第７章　農業機械・設備及び工具に関する技術の開発及び実験（適正技術開発研究）

本課題に関しては，パ国における適正技術の開発研究のほか，パ国製及び導入（日本製）農機具についての試験研究が行われてきた。主な内容は次のとおりである。

1. 概　要

(1) 終了したもの

ア．トラクタ及び耕うん機による水田の耕うん試験，イ．深井戸ポンプ・脱穀機・乾燥機・精米プラントの利用試験，ウ．レイングンによる野菜への灌水試験，エ．サイレージカッタによるイピルイピルの切断と暗きょ疎水材利用試験，オ．粉のパーボイルド調製法の改良

(2) 実施中のもの

ア．人力ポンプの収集・性能調査と改良，イ．畜力犂及び装具の調査と改良，ウ．耕うん機水田車輪の改造，エ．鎌及び唐箕の改良　（後述）

(3) 計画中のもの

ア．動力脱穀機（ポンプ用エンジン利用）の試作

次に，昭和５５年度から別途に予算が計上され，また今回の調査の主対象であった「適正技術開発研究」について述べる。

2. 適正技術開発研究

1）目　的

現地に適合する中小農機具を実用的なものに改良・試作して，円滑な技術移転と普及を図ろうとするものである。

2）研究経過

まず派遣専門家が，現地で利用されている鎌及び鍬を取上げて調査検討を行い，昭和５５年度に改良試作のための試案を事業団に報告するとともに，日本国内での試作を要望した。

事業団では，現地における開発研究を支援するために，「中小農機具の改良・試作に関する検討委員会」を同年度に設置した。現地からの要望内容が委員会で検討されたうえで，巡回指導チームが現地を訪れ，野鍛冶の実態調査を行い，また携行した日本製鍬と現地製鍬の比較調査を行い，さらに３種類の日本製鎌の適応性調査を現地専門家に依頼した。

委員会では，チームの帰国報告を受けて検討を行い，鎌及び鍬を試作して現地に送付することとした。

鍬については，その後現地側での対応に問題が生じたため，これに代るものとして唐箕を取上げることになった。

昭和５６年度に再び巡回指導チームが現地を訪れ（鎌及び唐箕を携行），鎌及び唐箕の改良試作のための調査検討を行い，また派遣専門家及びカウンターパートと協議のうえ，仕様

書を作製した。この結果に基づいて3,０００丁の鎌と１５０台の唐箕が国内で試作され，昭和５７年度始めに現地に送付された。

3）今回の調査

(1) 調査及び打合せ経過

現場に配布ずみの空送品（鎌１６０丁，唐箕１０台）のアンケート回答結果を専門家から聴取するとともに，専門家と唐箕を農家及び小規模ライスミルに携行して利用して貰い，意見を聞いた。さらに，コミラの先進的な農機具工場（Comilla Co-operative Karkhana Ltd）を訪れ，現地試作についての打合せを行った。

(2) 調査結果

ア．鋸鎌（３か所，２１名の回答）

稲刈に利用した結果は，使い心地と切味は良好，形状と重さは概して良好という評価であった。改造は不必要という意見もあったが，鋸目のピッチをもう少し小さく，またもう少し軽くしたいという意見の方が多かった。購入を前提とする希望価格は５～１０TK（現地製と同程度～約２倍）であった。

イ．汎用中厚鎌（１か所，４名の回答）

この鎌はブッシュを主な対象として試作したものであるが，かやとさとうきびに利用されてあり，使い心地・切味・形状・重さ等に対する評価は多様であった。

ウ．厚鎌（１か所，４名の回答）

この鎌はジュートを主な対象として試作したものであるが，ジュート収穫用としては重過ぎるためか，竹・かや・さとうきびに利用されており，使い心地と切味は良好とのことであった。ただし，刃の直線部をもう少し長く，また軽くしたいという意見があった。

エ．唐箕

a．アンケート（１か所，５名）

籾の選別に利用した結果は，取扱い性・性能ともに良好とのことであった。なお希望価格は４００～５００ＴＫ（現地製品は７００ＴＫ程度）であった。

b．供試後の聞取り（小規模ライスミル：１，農家：１）

ライスミルでは，精米機から出た籾がら・糠・精米の混合物に利用した結果，取扱い性・性能とも良好とのことで，継続試用を希望した。なお，本機を２～３人で操作した場合の能率は５００kg／h（精米）程度で，当ライスミルの精米機の能力に適合できるものと推定された。

農家では，籾の選別に利用した結果，取扱い性・性能とも良好とのことであった。この農家は足踏脱穀機を利用しており，脱穀後の選別用として導入したいとの意向を示した（希望価格は５００ＴＫ程度）。

(3) 打合せ結果

ア．現地での試作

上述の調査結果から，鋸鎌と唐箕の普及は希望と判断されたので，現地生産のためのサンプルの製造と製造マニュアルの作製をコミラの農機具工場に依頼した。

イ．日本での対応

鋸鎌については，送付品の製造マニュアルを作製して現地側に提示し，また唐箕はついては，現地適応性をさらに向上させるための二，三の改良（ハンドルからファンへの増速比の減少，１・２番口仕切調節板の取付等）を加えたものを試作して現地に送付することが必要であるとの結論に達した。

ウ．送付品（海送分）の配布と調査

海送した鎌及び唐箕は未配布であったため，鎌約2,７５０丁と唐箕約１３０台の配布先（前者は約４０か所，後者は約３０か所）を決め，専門家とカウンターパートが引続いて調査を行うこととした。

エ．砥石の利用

現地では鎌を砥石で研ぐ習慣がないため，今後専門家とカウンターパートが配布先を訪問する際に，日本から送付した砥石を携行して研ぎ方を指導することとした。

4）評　価

鎌及び唐箕については，前述のようにまだ送付品の約１割の数についての調査結果しか得られていないので，本技術開発研究の評価のためには今後の調査結果を待つ必要があろうが，現時点における現地側の鋸鎌と唐箕に対する評価は高い。なお，その後の専門家からの報告によると，コミラの農機具工場で試作した唐箕をバ国農機具展示会に出品したところ，戒厳司令官から好評を受け，「普及すべきである」とのコメントがあったとのことである。

これらの日本製品の性能や耐久性については，問題は皆無に近いので，今後の自主生産と普及の進展が期待される。しかし，鋸鎌については，現地では適正・均一な鋼材を入手しにくいので，日本製と同程度の品質（切味・耐久性）の製品の量産は，コミラの工場でも当面は難しいと考えられるし，さらに野鍛冶の段階に下ろすためには技術指導が必要である。

唐箕については，製造及び性能の維持面は鋸鎌よりも容易とみられるが，当面は高価格が普及上の制約になると考えられる。

5）今後の課題

(1)　実施中の適正技術

現在実施中の鎌及び唐箕に関しては，現地生産と普及の見込が得られたといえる。しかし，普及の定着化のためには新たに配布した製品の性能・耐久性・問題点等を，協定期間中のみならずその後もカウンターパートによって追跡調査・検討する必要があり，また現在１社にとどまっている製造工場数を増し，これらに対する技術指導を進める必要があろう。

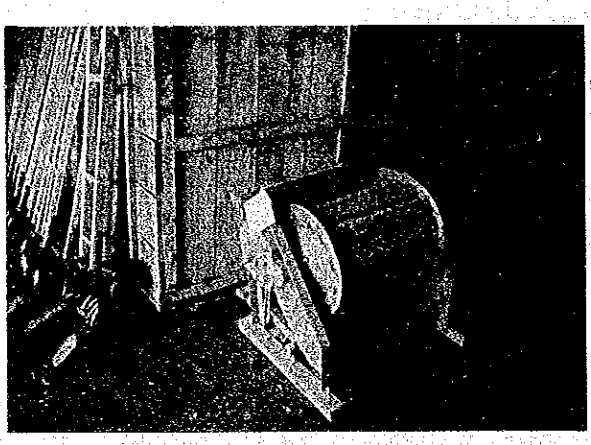
(2) 今後の適正技術

パ国の農業は，ごく一部を除いては，まだ人力と畜力が主体であり，犂（畜力）・鍬・鎌のほかは，ポンプ（人力・動力）・播種機（人力）・水田除草器（人力）・脱穀器（人力）・スレッシャー（動力）・唐箕（人力）等が除々に普及しつつある。しかし，急速な経済発展・農村労働力の減少が予測されない現状では，機械化の大幅な進展は期待できない。したがって，鎌と唐箕に続いて適正技術の開発協力を行うとするならば，現在派遣専門家が実施並びに計画中の人力ポンプの改造，畜力犂及び装具の改良，簡単な動力脱穀機の開発等が適当と考えられる。

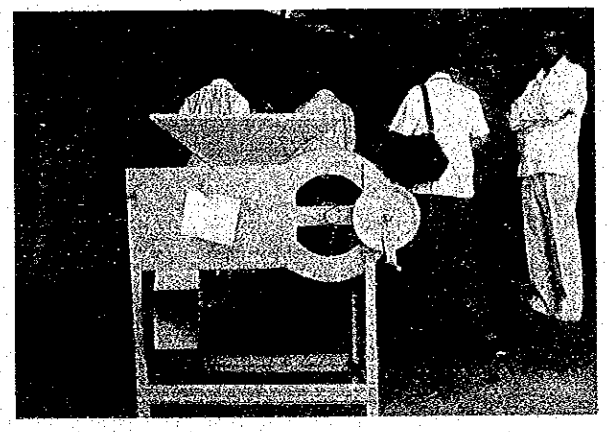
農家での厚鎌の試用（竹と木の枝を切り，切味は良好とのこと）

農家での唐箕の試用（籾を選別し，性能・取扱い性は良好とのこと）

コミラの工場製の唐箕（構造・性能に問題がある。年間生産台数は約1,５００台，価格は７５０ＫＴ）



コミラの工場製の水田除草器と脱穀機（除草器の年間生産台数は約5,０００台，価格は１４０ＴＫ，同じく脱穀機は約3,０００台，1,１００ＴＫ）



COMILLA ACADEMY FOF RURAL DEUELOPMENTにおいて日本製の唐箕を改良試作（'８２．１０月）

第 8 章　エバリュエーションの方法に関する意見交換

バ側の関係者と再三にわたりプロジェクトのエバリュエーションの方法について検討した。その結果，バ側の意向としては次の通りである。

(1) バ側関係者によるエバリュエーション

計画者の農業課長Dr. ALI を表敬した際，プロジェクトのエバリュエーションを行うため (a), Technical Committee と (b) National Committee の２つの委員会を設置する用意があることを主張した。

Technical Committee はBARI, BRRI, 農業省等から研究スタッフを選出し，技術的な評価を行うこととし，もう一つの Natinal Committeeは大蔵省，農業省，計画省，Bangladesh Institute Development Studies, BARI, BRRI, Project Monitering Bureaw のシニアスタフが出席しプロジェクトの総合評価を行うものである。同氏としては１９８２年の１２月及至１９８３年の１月頃にCommitteeを開催したいという考えであった。

(2) 日本からの調査団派遣によるエバリュエーション

農業省の訓練部長MR. A. K. M. MANSUR及びCERDIの所長であるMR. Khanと打合せた際，日本政府がエバリュエーションチームを派遣した場合，日バ双方が出席し合同でエバリュエーションを実施したいとのことであった。バ側が出席するメンバーとしては農業省のJoint Secretary, 大蔵省ERD, 計画省，CERDIの所長等である。

