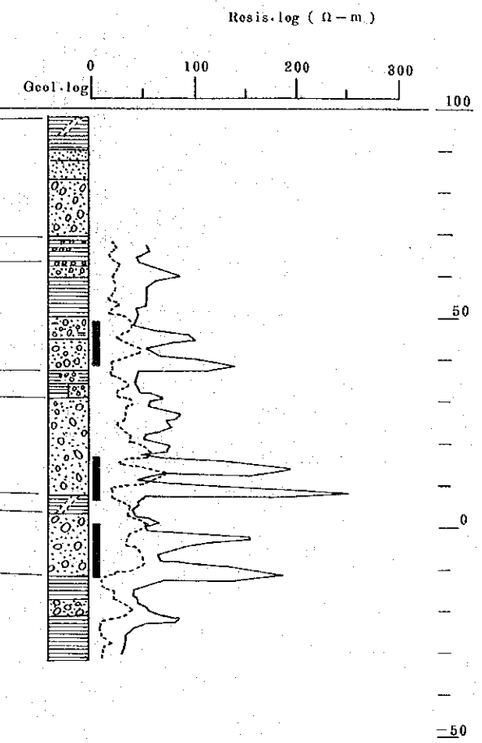
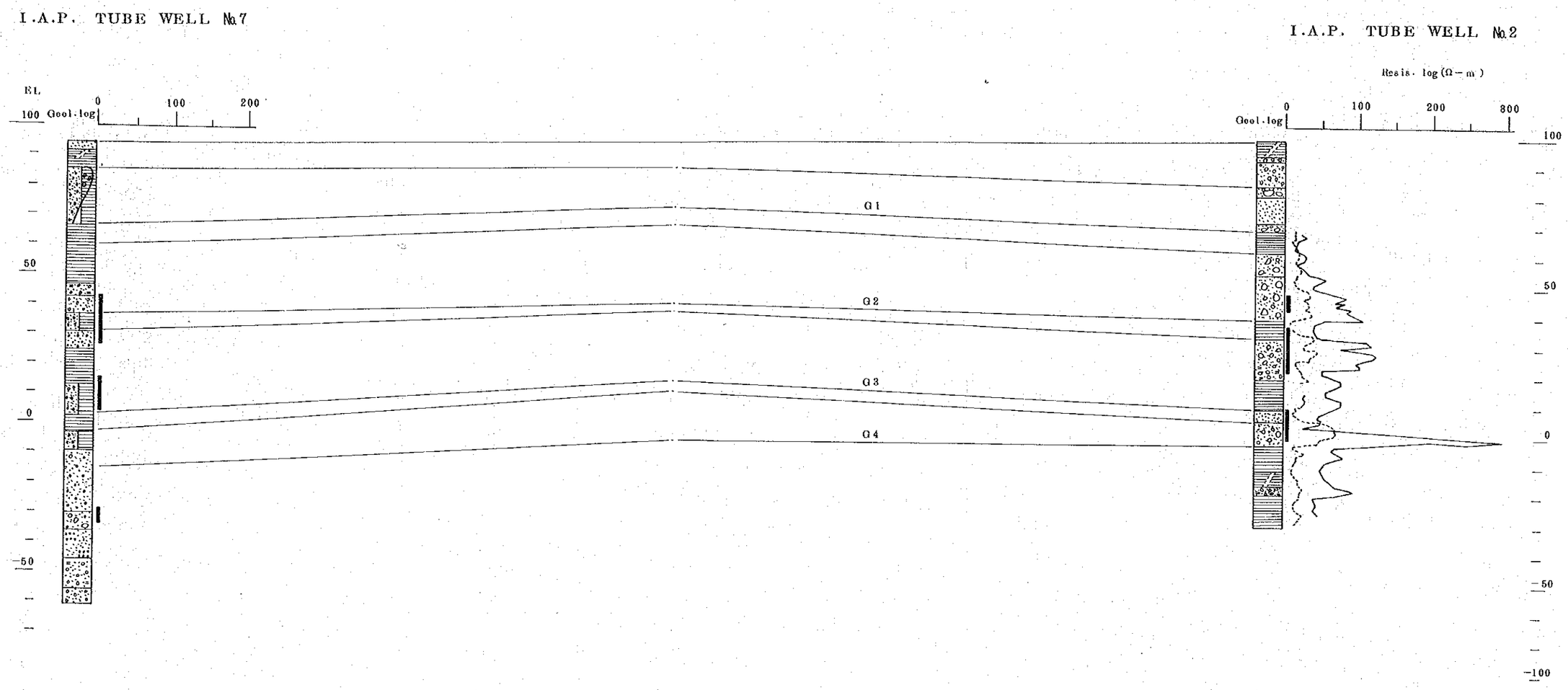
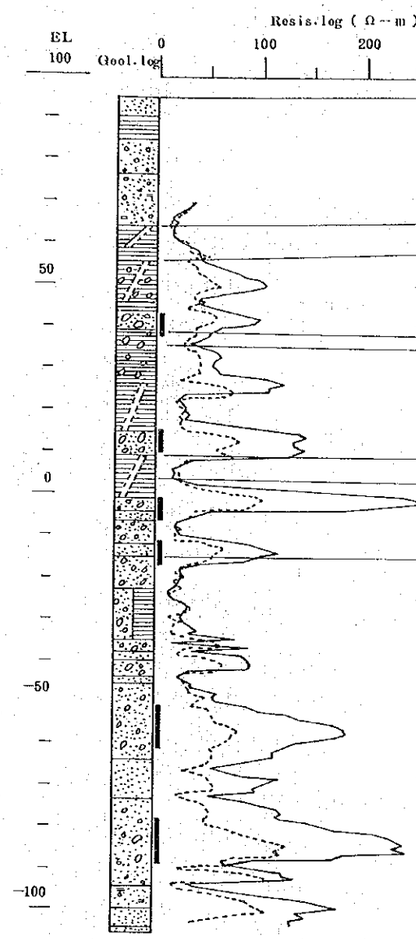