第 9 章　協定期間終了後の対応に関しバ側関係者の意向，考え方聴取

農業省等バ側関係者の意向及び考えについては次の通りである。

(1) 農業省訓練部長　Mr. A. K. M. MANSUR及びCERD所長，MR. N. M. Khan

(a) 訓　練

CERDI は訓練に重点を置いているが，その予算がバ側から配慮されていない現状である。協定終了後も何んとかしてその経費を外国から援助していただき継続していきたい。訓練の主なものとして第1にAETIの教官と専門技術員の訓練，第2に郡農務官及び郡普及指導官の技術研修，第3にAETIの所長及び地域農業普及所の所長及び次長を対象としたワークショップ及びセミナーを開催する。

(b) 職員宿舎の建設

当初バ側の予算で職員宿舎を建設する予定であったが，その予算が確保されず，実現していない現状である。今後建設経費の援助（外国）により，職員宿舎を建設したい。

(c) 海外研修（第3国研修）

日本及び諸外国から研修経費を負担していただきCERDIスタッフがMSC及びPHDを取得するようにしたい。

(d) 日本からの専門家派遣

具体的にはバ側関係者（農業省）と検討していないが，プロジェクトを延長した場合，必要となる専門家としては，チームリーダー，農業機械，園芸，栽培（土壌分析のできる専門家），農業普及，業務調整の6名である。

(2) 技術会議会長 Dr. K. M. BADRUDDOZA

プロジェクト全体の進捗は当初の計画と比較すると約40％と考える。当初バ側の予算がなく，中央農業普及技術開発研究所の建設が大幅に遅れたことによりInitiation stage が長かった。将来，日本から協力していただくとすれば，訓練，コミュニケーションシステム，スタッフの宿舎の建設である。

(3) 計画省，農業課長　Dr. ALI

CERDIは今まで建物の建設，普及員の訓練を中心に行ってきた。今後は本格的なOperational phase の段階である。職員宿舎の建設経費及びMid-Level Trainingの経費はバ側が負担すべきであると考える。

第10章

PERFORMANCE RECORD OF THE PROJECT

OCTOBER, 1982

The project of the Central Extension Resources Development Institute (CERDI)

Performance record of the project

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PREFACE

The CERDI Project started in the year 1976 as a joint programme between the Government of Bangladesh and the Government of Japan. The construction work of the project started in the year 1977 at Joydevpur and was completed in the year 1978. Actually CERDI started functioning since 1979 when posting of technical personnel and required fund was available.

Since inception about 27 trials, experiments and demonstrations have been conducted at CERDI farm in addition to trials and demonstrations conducted at three Community Development Centres (CDC) and farmers field.

So far 28 different courses for training of Mid-level Officers and technical personnel have been conducted and a total of 645 extension officials were trained.

Keeping close connection with research organizations a total of 51 publications as extension resource material were printed and circulated.

We have now 23 technical personnel including the Director and a Team of 9 Japanese Experts including the Team Leader who are working hand in hand on definite annual working plan developed on the basis of CERDI objectives.

Inspite of various difficulties the progress so far made could not be possible without material and positive assistance of our Japanese friends.

Sd/-
(N.M. Momtazuddin Khan)
Director, CERDI.

II. ACTIVITIES OF EACH DIVISION:

1. Resources Development Division

(i) Agronomy Section

1. Various kinds of improved partial technologies in Japan have been tested in CERDI field. Those related to seedling raising, transplanting, fertilizer application etc. have been observed to be equally applicable to Bangladesh rice culture.

2. Japanese style high yielding rice culture with special emphasis on fertilizer application of the right amount at right time according to proper nutritional diagnosis proved to be successful in producing 10 ton/ha. grain yield with BR-3, though the weather condition was very stormy during ripening period in Boro, 1980.

3. The following appropriate technology has been proposed to help poor farmers to increase paddy yield even with low rate of fertilizer application. In this cultural practice major nitrogenous fertilizer is applied 7 to 10 days before panicle initiation stage in densely populated condition derived from transplanting in closer spacing. Timely top-dressing is determined by observing particular internode elongation status.

4. The best application method of sulfur source in wide-spread sulfur deficient paddy field in Bangladesh is to apply low rate of gypsum or ammonium sulfur in mixed state with urea every season. Higher rate application of sulfur source has no further increase in yield as well as profit or sometime negative effect not only on yield increase but also sulfur uptake.

5. Development of a liner (Masumi liner) for row and square transplanting. This is an effective method to increase the farmers yield besides minimizing the time and labor. It has been observed that most Bangladesh farmers do not use transplanting method. And with the development of this liner, transplanting method will be quickly extended and adopted by the farmers.

6. Several books were published for AETI Instructors and TEOs Agronomy Training. These books were prepared from the basic knowledge and modern technologies of rice production which CERDI verified and collected. Follow-ups of trainers giving technical guidance and information were also done.

7. Conducting many verification or adaptability trials in the farmers and AETI farms basing from the technologies which CERDI developed or collected. And for this, the Agronomy Section created Development of Appropriate Rice

Technology Programme and Integrated Technology Program for high yield paddy production.

8. Agronomy Section prepared a survey questionaire for rice cultivation and management to grip the farm problems and to know the rice cultivation methods in the farmers field. And these data collected will be utilized for the development of appropriate technology.

(ii) Horticulture Section

1. New promising varieties of vegetables such as cucumber and onion in the winter season and radish and cabbage in the summer season have been introduced from Japan as those suitable for Bangladesh environmental condition.

   They are making rapid progress for increasing of farmer's income.

2. The modern cultivation with methods of fertilizer use, insect control and grafting have been introduced as yield increasing technologies for water melon, and it has shown the remarkable results in growing districts.

3. Urgent studies have initiated for the first time alongwith basic ones in Bangladesh to avoid soil sickness problems in intensive cultivation of various kinds of vegetables which will surely happen in near future.

4. Cropping system studies have been making a drastic reform under the control of water and fertilizer in a new irrigation-drainage combined system.

5. Scientific means for determining the optimum harvest time of fruits based on sugar content have been introduced. One of them is the use of hand refractmeter.

6. Collection of various kinds of fruit trees and ornamental plants has been made to obtain the informations on their cultivation and contribute to CERDI training with real materials. As a result, its participants who face them in their duty area have been free from the ill effects of the lectures given without real material.

7. Installation of permanent seed bed in CERDI campus and CDC' for experiments and distribution of seedlings to the farmers.

(iii) Soil and Fertilizer Section

1. One of the best equipped chemistry laboratory in Bangladesh has been set up to give prompt and accurate nutrition diagnosis to the crop sample sent from the inside and out side of CERDI. Most of nutritional disorders such as sulfur and zinc deficiencies etc. in crop are left uncontrolled yet in large areas.

2. In addition to zinc and sulfur deficiencies and salt injury in rice, sulfur deficiencies in sweet corn, dhancha, cabbage and cauliflower, phosphorus toxicity in soya bean and zinc toxicities in green pepper and marigold etc. were for the first time detected in Bangladesh. Chemical analysis on Mn/Fe rate of sample can prove any kind of root injury due to wet damages in potato, wheat etc. and also chemical toxicity in radish.

3. The crop growth limiting factors of soil fertility have been made clear on the farm soils of CERDI, 3 C.D.C. and 6 A.E.T.I.s.

4. TSP application can be economized by using simple soil testing kits.

5. Grain analysis for sulfur, zinc and even phosphorus can perform a key role to work out the national project for the survey on their deficient areas and the control of the deficiencies in crops.

6. The following booklets have been published and distributed.

   1. Soil and plant sample analysis. (English)
   2. Cultural practices with sub-optimum inputs. (English and Bangla)

(iv) Plant Protection Section

1. Studies on plant protection for the diseases and insects of seasonal crops in Bangladesh have been developed by these observation of the present situation in the country and identified the problems of the farmers in the pest control.

2. Collection of informations on relevent field from other research organization and cerculation to officers in digestable form.

3. Two kinds of calendares have been prepared for the diseases and insects in rice cultivation and distributed for organization concerned. The folder on vegetables pests also has been done.

4. In order to establish the pest surveillance at CERDI, the study has been going on with the sample collection through illimination insect collector in rice.

5. After the study on the existing crops, especially on vegetables insects at CERDI & C.D.C, the trial demonstration on available insecticides and fungicides have been carried out.

6. This section have been imparting training to the mid-level Extension Officers and Plant Protection Instructors of AETI.

7. Plant Protection Officers have been followed up at their AETI's and the other organization by the distribution of calendares and guide booklet, and given the precious advice through official tour.

8. The samples of diseases and insects are collecting and going on their collection for study and teaching materials to enrice the well-equipped laboratory.

(v) Extension Section

1. First of all we attempted to motivate the farmers, and youth groups of C.D.C command area through film shows, study tours and handicraft classes and became successful in this respect.

   The farmers, farmwives and youth groups became inclined toward the C.D.C. and showed their interest.

2. The farmers were motivated to apply the modern techniques of agriculture to boost up the per acre yield of rice through demonstrations. Prizes are being awarded to the farmers who produced maximum yield on competetion basis. This technique applied to creat interest to apply modern agricultural production techniques.

3. Presently, the trainees who are coming to CERDI for handing training are taken to C.D.C. for showing them the method which have been using there. And the coments are being invited from the trainees on how far the method is applicable for extension works. In this way, the extension methodologies are being developed.

4. One of the another important motto of the extension section of CERDI is to develop the extension methodologies and teaching techniques for the Instructors of A.E.T.I. and for the extension workers working in the field of agricultural extension. Experiments and traisl are going on

to reach decision on extension methodology and teaching techniques.

5. To help as well as to give guidance to the extension workers, the extension section published booklets on agricultural extension namely -

   (a) Agriculture Extension,
   (b) Project Record Book,
   (c) C.D.C. Activities,
   (d) Yield contest on Rice etc.

   The extension workers accepted these booklets coordialy as their guidance.

6. For extension work, preliminary survey on farmers and agriculture is preconditioned. In this regard, the extension section developed a questionaire. This questionaire is being utilized for survey. The analysis of findings is yet to be done. The result of survey will come soon within a short period and then the recommendation on what method of extension be followed will be given as per following objectives: -

   1. To find out the present situation of rural farmers by describing their selected socio-economic characteristics in some selected area of Bangladesh.
   2. To find out the extent of use of modern agricultural technologies on Rice Cultivation by the farmers.
   3. To assess and evaluated farmers resource constraints.
   4. To identify the present farming problems of rice growing farmers and offer possible solutions.
   5. To compare the different levels of cultivation practices among the farmers of C.D.C. areas & other representative areas of Bangladesh.
   6. To recommend useful suggestions for the farmers based on the result of study which will be executed by the Extension Workers.
   7. One 'hand book' on Agricultural Extension for Extension Workers is under preparation.

2. Farm Mechanization Division

Farm Mechanization Section & Mechanical Engineering Section

1. As the farm machinary will take a place of animal power in Bangladesh in near future, it is necessary to clarify the efficiency and economic differences between the mechanized and ordinary farming.

   Their related basic result have been got through the several experiments in the past two years.

2. The efficiency and production cost on the different depth of land preparation by the tractor and power tiller have been under the trial from T-Amon'81 and Boro'81/82 is going on.

3. The turning over of soil by mould board plow is confirmed to be not advisable to introduce for the rice cultivation in Bangladesh.

4. The local sickles have been improved through various survey and trials during the past two years. That of saw type sickle was completed, now expecting to receive its 2700 numbers. Another 200 numbers of bush or grass cutting type and 100 numbers of jute or bamboo cutting type sickles are expected to come from Japan.

   The suitability in their use and posibility in their local manufacture are planned to be reconfirmed by distributing them to the farmers, local black-smith and work shop.

   Besides, the improvement of winnower was also completed. The samples will be received soon to help the proper manufacture in Bangladesh.

5. The various text books and manuals on the farm machinery and mechanization have been published as follow: -

   1. Basic knowledge of Agricultural Equipments.
   2. Machine Elements.
   3. Fuel and Lubricants.
   4. Outline of Internal Combustion Engine.
   5. Electric Ignition Engine.
   6. Pump for Irrigation and Drainage/Electric Motor.
   7. Tractor Engineering.
   8. Tractor and Field Machinery.
   9. Tillage Machinery.
   10. Power Tiller.
   11. Fertilizer Distributer and Seedling Equipment.

12. Rice Transplanter.
13. Pest Control Equipments.
14. Grain Harvesting Machinery.
15. Grain Dryer.
16. Paddy Husker and Rice Whitening Machinery.
17. Proper Handling and Maintenance for Power Tiller.
18. Driver's and Mechanic's Hand Book for Vehicle.
19. Trouble Shooting for Diesel Engine.
20. Proper Handling and Maintenance Manual for Battery.
21. Operation Manual for Power Tiller.
(No. 17 - No. 21 are available in Bangla also.)

6. The attached farm at CERDI has been consolidated as modern experiment and demonstration farm with fully equipped farm machinery & equipments.

7. One of the best equipped workshop has been set up for the repair and maintenance of farm machinery and equipments.

8. The modern harvest plant and equipments have been set up to introduce better quality rice processing.

9. The advanced system on the storing of spare parts and machinery has been introduced and now it's going on.

10. The well organized central control system for their smooth performance of farm machinery and equipments has been introduced. It is successfully carrying out now.

3. Information and Training Devision

This division deals with the following activities: -

1. Collection of information materials: research materials, research findings etc. from the local and foreign research organizations.

2. Dissemination of the recently evolved technologies collected from various research stations and based on the demonstration results of CERDI and CDC farms in the form of News letters, Book, Booklets, Training reports, Folders, Pamphlet etc.

3. Conducting of In-Service training to the Mid-level Officers, AETIs Instructors, Mechanics, Overseers & Technical Staff etc. of the Ministry of Agriculture.

4. Conducting of Induction training for the B.A.S(Jr) Officers of the Ministry of Agriculture.

5. Conducting of Farmers, Farmwives and Farm-youths training.

6. Arrangement for conducting others organizational training at CERDI on the specific subject matter as a host Institute.

7. Preparation of training aids, management of Audio-visual equipments and Printing Press.

8. Evaluation and assessment of future training needs.

9. Improvement and modification of syllabus for AETIs.

10. Arrangement for conducting seminar, workshop and Pannel discussion with Principals of AETI and Senior officials of Agriculture Deptt.

This Division so far conducted training to: -

	Designation of the trainees	Department of	Year of conduction	Nos. of the Participants
	1	2	3	4
1.	Instructors of AETI.	Directorate of Agriculture (E&M)	1979	56
2.	Instructors of AETI.	Ditto	1980	55
3.	Thana Agril. Officers.	- Do -	1980	96
4.	Thana Extn. Officers & SDAO	- Do -	1981	59
5.	Thana Agril. Officers.	- Do -	1981	50
6.	Mechanic-cum-workshop Officers,	- Do -	1981	11
7.	Overseers of AETI & C.E.R.D.I.	Ditto & CERDI.	1981	18
8.	Thana Extn. Officers & SDAO.	Directorate of Agriculture (E&M)	1982	16
9.	Instructors of AETI.	Ditto	1982	65
10.	Thana Agril. Officers.	- Do -	1982	55
11.	Mechanic-cum-workshop Officers,	Ditto & Plant Protection Deptt.	1982	24
12.	Overseers, cotton unit Officer, Inputs supply Officers.	Horticulture Dev. Board, Cotton Dev. Board & IJCS.	1982	40
13.	Technical Staff.	C.E.R.D.I.	1982	14
14.	Farmers, Farmwives, and farm youths of CDC command area.	C.E.R.D.I.	1982	60
15.	Induction training for newly recruited Thana Extension Officers and Instructors of AETI.	Directorate of Agriculture (E&M)	August, 1982	26
			Total	645

PUBLICATIONS: -

1. Vegetable cultivation Manual in Bangladesh.
2. Rice cultivation technique by Diagram.
3. Life History of Rice Plant.
4. Production Prospect of short period leaf vegetables of South East Asia during Rainy Season in Bangladesh.
5. Text Book of the Field Practice (Rice cultivation).
6. Seed Quality and its Production.
7. Pre-treatment of Seed of Rice.
8. Performance of Paddy Rice Seedlings.
9. Vegetable Seeds Production method in tropical and sub-tropical countries.
10. Farm Machinery Text Book (Vol. 1 - 15 nos.).
11. Nutun Sabji Kankong and Kailan.
12. Drivers and Mechanics' Hand Book.
13. Guide Book for development of vegetable Horticulture with capable seed production in Bangladesh.
14. China Mular chash.
15. C.E.R.D.I.
16. Ipil-Ipil.
17. Agriculture Extension & Community Development in Bangladesh.
18. Training Report (3).
19. Diesel Enginer Gulogug Nirupon-O-Ehar pratikar.
20. Prakalpa Record Book.
21. News letter -

    May - December '80
    January - February '81
    March - '81
    April - May '81
22. Dhan utpadan protigujita.
23. Unnata Jater Dhaner Falon Briddir upay.
24. Gari chalak-O-Mechanicder Nirdeshika.
25. Batterir Satik Babahar-O-Rakkanabekkon.
26. Power tillerer parichalona paddati.
27. Samprasaron Karjjakram CERDI.
28. CERDI Publication.
29. Soil and Plant Samples Analysis.
30. Cultural Practices with sub-optimum Inputs.
31. Bengali verson of the cultural practices with sub-optimum inputs.

32. Krishite Unnata-O-Adhunik Kalakaishal.
33. News letter - July '82.
34. Folder on fruit and shoot Borer.
35. Folder on Bottle gourd.

Total publications 35 + 16 = (51)

The following items are ready for Publications: -

1. News letter August - September '82.
2. CERDI manual (CERDI pamphlet).
3. Nutrition and Food habit.

Library and References Services:

CERDI maintains Library which has a total collection of about 4,000 volumes. The library also keeps a good number of research Magazines, Booklets, Journals, Reports and ready reference etc. of home and abroad. The library has also sufficient documentary films on Agriculture.

III. Japanese Experts.

1. Dispatched experts

Subject	Number of dispatched experts	
	Long term (more than 1 year)	Short term (less than 1 year)
1. Chief Advisor	1	
2. Team Leader	2	
3. Horticulture	2	
4. Soil and fertility	2	
5. Farm mechanization	1	
6. Mechanical engineering	2	
7. Extension planning	2	1
8. Agricultural extension	3	
9. Agronomy	2	1
10. Liaison officer	3	
11. Printing		3
12. Audio-visual aids		2
13. Rural youth education		1
14. Photo print		2
15. Installation of rice mill and operation		1
16. Infra-structure improvement		4
17. Irrigation agronomy	1	
18. Home living improvement		1
19. Agricultural economics		1
20. Tool improvement		2
21. Plant Protection		1
22. Green house construction		1
23. Hand book		3

2. Existing Japanese Experts:

1. Mr. T. Sato, Term Leader of the Japanese Advisory Group.

2. Mr. M. Inoue, Extension Expert.

3. Dr. M. Nezu, Horticulture Expert.

4. Dr. S. Yoshioka, Soil and Fertility Expert.

5. Mr. Y. Yoshizumi, Farm Mechanization Expert.

6. Mr. T. Oshima, Expert on Extension.

7. Mr. T. Edagawa, Expert on Farm Machinery.

8. Mr. K. Masumi, Agronomy Expert.

9. Mr. K. Morishita, Liaison Officer.

IV. Donation from Japanese Government since the beginning of cooperation upto now

(¥11.5 = Tk. 1/00)

1) Grant equipment
¥500 million = Tk. 43.5 million

2) Construction of CERDI building and 3 C.D.C.
¥1,000 million = Tk. 87 million

3) Infra-structure improvement
¥8 million = Tk. 0.7 million

4) Emergency repairing
¥13 million = Tk. 1.1 million

5) Training fund for mid-level officers
¥43 million = Tk. 3.7 million

6) Field survey
¥1.3 million = Tk. 0.1 million

V. Budget allocation from Bangladesh Government for CERDI Project

Unit: 1000 Taka

Item/Fiscal year	1978-79	1979-80	1980-81	1981-82	1982-83
1. Salary and wage for CERDI staff	783	710	1175	1181	1800
2. Budget for construction.	2224	4494	380	936	150
3. Budget for farm management.	627	-	85	-	-
4. Budget for purchasing office supply and other materials.	520	519	462	206	800
5. Budget for customs clearance of Grant equipment and its transport.	12734	3436	585	1369	1000 (customs duty & tax only)
6. Travel allowance.	1	5	6	-	
7. Others.	-	-	-	-	850 (repairing, small construction, transport of grant equipment from Chittagong to Dacca, farm management.)
Total	16889	9164	2693	3892	4600

VI. Technical training and observation in Japan

Sl.No	Name of the officers	Subject of training	Duration	Remarks
1.	Mr.A.S.M.Kamaluddin, Ex-Director	Study tour	21 days	
2.	Mr.M.A.Mannan, Ex-Director	Study tour	21 days	
3.	Mr.A.K.M.Mansur, Ex-Director	Study tour	21 days	
4.	Mr.Nuruddin Ahmed, Farm Mechanization Specialist	Agril. Machinery	6 months	
5.	Mr.Nasirullah, Principal Information Officer	Agriculture Extension	3 months	
6.	Mr.Nurul Alam, Irrigation agronomist	Irrigation & Drainage	10 months	
7.	Mr.A.Sattar, Agronomist	Rice production	10 months	
8.	Mr.M.Zaman, Agril. Engg(engine)	Farm Mechanization	10 months	
9.	Mr.M.R.Chowdhury, Extn. Specialist	Agriculture Extension	3 months	
10.	Mr.M.Hossain, Asstt. Horticulture Specialist	Vegetables cultivation	10 months	
11.	Mr.Rezaul Islam, Asstt. Extn. Specialist	Agriculture Extension	3 months	
12.	Mr.A.A.Khan, - do -	Agriculture Extension	3 months	
13.	Mrs.Momtaz Ara Begum, Librarian	Library management	3 months	
14.	Mrs.Monowara Habib, Home Improving Agent	Home life improvement and Extension	45 days	
15.	Mrs.Fatema Zohera, - do -	- do -	45 days	
16.	Mr.Nanda Lal Das, Training Officer	Agril. Extension	3 months	
17.	Mr.M.N.A.Dewan, Plant Protection Specialist	Plant Protection	6 months	
18.	Mr.M.A.Sattar, Principal Agronomist	Rice Production	10 months	
19.	Mr.M.A.Mannan, Soil & Fertility Specialist	Agriculture Extension	3 months	
20.	Mr.M.Yunus, Fmt. Specialist	- do -	3 months	
21.	Mr. Abdul Salek, Chief Mechanic.	Repair and maintenance of Agril. machineries	6 months	
22.	Mr.Qumrul Islam, - do -	- do -	6 months	
23.	Mr.Sahebullah Chowdhury, Asstt. Mechanic	- do -	6 months	
24.	Mr.M.A.Sattar, Agril. Engg (machine)	Farm Mechanization	10 months	On training
25.	Mr. Shahidul Islam, D.D(Admn)	Rice production	10 months	-do-

第１１章

THE MONTH WISE SCHEDULE OF ACTIVITIES OF CERDI FOR THE YEAR

1982/83

The Project of Central Extension Resources Development Institute

The month wise schedule of activities of CERDI for the year 1982 - 1982

10 July, 1982

The monthly schedule of activities for CERDI has been prepared keeping the main theme or CERDI objectives in our vision. The functions of the institute have been worked out in the light of four broad topices. The topices have been divided into some sub-topices for clarification and spelling out of the functions systematically for each section.