I.A.P. TUBE WELL No.1




I.A.P. TUBE WELL No.7
I.A.P. TUBE WELL No.2
EL
100
50
0
-50
Geol.log
0
100
200
Resis. log (Ω-m)
0
100
200
300
G1
G2
G3
G4

I.A.P. TUBE WELL No.8



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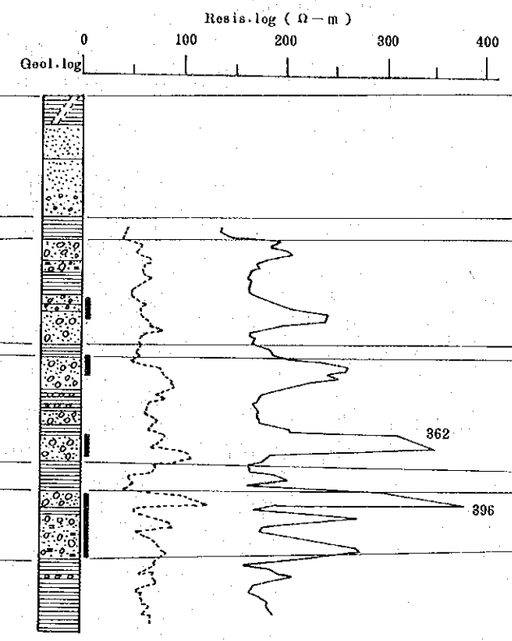