The broad topices are: -

1. Collection and analysis of improved agricultural techniques acquired by research institutes and agences in Bangladesh and abroad (programme attached).
2. Development of technical resources for Agricultural Extension.
3. Development of Extension Methods and materials.
4. Training and Guidance.
5. Extension and Information.

In the development of technical resources for agricultural extension the following steps will be followed: -

1. Trial and demonstration on agricultural techniques in the CERDI Community Development Centre farm and AETI farms.
2. Trial and testing of agricultural machinery, equipments and tools for development of usable resources.

To Continue with above study work will proceed to: -

1. Finding out and development of appropriate technique in Bangladesh.
2. Improvement of agricultural tools and equipments which being are Operated by manual and animal power.
3. Trial and testing of newly introduced machinery, equipments and tools.
4. Standardization of introduced agricultural Machinery, equipments and tools.

For development of Extension Methods and Materials the approach would be as follows: -

1. Study on the methods of extension activities.
2. Comparative study on practicability of various extension methods and means.
3. Study on Audio-visual aids and proparation of teaching materials for farmers and extension workers.
4. Study on the activities of youth education and home living for farm wives.

Training and Guidance

Training is the main field of activities at CERDI. The resource and materials which would be developed at CERDI must have to be transfered to the extension workers and farmers through training.

To continue with our training programme the following items would be under taken,

1. Improvement of the curriculum of Mid-level officers of Extension, Farmers and field workers.
2. Training/Seminar/Workshop on development and infusion of subject wise technique for the Instructor, SDAO, TEO, & TAO.
3. Holding seminar/training for senior officers like RD, DEO, Principles for development of future training program.
4. Follow up guidance to the participants already trained to CERDI for establishing two-way Communication flow in respect of training and guidance.

Development/Extension and information materials

Development of materials on the basis of findings of BRRI, BARI other research organization of the country and as per results of trial and demonstration conducted by CERDI is one of the important functions of CERDI, Material developed thus would be multiplied in CERDI's own press for dissemination to the Extension workers and farmers. The steps for such activity would be as follows: -

1. Making pamphlets, folder, Booklet, and other teaching materials for Extension workers, Instructors and farmers.
2. Publishing monthly news letters, Books on crops, machinery tools, Fruits and vegetables cultivation etc.
3. Development of the Hand Book for Extension workers.

MONTHLY PLAN OF ACTION OF CERDI FOR THE YEAR 1982-83

Collection and analysis of data/information of improved Agricultural techniques developed in different research organizations of the country and abroad.

Months / Assigned Organization for collection of materials	July 1982	August 1982	September 1982	October 1982	November 1982	December 1982	January 1983	February 1983	March 1983	April 1983	May 1983	June 1983
	BRRI, BARI, BARC, HDB.	G I, BADC, FAO/ UNDP, ADAB Tobacco Board.	Cimilla BARD, Bogra Academy Bureau of Statistics, UNICEF, BADC Agril. Estate Chittagong, BRRI, BARI.	Visit to Mymensing University: BAU library, Horticulture Society, Agronomy Society & Variety Extension project, BARI, BRRI.	1.Education Extension Centre. 2. AIS 3. Planing & Evaluation Section LGRD, BRRI, BARI, BARC.	Agril. College, Soil survey, Soil Science, Section Dacca University, Botany & Enlomology Division of Dacca University BRRI, BARI, BARC.	Sugarcane Research Institute & Farm BRRI, BARI.	Bangladesh Agriculture Bank (BKB) BRRI, BARI.	Directorate of Fisheries & Water dev. Board BARC, BRRI, BARI, BADC.	Cooperative Department, IRDP, JICA Japan embassy, BRRI, BARI.	British Council library, British High Commission, Soil Survey Div. BRRI, BARD.	American Embassy Canadian Embassy Family Planning Directorate, BRRI, BARI, BADC.

Working schedule of CERDI for 1982-83

Development of technical Resources for transmission as Extension resources

Month of July '82.

Section-wise activities to be performed by each section

Agronomy section	Horticulture section	Plant Protection section	Soil section	Extension section	Farm Machinery section	Information division	Remarks
1. Observation of conventional technique in the cultivation of Aus & list cut problems being faced by varmers at CDC & AETIS. 2. Arrange measure for solution of the problems of the farmers in callaboration with BARI & BRRI. 3. Sortout the resources developed at farmers level & processing the same for publication through Information section. 4. Study of irrigation condition of the country utilization report present water resources. 5. Prepare demonstration trial plots in CDC and CERDI farm area. 6. Arrange meeting of the cereal sub-committee.	1. Observation of conventional technique in the cultivation of fruits and vegetables. 2. Identify the problems of the farmers in the field. 3. Search out the resource growers & arrange ways & means for developing the technique for the farmers. 4. Follow up technique & find out measures to be taken on cultivation of summer vegetables. 5. Arrange meeting for the Horticulture sub-committee for winter vegetables.	1. Observation of the present situation of pest and desease in the country in seasonal crops in collaboration with P.P.deptt. 2. Identify the problems of the farmers in the control of pest & diseases. 3. Develop a calender for pest & diseases for circulation. 4. Collect sample through light tramp & enrich the P.P.Lab. 5. Arrange incorporation of problems & prospect in the sub-committee meeting of cereal sub-committee.	1. Observation of the present problems and Identification of neutrinal status of soil of different area in collaboration with BARI soil division. 2. Testing of soil sample of different areas of the country in collaboration with BARI & BRRI. 3. Prepare recommended doses of fertilizer as per test made in item 2 with BARI & BRRI. 4. Study the soil sample around the CDC & AETI areas. 5. Start collection of data from difft. organization & arrange for testing.	1. Continue with surveying of situation of the farming community. 2. Prepare report of the survey. 3. Observe the present extn. approach in the country. 4. Prepare Extn. programme for 3.C.D.C. areas. 5. Arrange sub-committee meeting.	1. Observation of conveniant technique of farm tools. 2. Study the advantage & disadvantage of local tools. 3. Identify prospects of mechanized farming. 4. Organize meeting of the farm mechanization sub-committee.	1. Arrange collection of materials for news letter. 2. Publish atleast 3 foldors. 3. Publish annual report. 4. Organize training course of mid-level officers as per yearly schedule. 5. Organize information & training sub-committee meeting. 6. Development of draft handbook for extension workers.	

Month of August '82

Agronomy section	Horticulture section	Plant Protection section	Soil Fertility section	Extension section	Farm Machinery section	Information division	Remarks
1. Continue with the trial/demonstration programme. 2. Arrange implementation of the trial on fertilizer on HYV, density trial & varietal trial. 3. Organize and supply booklet, pumphlet and folder material for publication.	1. Continue summer vegetables production. Nailen and kangkon. 2. Organize programme for trial demonstration on vegetables developed at BARI, Horticulture Dev. Board etc. 3. Plan setting up demonstration plots, at CERDI & 3 CDC winter vegetables. 4. Prepare comprihensive prospect report about summer vegetables. 5. Booklet/folder how farmer can be benefited by S.V.P.	1. Trial demonstration on diffn. insecticides fungacides at CERDI field & CDC. 2. Prepare booklets, pumphlet & folders on important P.P. measure. 3. Sub-committee meeting for monthly plan.	1. Prepare plan for trial demonstration on fertilizer for Boro, wheat and rabi crops. 2. Prepare pumphlet, Booklet & folders on soil nutrients, fertilizers etc. in collaboration with BARI & BRRI.	1. Co-ordination committee meeting at 3 CDC. 2. Establish projects for CDC according to Extn. programme. 3. Organize farmers groups. 4. Trial of Extn. methods and materials. 5. Study of present audio-visual aids now being used in Bangladesh for Extension work. 6. Organize rural youth groups.	1. Continue trial on depth & crops by farm machinery. 2. Collection of report from all AETIs about machinery and tools. 3. Prepare a situation report on the maintenance status of P.P. equipments, power tillars, tractors & all types of vehicles lying in possession of DEOS. 4. Organize sub-committee meeting to formulate plan for appropriate technology development.	1. Subject-wise competation of information & determination of the form of training syllabus through a sub-committee meeting. 2. Participant in the seminar & workshop of BRRI, BARI, BARC & other orgns. if, organized. 3. Collection of materials & preparation for a seminar, workshop ..... 4. Preparation of a detail programme for evaluation of training conducted at CERDI.	

Month of September, '82

Agronomy section	Horticulture section	Plant Protection section	Extension section	Farm Machinery section	Soil Fertility section	Information division	Remarks
1. Continue trial demonstration on T-Amon crop on the basis of study at BRRI. 2. Booklets, folders, pumphlets on improved technique on important crop. 3. Followup guidance on the training and instruction given. 4. Continue demonstration trial at CDC. 5. Sub-Committee meeting. 6. Preparation on experiment on the utilization of irrigation water by D.T.W. in CDCs. 7. Preparation of programme for pulces & oilseeds demonstration.	1. Plan for trial demonstration on vegetables with the information received from HARI & H.D.B. 2. Rapseed & vegetables & fruits nursery at the CDC. 3. Followup guidance in the AETI farm. 4. Develop booklet, folder & pumphlet on cultivation of winter vegetables.	1. Study on the existing crop insects at the CERDI & CDC farm. 2. Enrich the laboratory with collection of samples of pest & diseases. 3. Develop pumphlet, booklets & folders on important items in plant protection. 4. Organize study on pest surveillance. 5. Followup guidance to AETI.	1. Continue demonstration plots in CDC farm & farmers plotin collaboration with Horticulture & Agronomy section. 2. Mobilize villages around CDC for extensive vegetable & fruits production. 3. Plan and organize deep tube well groups. 4. Organize youth group for poultry & livestock projects. 5. Continue farmwives for vegetable cultivation and home making works.	1. Arrange distribution of machinery to AETI. 2. Setup design of efficient farming tools after study of the local tools available in the country. 3. Start the rice drilling machine on the basis of the programme to be developed jointly between BRRI, BARI, & CERDI. 4. Conduct experiment on farm machinery in collaboration with Agronomy & Horticulture sec. at CERDI & CDC.	1. Condinue spil testing & soil analysis of different orgns. in collaboration with Soil survey BAU, BARC & Directorate of (E & M). 2. Followup guidance to AETI to observe the effectiveness of the trial assigned to AETIs. 3. Trial demonstration in the CDC area on fertilizer, farmyard manure & compost.	1. Prepare and examine the draft training syllabus in collaboration with concerned organizations. 2. Publication of newsletter, Booklets, pumphlets on pulses, fruits, vegetables, etc. 3. Study of the draft of 'Hand book' for Extn. workers. 4. Preparation for holding seminar. 5. Evaluation of follow guidance to AETI. 6. Development of Hand book.	