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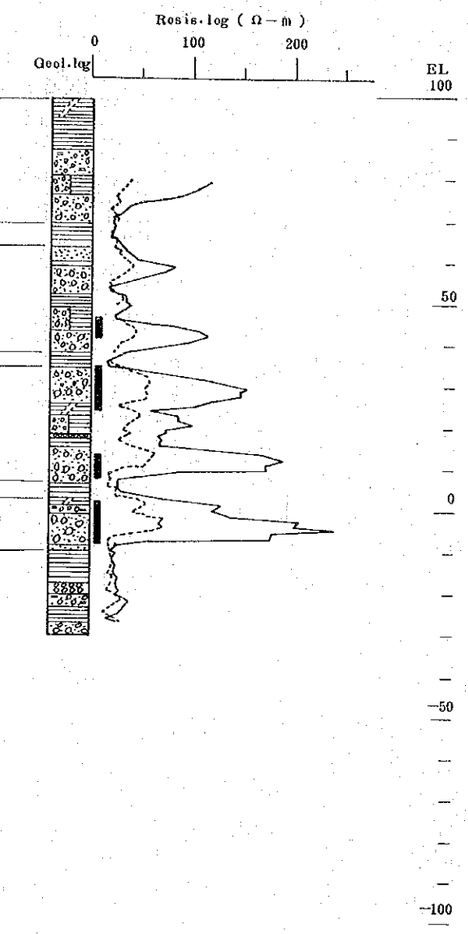
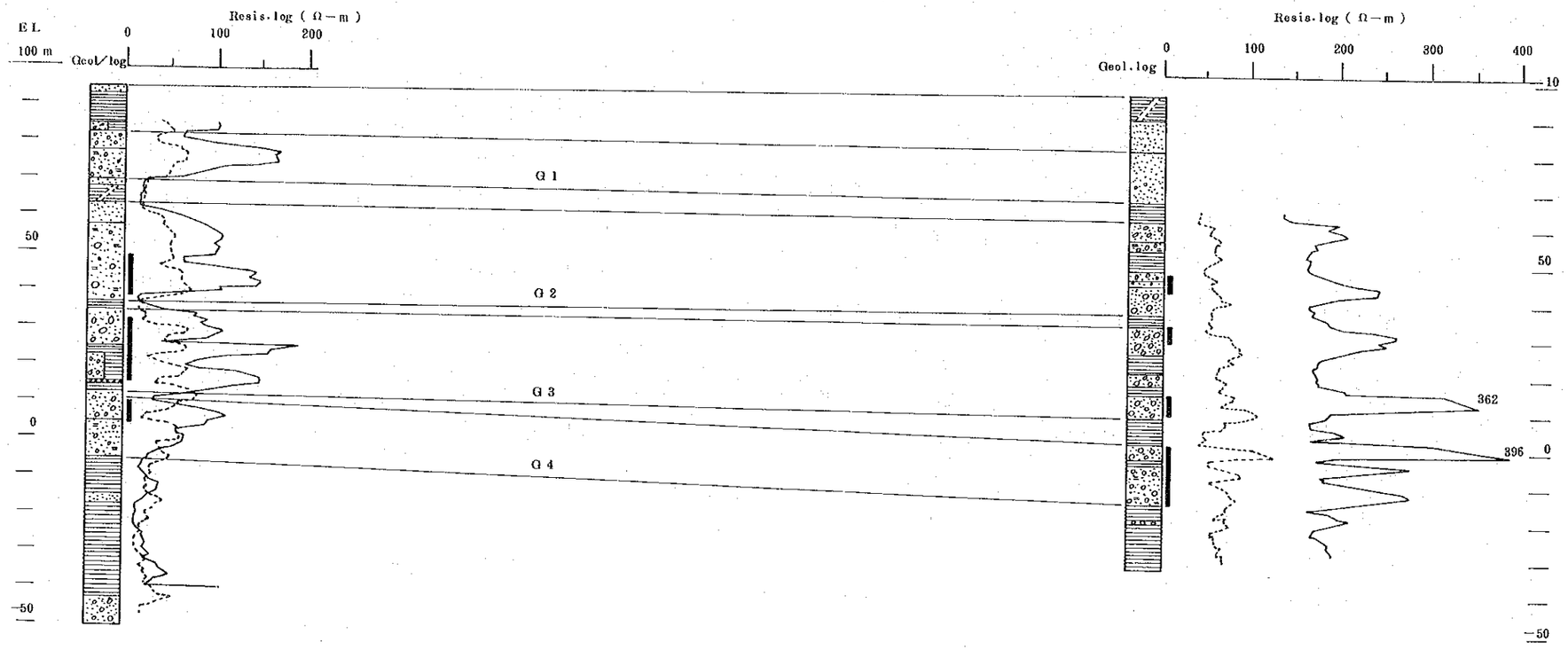


I.A.P. TUBE WELL No.4

I.A.P. TUBE WELL No.5



JICA