Month of October, '82

Agronomy section	Horticulture section	Plant Protection section	Extension section	Farm Machinery section	Soil Fertility section	Information division	Remarks
1. Continue trial demonstration on Amon crop in CERDI & CDC farm. 2. Develop printed teaching materials for the extension workers. 3. Develop pumphlet, booklets on wheat, rice, mustard, oilseeds & pulses. 4. Develop a suitable crop production plan to attain self sufficiency for an average farm tanurely in collaboration with extension section of CERDI & DEM. 5. Folder & pumphlet development. 6. Study on irrigation.	1. Raise vegetable nursery at CERDI, CDC for extensive supply to the farming community. 2. Demonstration with winter vegetables at CDC & CERDI & AETI farm. 3. Preparation of important pumphlet, folders. 4. Submit report on followup guidance to AETI. 5. Prepare a model scheme for fruit & vegetable growing for and average farm families.	1. Prepare a post situation report on some important insect pest & foreast pest appearances on crops. 2. Arrange publication pamphlet, folders. 3. Continue study the type of insects infesting Joydevpur area by means of Light trap. 4. Followup guidance to AETI on training.	1. Complete survey of village around three CDC. 2. Analyse the survey data and determine the suitable method of extension & the training needs of the farmers. 3. Determine effectiveness of simple audio-visual aids. 4. Stome improved work sewing juts. 5. Organize the farmers & youth in the CDC vegetable raising programme through audio-visual programme.	1. Physical verification of all materials as per invoice & prepare a half yearly report. 2. Effective utilization of rice mill machine. 3. Testing of fuel consumption for all type of vehicles of CERDI. 4. Pumphlets, booklets and folders.	1. Soil sample analysis & recommendation of fertilizers & manures contunues. 2. Trial demonstration in the CERDI & CDC farm. 3. Followup guidance to AETI. 4. Solution of common soil problems of the country in collaboration with BAR, BARI & BRRI.	1. Develop a publication on vegetable production having materials from all concerned agencies. 2. Develop training manual for CERDI. 3. Organize training of farmers, farmwives & youth group in collaboration with extension. 4. Pumphlet, how to organize farmers group, youth & farmwives group. 5. Preliminary preparation for seminar.	

Month of November '82

Agronomy section	Horticulture section	Plant Protection section	Extension section	Farm Machinery section	Soil Fertility section	Information division	Remarks
1. Continuation with the trial on Amon. 2. Preparation for trial demonstration on wheat. 3. Preparation of pumphlet, booklet & folder on the recommendation collected. 4. Demonstration trial on irrigation. 5. Sub-Committee meeting. 6. Formulation of irrigation programme for the CDC by the Irrigation Agronomist.	1. Continue activities in the vegetable nursery at CERDI, CDC. 2. Demonstration programme with newly developed vegetables, fruits will confirm in CERDI & CDC area. 3. Pumphlet, folder development. 4. Submit the model scheme for fruit & vegetables to the Director for reviewing. 5. Followup guidance to AETI. 6. Conduction of farmers training.	1. Demonstration on the control of pest diseases. 2. Pumphlet, booklets on proper application of insecticide, fungicide. 3. Enrichment of a laboratory with disease & insects samples. 4. Preparation of teaching materials for the trainees by consulting BRRI & BARI. 5. Contact BRRI, BARI, Plant Protection Director for joint Project.	1. Study on existing extension activities & determine their practicibility. 2. Formulation of integrated extn. approach for total development of selected area. 3. Technical contest for Rural youth at the CDC. 4. Organize farmwives group for yield contest trial on winter vegetables. 5. Coordination meeting.	1. Development of suitable farm tools manufactured at at CERDI as per recommendature of the sub-committee. 2. Study on the arewise requirement of farm machinery. 3. Trial on Amon crop on farm machinery. 4. Meeting ot the standardization of farm tools and machinery.	1. Report on the recommendation of trial & demonstration so far conducted. 2. Leaflets & folders development. 3. Arrange a training class with educated farmers on the use of soil kits. 4. Trial demonstration in the command area of CDC.	1. Work on the training manual of CERDI. 2. Training of of mid-level officer. 3. Publish news letter, folders. 4. Report on the overall utility of the press & its scope. 5. Evaluate the library facility.	

Month of December '82

Agronomy section	Horticulture section	Plant Protection section	Extension section	Farm Machinery section	Soil Fertility section	Information division	Remarks
1. Trial demonstration on Boro and wheat. 2. Leaflets, folders on Boro & wheat cultivation. 3. Training material preparation for the farmers & Instructors. 4. Survey on irrigation data by irrigation Agronomist. 5. Evaluation of the activity of farm management facility at CERDI.	1. Demonstration with winter vegetables at CERDI & CDC farm. 2. Development of vegetable & fruits nursery at the CDC area. 3. Collection & organization of materials for a book on winter vegetable cultivation as per recommendation of BARI, HDB & DEN. 4. Training of youth and farmwives at CDC.	1. Trial demonstration at CDC & CERDI farm. 2. Training to farmers about proper dise, time of application etc. 3. Develop teaching materials, posters graph, charts for the farmers training and for Instructor. 4. Demonstration on granular insecticide. 5. Leaflets, folders development on current problems.	1. Evaluation of data of situation survey. 2. Demonstration on yield contest trial. 3. Continue with poulty project. 4. Study of the effect of Audio-visual aids in Extn. approach. 5. Project activity with farmwives-sewing, vegetables & jute work.	1. Trial on group utilization of irrigation pump. 2. Training of farmers on proper maintenance of sprayer, fractional pump power tiller. 3. Manufacture of farm tools for trial. 4. Trial on the utilization of low lift pump. 5. Followup guidance to AETI.	1. Trial demonstration on soil fertility. 2. Short guidance training to the farmers to judge the soil fertility status. 3. Booklet, pumphlet and folder development on current issue. 4. Trial demonstration in the command area of CDC.	1. Finalize the syllabus for all groups of participants. 2. Training for mid-level officers. 3. Library management. 4. Publication of booklets, pumphlets & folders. 5. Follow-up guidance to AETI.	

Month of January '83

Agronomy section	Horticulture section	Plant Protection section	Extension section	Farm Machinery section	Soil Fertility section	Information division	Remarks
1. Trial demonstration on Boro & wheat continue. 2. Conduct trial in the farmers field of CDC Command area. 3. Produce leaflets pamphlets in consultation with BRRI, BARI. 4. Produce a Booklet on proper utilization of Irrigation water. 5. Sub-Committee meeting. 6. Development of the green house.	1. Trial demonstration with winter vegetable in the CERDI CDC command area. 2. Grafting, budding, training to the farmers on fruits of the command area. 3. Collection vegetables & fruits seeds from all over the country for setting up a 4. Sub-Committee meeting. 5. Training of the farmers, fermwives & youth under command area of CDC on fruits & vegetables & CERDI/CDC campus beautification.	1. Trial demonstration on pest & diseases in the CERDI & CDC farm. 2. Arrange collection of pest situation having contact with P.P. Directorate, BRRI, BARI & DEM. 3. Develop pumplet, booklets on current problems. 4. Analyse the peak period of the pest survaillance. 5. Preparation teaching materials.	1. Study of appropriate extension methods in the communication of information. 2. Continue with youth and farmwives programme on poultry, fishery and nutrition. 3. Folders and pamphlets on the ideal activities of the Extension workers. 4. Follow-up guidance to AETI.	1. Trial demonstration on Boro in CERDI farm. 2. Workshop on proper handling and maintenance of Farm Machinery and tools and vehicles. 3. Trial demonstration on the efficiency of deep-tube-wells at the CDC. 4. Effectiveness of Farm tools manufactured by the mechanization Division. 5. Sub-Committee meeting.	1. Trial demonstration on winter vegetables and crop. 2. Soil samples analysis. 3. Develop Pamphlets and Booklets on Current problems. 4. Programme on the utilization of soil testing with farmers of the Commond area Continue.	1. Training of mid-level officers. 2. Publish news letters, pamphlets Booklets, folders, and their circulate. 3. Following up guidance on training programme to AETI. 4. Preparation transminar/ workshop on training need.	

Month of February '83

Agronomy section	Horticulture section	Plant Protection section	Soil Fertility section	Extension section	Farm Machinery section	Information division	Remarks
1. Trial demonstration on Boro & wheat. 2. Develop folders & Leaflets on current issue on Agronomical problems. 3. Training irrigation and drainage practices on the standing crops to the farmers. 4. Train the farmer of CDC command area for preparation of seed bed for Aus HYV. 5. Motivation work for more pulse crops to the farmers including CDC.	1. Motivation to adopt improved Harvest & post harvest practice on potato. 2. Development of folder on the preservation of poralo & as substitute item of food. 3. Continue with the work of development nursery of vegetables & fruits for supply to the farmers. 4. Building of Kul trees in the farmers house continue beautification.	1. Trial demonstration on vegetables. 2. Development leaflets, folders. 3. Survey of P.P. equipments in respect of maintenance and repair. 4. Follow-up guidance to AETI. 5. Guidance to farmers including CDC on the control measure of thrips, stemborers leaf roller etc. for boro paddy.	1. Soil sample analysis on nutrient deficiency for sample collected from different parts of the country. 2. Plant sample analysis to be continued. 3. Recommended fertilizer dose as per findings. 4. Preparation of a Map of CDC's soil snowing the fertility & nutrient status.	1. Motivation for proper storing, preparation of food grains and potato. 2. Study on the effect of proper utilization of Audio-visual aids as per views and choice of the farmers. 3. Training of the farm youth & farmwives on current Agri. problems. 4. Induce farmers to adopt new techniques of marketing.	1. Trial on Boro & wheat continue. 2. Preparation for the report on the bauls of finding of the trial. 3. Training of CERDI Specialists & Overseers to utilize the Moisture meter. 4. Training and Instroduction rice transplanter to farmer.	1. Publication of monthly newsletters folders of each sections. 2. Training a typist, Stenotypist, press operators, photographer, artist & concerned officers for printing and publication. 3. Compilation and publication of important lecture notes of CERDI traiing	

Month of March '83

Agronomy section	Horticulture section	Plant Protection section	Soil Fertility section	Extension section	Farm Machinery section	Information division	Remarks
1. Trail demonstration on Boro crops continued. 2. Preparation for harvesting of wheat and selection of seeds. 3. Guidance to the farmers including the farmers of command area of CDC for AUS & JUTE cultivation. 4. Proparation for of the folders & leaflets on storage and preservation of potato, Oil seeds.	1. Plan trial demonstration for improved type of quick growing fruits like Banana Papaya and Water-melon. 2. Preparation for Summer vegetable cultivation having programme at CDC & CERDI field. 3. Sub-Committee meeting for approval of summer Programme. 4. Preparation for materials of folders & leaflets. 5. Beautification continue with appropriate flowers and trees.	1. Preparation of materials for taking proper plant protection measures against stemborer, Rice Hispa & Swarming Caterpiller. 2. Leaflets and folders on wheat Banana, papaya water-melon diseases. 3. Plan for steps to be taken in the control of summer vegetables, diseases & pests in collaboration with BRRI & BARI. 4. Follow-up guidance to AETI in advising control measures of trial being taken at AETI according to CERDI Programme.	1. Follow-up guidance Prog for soil testing kits. 2. Soil and plant samples analysis to the continued. 3. Keeping contact with soil survey, BRRI, BARI for development of teaching materials for extension workers and mid-level Agril. Officers. 4. Follow-up guidance to AETI.	1. Develop suitable programme for farm wives to better crop production and efficient home managed (Jute work, egg incubation, fishering & quick growing fruits orcherd) 2. Contact with AIS, Audio-visual training centre, Education Extension Contrecte for development of better teaching materials for extension workers & farmers. 3. Preparation for the report on the views & choice of the farmers regarding audio-visual aids.	1. The trial demonstration on deepth study to be continued. 2. Rice milling machine to be kept ready for next husking operation. 3. Report on the proper utilization of Deep-tube well in the 3 CDC. 4. Follow-up guidance to AETI. 5. Sub-Committee meeting.	1. Training of midlevel Officers. 2. Holding of Seminar .... /workshop .. .. 3. Publication of newsletter folders, etc. 4. Publication of Book on the technique developed by each section of CERDI. 5. Fallow-up guidance to AETI. 6. Sub-Committee meeting.	

Month of April '83

Agronomy section	Horticulture section	Plant Protection section	Soil Fertility section	Extension section	Farm Machinery section	Information division	Remarks
1. Continue with the trial on Boro, and set up trial demonstration on Aus. 2. Prepare pamphlets and folders in collaboration with BRRI & BARI. 3. Design layout of demonstration according to the training need of the Iicip 4. Follow-up guidance to AETI. 5. Finalization of data on irrigation of Boro and wheat by Irrigation Agronomist.	1. Continue trial with quick growing fruits. 2. Plan for preparation after Summer vegetables cultivation at CERDI CDC & AETI. 3. Preparation for Mango grafiting ful Budding continue. 4. Preparation for Folder and pamphlets on quick growing fruits, summer vegetables and on proparation of fruits plan.	1. Continue with the trial on the control of Insect and diseases of quick growing fruits vegetables and cereal crops in selected plots to be assegued by Head of Resources Deve. 2. Preparation of folder and pamphlets on insect and diseases in collaboration with BRRI & BARI.	1. Continue with soil sample annalysis. 2. Demonstration with different levels of fertilizer doses. 3. Prepare some booklets, pamphlets and folder. 4. Prepare teaching materials at CERDI and CDC for training to be conducted.	1. Continue with the programme for youth farm wives. 2. Develop teaching materials for training of farmers and mid-level Officers. 3. Set up programme in tion with others sections of CERDI for conduction of trial and training at CDC. 4. Develop folder on the activity of Farm youth & farmwives.	1. Continue with trial demonstration on wheat and Boro. 2. Start operation of Rice Milling machine. 3. Training the CERDI and CDC Mechanic on the maintenance of Deep-tube-wells. 4. Operation trial with the farm tools manufactured at CERDI. 6. Develop folders and pamphlets on the problems and solution of farm tools and mechanery.	1. Training of mid-level Officers. 2. Publication of news letters folders, booklets. 3. Review of syllabes for Modification as per training needs of different category of participants. 4. Follow-up guidance, to AETI.	

Month of May '83

Agronomy section	Horticulture section	Plant Protection section	Soil Fertility section	Extension section	Farm Machinery section	Information division	Remarks
1. Continue with the trial on Aus. 2. Prepare programme for farmers, farm youth training in consultation with extension section. 3. Prepare teaching materials for Instructors on AETI, and Extension Worker. 4. List out experiments cont & to be conducted in BRRI, BARI, BARC and other research organization.	1. Continue with growing fruits. 2. Continue with the programme of summer vegetables and Budding, grafting etc. 3. Preparation teaching materials for training of CDC fermers and Mid-level officers at CERDI training programme. 4. Follow-up guidance to AETI.	1. Fonalize preparation of report on the trial made on Boro & wheat. 2. Prepare teaching materials on the technique on the preservation of speciment sample. 3. Acquire technique of slide preparation both white & Coloured. 4. Folder pamphlet & Booklets preparation.	1. Continue with plant and soil sample analysis. 2. Prepare booklets, folders and pamphlets in collobaration with ERRI, BARI. 3. Teaching materials for traneers and Extension workers continue. 4. Trial demonstration with fortilizers doses continue.	1. Report on the present activity of the extension work. 2. Preparation of a paper on the effictiveness of present extension methods. 3. Preparation of leaflets, folders & Booklets. 4. Continue with youth and woman programme. 5. Follow-up guidance.	1. Trial demonstration with Aus to be set up in consultation with the mechanized section of BRRI & BARI. 2. Rice Mill work continue. 3. Preparation of the report of Deepth exporiment. 4. Preparation of Folders.	3. Publication of Newsletter. 2. Publication folders. 3. Preparation of Annual Report, 1983. 4. Follow-up guidance to AETI, Thana extension Officer.	

Month of June '83

Agronomy section	Horticulture section	Plant Protection section	Soil Fertility section	Extension section	Farm Machinery section	Information division	Remarks
1. Continue the trial of Aus Paddy in CERDI & CDC field. 2. Conduction of training of farmers Extension. 3. Preparation of activities.	1. Cultivation of of Lalsbak, Brinjal, spinach sweet-goard, Summer radish. 2. Turmarie papaya, pineapple. 3. Training of CDC farmers. 4. Preparation of Annual report for the activitions on the field of Horticulture.	1. Continution of the preparation of teaching materials & slides. preparation. 2. Plant protection measure to be taken for rice crops of CERDI & CDC against sten bore, green-leaf hoppers, Rice bug, Rice Hispa etc. 3. Prepare Annual report on the activities of plant protection.	1. Popularization of soil testing kits and help farmers of CDC area to determine Number dificrency. 2. Report on soil fertility to be prepared incosultation with BRRI & BARI. 3. Necessary soil & plant sample annalysis. 4. Submit annuel report to information division for publication.	1. Recommendation of Extension survey report. 2. CDC activities as per direction. 3. Preparation of Annual report. 4. Report on the youth and farmwives activity.	1. Post and prevaluation report of CERDI machines. 2. Machine & engine maintenance report. 3. Review of overall condition of training if any on farm machinery 4. Publication work of Annual report.	1. Publication of Annual Report. 2. Publication of Newsletter. 3. Publication Training reports, etc. 4. Sub-Committee meeting.	

第１２章

TRAINING PROGRAMME
OF
CENTRAL EXTENSION RESOURCES DEVELOPMENT INSTITUTE(CERDI)

1979 ~ 1983

"PARTICULARS OF TRAINING ORGANIZED BY CERDI FROM MARCH 1979 TO SEPT. 1982"

Year	Batch No.	Duration	No. of days	Participants	No. Attended	Remarks
	1	5.3.79 to 31.3.79	27 days	Instructors	40	
1979	2	12.11.79 to 24.11.79	13 days	Instructors	16 (56)	
1980	3	14.1.80 to 26.1.80	13 days	Instructors	23	
	4	22.9.80 to 4.10.80	13 days	Instructors (P.P & Hort.)	32	
	5	6.10.80 to 11.10.80	6 days	T.A.O	38	
	6	10.11.80 to 15.11.80	6 days	T.A.O	39	
	7	21.11.80 to 29.11.80	9 days	T.A.O	19 (151)	
1981	8	22.12.80 to 10.1.81	20 days	Mechanic Cum-work-shop Officers	11	
	9	20.1.81 to 3.2.81	15 days	Overseers of AETI & CERDI	18	
	10	4.3.81 to 19.3.81	16 days	T.E.O	22	
	11	14.9.81 to 24.9.81	11 days	T.A.O	28	
	12	15.10.81 to 24.10.81	10 days	T.E.O	18	
	13	20.11.81 to 28.11.81	9 days	T.E.O	19	
	14	14.12.81 to 24.12.81	11 days	T.A.O	22 (138)	
1982	15	4.1.82 to 9.1.82	6 days	T.E.C	16	
	16	26.1.82 to 5.2.82	11 days	T.A.O Mechanics form (P.P)	30	
	17	15.2.82 to 20.2.82	6 days	D.A (E & M)	24	
	18	15.3.82 to 27.3.82	13 days	Overseers (Mid-level officers of HDB, CDB, IJCS)	40	
	19	5.4.82 to 10.4.82	6 days	Techanical staff of farm Mechanigation Division, CERDI.	14	
	20	26.4.82 to 28.4.82	3 days	Youths & farmers of 3 C.D.C.'s	30	
	21	29.4.82 to 30.4.82	2 days	Farmwives of 3 C.D.C.'s	30	
	22	10.5.82 to 15.5.82	6 days	Instructors on Horticulture AETI.	12	
	23	10.5.82 to 15.5.82	6 days	Instructors on Farm Machinery (AETI).	10	
	24	17.5.82 to 22.5.82	6 days	Instructors of AETI on Extn.	10	
	25	17.5.82 to 22.5.82	6 days	Instructors of AETI on P.P.	8	
	26	14.6.82 to 19.6.82	6 days	Instructors of AETI on Agronomy 1 & 11.	25	
	27	5.7.82 to 17.7.82	13 days	T.A.O.'s	25	
	28	2.8.82 to 11.9.82	41 days	TEO & Instructors.	26 (300)	
				Grand Total	645 Nos.	

TRAINING PROGRAMME OF

CENTRAL EXTENSION RESOURCES DEVELOPMENT INSTITUTE (CERDI)

JOYDEVPUR, DHAKA

APRIL, 1979 TO MARCH, 1980

Months \ Dates	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	REMARKS
APRIL '79																																
MAY '79																																
JUNE '79																																
JULY '79																																
AUGUST '79																																
SEPTEMBER '79																																
OCTOBER '79																																
NOVEMBER '79												16 Nos. Instructors of A. E. T. I.																				
DECEMBER '79																																
JANUARY '80														23 Nos. Instructors of A. E. T. I.																		
FEBRUARY '80																																
MARCH '80																																

TRAINING PROGRAMME OF
CENTRAL EXTENSION RESOURCES DEVELOPMENT INSTITUTE (CERDI)
JOYDEVPUR, DHAKA
APRIL, 1980 TO MARCH, 1981

Months \ Dates	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	REMARKS
APRIL '80																																
MAY '80																																
JUNE '80																																
JULY '80																																
AUGUST '80																																
SEPTEMBER '80																						32 Nos Instructors of										
OCTOBER '80	A. E. T. I.					38 Nos T. A. O.																										
NOVEMBER '80										39 Nos T. A. O.											19 Nos T. A. O.											
DECEMBER '80																						11 Nos Mechanic-cum										
JANUARY '81	workshop Officers																			18 Nos Overseers of A. E. T. I.												
FEBRUARY '81	CERDI																															
MARCH '81				22 Nos Thana Extension Officers.																												

TRAINING PROGRAMME OF
CENTRAL EXTENSION RESOURCES DEVELOPMENT INSTITUTE(CERDI)
JOYDEVPUR, DHAKA
APRIL, 1981 TO MARCH, 1982

Months \ Dates	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	REMAKS
APRIL '81																																
MAY '81																																
JUNE '81																																
JULY '81																																
AUGUST '81																																
SEPTEMBER '81														28 Nos. Thana Agril. Officers.																		
OCTOBER '81															18 Nos. Thana Extn. Officers.																	
NOVEMBER '81																				19 Nos. Thana Extn. Officers.												
DECEMBER '81														22 Nos. Thana Agril. Officers.																		
JANUARY '82				16 Nos. T. E. O																												
FEBRUARY '82	Officers														24 Nos. *																	* Mechanics from D. A. (PP)&D. A. (E&M)
MARCH '82															40 Nos. Mid-level Officers **																	** Fram D. A. (JP), C. D. B., H. D. B.

TRAINING PROGRAMME OF
CENTRAL EXTENSION RESOURCES DEVELOPMENT INSTITUTE (CERDI)
JOYDEVPUR, DHAKA
APRIL, 1982 TO MARCH, 1983

Months / Dates	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	REMARKS
APRIL '82					14 Nos. CERDI Staff																					30 Nos. * 30nos. **						* Youths & Farmers of CDC. ** Farmwives of 3 CDC.
MAY '82										22 Nos. Ins. *							18 Nos. Ins. *															* Instructors of A. E. T. I.
JUNE '82														25 Nos. Ins. *																		* Instructors of A. E. T. I.
JULY '82					25 Nos. Thana Agril. Officers.																											
AUGUST '82		26 Nos. Thana Extension Officers and Instructors Of A. E. T. I. (INDUCTION																														
SEPTEMBER '82	TRAINING)												Coverdale Org.							25 Nos. T. E. O.												
OCTOBER '82			Coverdale Org.							25 Nos. T. E. O.							26 Nos. Ins. *															* Instructors of A. E. T. I.
NOVEMBER '82	26 Nos. Ins. *						BLANK							Coverdale Org.							32 Nos. Mid-Level Officers.											* Instructors of A. E. T. I.
DECEMBER '82					26 Nos. Ins. *							30 Nos. Thana Extension Officers.																	Work. **			* Instructors of A.E.T.I. ** Workshop on Syllabus.
JANUARY '83		26 Nos. Instructors of A. E. T. I. *														BLANK							Coverdale Org.										* on Co-operative & Marketing and A. Husb.
FEBRUARY '83	26 Nos. Instructors of A. E. T. I.												BLANK							Coverdale Org.												* on Horticulture & Extension.
MARCH '83						26 Nos. Instructors of A. E. T. I.														Coverdale Org.							Work. *					* Workshop of Principals of A. E. T. I. on Training needs.

Training Calender for 1982 - 83 (July - June)

Batch No.	Duration	Field of training	Participants	No. of parti-cipants	Remarks
1	2	3	4	5	6
1.	5-7-82 to 17-7-82	Agriculture technology	T.A.O.	44	
2.	2-8-82 to 11-9-82	Induction.	T.E.O & Instructors	29	
3.	30-8-82 to 4-9-82	Wheat, pusle & oilseeds.	T.E.O.	25	
4.	13-9-82 to 18-9-82	Coverdale	Managers	30	
5.	13-9-82 to 14-9-82	Policy workshop on population	Top officers	10	
6.	20-9-82 to 25-9-82	Wheat, pulse & oilseeds.	T.E.O.	25	
7.	3-10-82 to 7-10-82	Coverdale.	Managers	30	
8.	10-10-82 to 14-10-82	Wheat, pulses & oilseeds.	T.E.O.	25	
9.	10-10-82 to 14-10-82	Oil seeds.	T.E.O. & BADC W.D.B. officers.	29	
10.	17-10-82 to 21-10-82	Horticulture	Instructors	13	
11.	17-10-82 to 21-10-82	Extension	- do -	13	
12.	17-10-82 to 21-10-82	Wheat, pulses & oilseeds.	T.E.O.	25	
13.	31-10-82 to 4-10-82	Agronomy-I.	Instructors	13	
14.	31-10-82 to 4-11-82	Agronomy-II.	Instructors	13	
15.	14-11-82 to 30-11-82	Agriculture	Input supply officer	30	
16.	21-11-82 to 30-11-82	Agriculture technology.	Input supply officer, Cotton Unit Officer, grading Inspector	32	
17.	5-12-82 to 9-12-82	Farm Machinery	Instructors	13	
18.	5-12-82 to 9-12-82	Plant Protec-tion	- do -	13	
19.	12-12-82 to 23-12-82	Agriculture technology	T.E.O.	30	
20.	28-12-82 to 31-12-82	Workshop on training syllabus.	Principals of AETI.	37	
21.	2-1-83 to 13-1-83	Co-operative and Marketing	Instructors	13	
22.	2-1-83 to 13-1-83	Animal husbandry	- do -	13	
23.	23-1-83 to 27-1-83	Coverdale	Managers	30	

1	2	3	4	5	6
24.	30-1-83 to 10-2-83	Horticulture	Instructors	13	
25.	30-1-83 to 10-2-83	Extension	- do -	13	
26.	20-2-83 to 24-2-83	Coverdale	Managers	30	
27.	6-3-83 to 16-3-83	Agronomy-I.	Instructors	13	
28.	6-3-83 to 16-3-83	Agronomy-II.	- do -	13	
29.	20-3-83 to 24-3-83	Coverdale	Managers	30	
30.	26-3-83 to 30-3-83	Workshop on training needs	Dy.Director of the District.	24	
31.	3-4-83 to 14-4-83	Agriculture technology.	T.A.O.	32	
32.	17-4-83 to 21-4-83	Coverdale.	Managers	30	
33.	24-4-83 to 5-5-83	Agril. Technology	Input supply officer, Cotton unit officer, grading Inspector.	32	
34.	15-5-83 to 19-5-83	Coverdale.	Managers	30	
35.	22-5-83 to 2-6-83	Agril. Tech.	T.E.O.	32	
36.	19-6-83 to 30-6-83	Agril. Tech.	T.A.O.	32	
			Grand total (including - 240 nos. of Coverdale)	859	
				- 240	
				CERDI- 619	

第１３章　専門家派遣の実績

No.	氏名	等級	指導科目	派遣期間	生年月日	卒業年次	関係機関	同伴家族	備考
1.	姉歯尚	1－1	チーフアドバイザー	48.12. 7～50. 3. 7	大 9. 1. 1	昭 18	農林省		長
		〃	〃	50.11.27～51. 7.30	〃	〃	〃		
2.	松本栄市	2－2	農業機械化	48.12.13～50. 4.16	昭13. 3. 5	昭 33	ＪＩＣＡ		長
		〃	〃	50. 6.26～52. 6.25	〃	〃	〃		
3.	難波輝久	3	稲作栽培	48. 3.31～50. 4.16	昭20. 2.20	昭 44	〃	（妻）	長
		〃	〃	50. 6.26～56. 6.25	〃	〃	〃		
4	藤岡正満	2－1	圃場整備	51.12. 2～51.12.22	昭 7.10.30	昭 31	㈱日本技術開発		短
5	根岸久雄	2－1	圃場設計	〃	大15. 8.27	昭 21	農林省		短
6	岡本純忠	4	圃場整備	51.12. 2～52.12.19	昭19. 7.15	昭 42	㈱日本技術開発		短
7	福里藤三郎	特－2	普及	50. 7.27～52. 7.26	大 2.10. 8	昭 11	ＪＩＣＡ		長
8	水間健志	2	普及計画	53. 2.16～53. 4.15	昭 8. 2.12	昭 28	農林省		短
9	石田武司	5	写真暗室用機械操作据付	53. 7.20～53. 8.12	昭22. 4.14	昭 48	㈱カメラのきむら		〃
10	岩梨一博	6	写真作成	〃	昭26.11.23	昭 45	〃		〃
11	中原臣博	5	印刷機械操作	53. 8.17～53. 9.16	昭19. 8.21	昭 38	㈱東京河本精文社		〃
12	久松隆悦	4	〃 保守整備	53. 8.28～53. 9.17	昭16. 2.27	昭 40	㈱浜田印刷機		〃
13	原本政元	6	製米機据付操作	53. 9. 7～53.10.21	昭30. 2.12	昭 52	㈱佐竹製作所		〃
14	中田正一	等－1	チームリーダー	50. 7.27～57. 4.26	明39.10.28	昭 8	ＪＩＣＡ	妻	派遣中　長
15	沼田正道	2－1	機械工学	52. 2.16～56. 2.15	昭 2. 7.31	昭 20	〃		〃
16	芳住喜介	2－2	農業機械化	52.12. 8～57.12. 7	昭14. 1. 9	昭 41	〃	妻（子１）	派遣中　〃
17	山田保	4	業務調整	54. 4.30～56.10.29	昭20. 8. 7	昭 44	〃	妻（子２）	〃　〃

No.	氏名	等級	指導科目	派遣期間	生年月日	卒業年次	関係機関	同伴家族	備考
18	工藤　厳	3	普及	54.11. 1～56.10.31	昭 9. 5. 4	昭 28	ＪＩＣＡ		派遣中　長
19	坂井　弘	1－1	土壌肥料	54.12. 1～56. 3.30	大 9. 4.10	昭 19	農林水産省	妻	長
		特－2	〃	56. 6. 7～57. 6. 6	〃	〃	〃	妻	派遣中　長
20	依田盛男	特－2	普及計画	55. 1.27～55. 5.26	大 4. 8. 7	昭 11	ＪＩＣＡ		短
21	天野常雄	3	モデルインフラ	55.11.25～56. 2.22	昭18. 8. 8	昭 41	日本技術開発		〃
22	渡辺喜一	特－2	かんがい農業	52. 3.30～54. 3.29	大 6. 8.16	昭 15	ＪＩＣＡ	妻	長
23	和田鉄二郎	4	業務調整	52. 3.30～54. 3.29	昭13. 9. 7	昭 42	〃	妻（子３）	〃
24	篠原捨喜	特－2	園芸	52. 4.24～54. 4.23	大 2. 2. 6	昭 8	〃	妻	〃
25	武川鴻四郎	〃	農業普及	52.12.8 ～54.12. 7	大 8. 1.12	昭 26	〃		〃
26	岡野美樹子	2	生活改善	54. 3. 1～54. 3.17	昭 5. 2.16	昭 26	農林水産省		短
27	佐藤　宏	3	農業経済	55. 1.27～55. 3.25	昭18.11.11	昭 41	アジア経済研究所		〃
28	金子吉太郎	2	農具改良	55. 2.27～55. 3.17	大15. 1. 3	昭 17	三条製作所顧問		〃
29	岩崎重義	3	〃	〃	昭 8. 1.13	昭 26	〃　代表		〃
30	中野大二郎	1	印刷技術	55. 2.27～55. 3.12	大 3. 5.13	昭 27	浜田印刷機製造所		〃
31	大塚正明	5	作物栽培	55. 4. 9～55. 9.30	昭24.11.18	昭 49	ＪＩＣＡ		〃
32	下条道夫	5	育少年教育	〃	昭22. 4.23	昭 49	〃		〃
33	内田　宏	1	視聴覚機材	55. 4. 9～55. 6. 8	大12.11.20	昭 20	農林水産省		〃
34	藤原君子	特－2	生活改善	55.10.20～55.11.20	大10. 4.11	昭 16	ＪＩＣＡ		〃
35	森宮　実	5－2	モデルインフラ	55.11.25～55.12.24	昭23. 8. 9	昭 39	高砂鉄工刈谷工業		〃
36	天野常雄	3	〃	55. 6. 7～55. 8. 5	昭18. 8. 8	昭 41	日本技術開発		〃
37	東出正敏	4	〃	55. 6. 7～55. 8. 5	昭24. 1.12	昭 46	〃		〃

No.	氏名	等級	指導科目	派遣期間	生年月日	卒業年次	関係機関	同伴家族	備考
38	勝部利弘	1	病害虫	56. 1.10～56. 4. 9	昭 5.11. 8	昭 41	東北農試栽培部		短
39	横山保	4	ガラスハウス建設	56. 3.15～56. 5. 3	昭16. 8. 3	昭 34	アルミニウム株式		〃
40	赤川克之	2	普及の手引き作成	56. 4. 4～56. 6. 3	昭 8. 4.10	昭 29	JICA		〃
41	高野林平	1	〃	〃	大12. 3.30	昭 16	十日町土木事務所		〃
42	枝川孝男	3	機械工学	56. 2. 5～58. 2. 4	昭15. 6.15	昭 34	JICA	妻（子4）	長
43	根津光也	1－1	園芸	56. 6. 7～58. 6. 6	昭 2. 3.15	昭 30	〃		〃
44	大嶋健男	4	普及	56.10. 3～58.10. 2	昭23.12.13	昭 47	〃	妻（子1）	〃
45	森下耕自	5－1	調整	56.11.21～58.11.20	昭24. 3.20	昭 49	〃	妻（子1）	〃
46	増見国弘	4	栽培	56.11.21～58.11.20	昭22.10.18	昭 48	〃	妻	〃
47	井上政敏	特－2	普及計画	56.12. 3～58.12. 2	大11.12.28	昭 18	〃	なし	〃
48	赤川克之	2	普及の手引書作成	57. 3.15～57. 6.14	昭 8. 4.10	昭 29	自営	なし	短
49	佐藤隆	特－2	リーダー	57. 6.14～58.10.12	大 8.11. 9	昭 17	JICA	妻	長
50	吉岡真一	1－2	土壌肥料	57. 8.19～58.10.12	昭 4. 4.21	昭 25	農水省	妻	〃

第１４章　機材供与の実績

年度区分	昭和５０年度	５１年度（第１期）	５１年度（第２期）	５２年度	５３年度	５４年度
主要機材	(1) 車両類 バス，ステーションバン，ジープ。 (2) 農機類 トラクター（２６HP級，２２HP級，４輪駆動，プラウ，他アタッチメント） 装軌動トラクター，トラクター３５HP級 (3) 補充品 パーツ類	(1) 農機類 自走自脱，乾燥機，精米設備，製粉機，６″ポンプ，５″ポンプ，４″ポンプ，実習用ディゼルエンジン，噴霧機，スプリンクラー，レインガン。 (2) 小型印刷セット オフセット印刷機，複写製版機，紙折機，紙枚数計算機，裁断機。 (3) 事務用資機材 スチール書庫，カードキャビネット，雑誌架他 (4) 気象観測用機器 自記地中温度計，自記温度計，ジョルダン日照計，風向風速計，百葉箱 (5) 試験研究用機材 害虫予察セット，緑葉面積計，光学顕微鏡，化学天秤，穀粒天秤，ウラ科強度測定器，クリーンベンチ，水質検定器，ガス発生装置，インキュベーター，土壌透水性測定装置，減水深測定機，ガラス器具類，試薬類他 (6) 補充品 パーツ類，旋盤用部品 (7) 農業機械化実験用機材 土壌抵抗測定器，ディジタル・タコメーター，通風乾温計，他 (8) 園芸実験用機械 土壌検定器，土壌植物栄養診断器，パイプハウス，他 (9) 普及指導用写真暗室セット	(1) 車両類 マイクロバス (2) 農業機械類 ポリュートポンプ，揚井ポンプ，揚水ポンプ，耕運機１０－１１HP級，動力噴霧機，動力防除機，噴霧機類，乾燥機他 (3) 事務用資機材 スチール書庫，カードキャビネット，雑誌架他 (4) 気象観測用機器 自記地中温度計，自記温度計，ジョルダン日照計，風向風速計，百葉箱 (5) 試験研究用機材 害虫予察セット，緑葉面積計，光学顕微鏡，化学天秤，穀粒天秤，ウラ科強度測定器，クリーンベンチ，水質検定器，ガス発生装置，インキュベーター，土壌透水性測定装置，減水深測定機，ガラス器具類，試薬類他 (6) 補充品 パーツ類，旋盤用部品 (7) 農業機械化実験用機材 土壌抵抗測定器，ディジタル・タコメーター，通風乾温計，他 (8) 園芸実験用機械 土壌検定器，土壌植物栄養診断器，パイプハウス，他 (9) 普及指導用写真暗室セット	(1) 農業機械類 トラクター７０～８０HP級，耕運機３.５～４.５HP級，自走自脱，播種機，噴霧機類，散粉器，土壌消毒器，クローラートラクター３５～４５HP級，他 (2) 車両類 クレーン付貨物トラック，ステーションワゴン，巡回広報車 (3) 農薬類 (4) 実習訓練用資機材 ネットハウス，グリーンハウス，防鳥網，農具，自記温度計，簡易種子含水量測定器，ビニール用高周波ミシン，光ネット，ポリポット，暗渠排水ポンプ，かんがい用水小型ゲート，波形パイプ，浮イキ調査ボート (5) 補充品 トラクター用モブー，トラクタ用ポストホールディガー	(1) 揚水ポンプ－６基 バーチカルタービンポンプ－３３m揚程，水冷ディゼルエンジン付 (2) 車両類 ジープ－キャンバストップ型，ジープステーションワゴン，２t横トラック，単車，自転車 (3) 農業機械類 耕運機９HP級，手動式噴霧機，磨鉱，足踏脱穀機，蓄力用スキ，他 (4) 農業用資材 (5) 農業肥料類 (6) 生活改善用資機械 足踏ミシン，洋裁道具セット，調理器具，テレビジョンセット，拡声装置 (7) 補充品 写真暗室用，印刷機械用 (8) 普及訓練用資機械 (9) 整備用資機械 ポータブルブリッチ，プーバープレス，工具セット，足踏切断機，電動大工セット (10) 農業機械化試験用機械 赤外線水分計，自然対流式定温乾燥機，穀粒均分器，鏡板土壌水分計，土壌抵抗測定器，自記式コーンペネトロメーター，荷重交換器，小型　精米機，他 (11) 栽培実験用機器 発芽試験用恒温器他 (12) 車両用スペヤパーツ類	(1) 実習用農機類 バッテリーチャージ，マシンウォッシャー他 (2) 鍛造治金設備 鋳鉄製アンビル，　金ハンマー他 (3) 農業機械化機械 振とう器，照明拡大鏡，上皿直示天秤，米麦水分計，穀類乾燥用ロータリドライヤー，ボトムプラウ他 (4) 実験資機械 穀品用器具戸棚，穀粒横断器，落花生水分計，ミニチップ脱穀機，稔実歩合測定機，呼刈用とうみ，双眼実体顕微鏡，定温器，ワグネルポート，水稲収量簡易速決診断器，低温発芽試験機 (5) 肥料（硫安，熔リン，高度化成） (6) 土壌肥料実験用資機械 原子吸光／炎光分光光度計，光電比色計，マイクロプロセッサーイオンアナライザー，浄水装置，窒素分解装置，小型乾機 (7) 園芸普及実験用資機械 カンレイシャ，ファイロン温室，パイプハウス，播種機，他 (8) 普及訓練用資機械 黒板，テープレコーダースライド作成機 (9) 補充品 グリーンハウス霜除けスクリーン他 (10) 植物防除実験用資機械 定温乾熱滅菌器，全温恒温器，虫とう培養器，オートクレブ，ホモジナイザー，ＰＨメーター，稲白葉枯病菌接種器，昆虫標本戸棚，顕微鏡，ミクロトーム，標本複写台，ガラス器具類，試薬類，他 (11) 車両及び農機用スペヤパーツ
（供与額）	（85,000千円）	（95,000千円）	（60,000千円）	（75,000千円）	（69,000千円）	（59,500千円）

年度区分	55年度	56年度	57年度	58年度
主要機材	(1) 車　輌 ジープ，マイクロバス，普及広報車，オートバイ (2) 園芸用機材 野菜洗浄機，スプリンクラーかん水装置，顕微鏡，他 (3) 栽培用機材 硝子器具，乾燥機，ラスター硬度計，栄養診断器，水質試験器，蒸発計，他 (4) ガラス器具，試薬 分　器，ビュレッド，試薬類等 (5) 農薬，肥料 硫安，粒状固形化成，ダイアジノン，他 (6) 普及用機材 (7) 事務機器 (8) パーツ類	(1) 車輌関係部品 ○三菱ギャラン等部品 三菱ジープF36，RJ－34 ギャラン，K－36 ○クボタトラクター等部品 L2201DT，L2600，L2100 ○トヨタステーションワゴン等部品 トヨタクラウン，トヨタステーションワゴン，トヨタバン，トヨタクルーザー，ピックアップ ○日産ステーションワゴン部品 ステーションワゴン，クレーントラック，パトロール (2) 実験用薬品及び農薬，肥料 硫酸銅，固形尿素，その他 (3) 実験用機材，ガラス器具 ドラフトチャンバー，自動　装置その他 (4) 事務用機材 オフセットペーパー，他 (5) 視聴覚機材 映写機，フィルム，他	(1) 農機具，車輌スペアパーツ クボタB-6000，ヤンマーディーゼルTS6000，クボタパワーティラーK-120等17台分 (2) オーバーヘッドプロジェクタースペアパーツ Elmo Colouring Pen 他 (3) 印刷機，コピーマシンスペアパーツ Hamada 790CD 他 (4) ワークショップ用機材 Hand Piece Spray 他 (5) 栽培及び園芸機材 園芸用種子（スイカ，他）実験機材（天幕他），肥料及び農薬，くわ他 (6) 建設資機材 レンガ，セメント，竹，鉄板 他 (7) 事務機材等 イオンコンピューター 他	検　討　中
（供与額）	（67,000千円）	（30,000千円）	（25,000千円）	

供与機材に関する調査

No	調査項目	摘要
1.	管理状況について	
(1)	プロジェクトにおける実質的な機材管理者氏名（専門家及びカウンターパート）	全専門家が自分の専門分野の機材について管理しているが農業機械及び車輛が大きな部分を占めるため，とりわけ機械の専門家（芳住，枝川氏）及びそのカウンターパートプラス現地人ストアキーパーが中心となって機材を管理している。
(2)	備品台帳の有無 ①日本語　②英語 ③現地語	①主要機材利用・処分状況表（１９８２年３月末調査）あり　②英文 Inventory（簡潔な一覧表）作成中 ③英語表記 STOCK BOOK 各年度版を現地側は備えている。（日本から受取った供与機材及びバングラ側が購入した資機材等を記帳）
(3)	アフターケアーについて 現地代理店を通じアフターケアーはどの程度行われているか。また現地代理店がない場合，アフターケアーはどうしているか。	日本でしか修理出来ない精密測定器等が故障した場合お手上げである。 在ダッカ日本商社を通じて，ダッカにて入手不能なパツを日本へ発注。
2.	輸送について 到着時点の梱包状況と望ましい梱包について	チッタゴンにて引取りを待つ間１年以上野積みされている間に強い勢いの雨にさらされて梱包の中に浸水している機材もしばしばあり，引取った時点で既に故障していて使えない精密測定器あるいはエレクトロニクス製品もあった。全てを完全な防水梱包をほどこしていただきたい。
3.	保険期間及び保険求償の方法	色々と問題のある国でもあるが，結果として現状のままで良い。
4.	現地調達について	
(1)	現地調達をした主な機材名	バッテリー，オルタネーター，スターター・モーター，練瓦
(2)	現地調達を実施する上での問題点	現地調達に関する総裁名通達，昭和５２年１１月１１日付（経）第５９号に記されたガイドラインに従って，例えば牛糞のような肥料を現地調達した場合，一度に例えば２５万円分（トラック５５台分）も買う訳にいかず，

		少しずつ買って行くことになる。そうした場合，完全にレシートがそうまでに1年近くかかる事が予測され，合計処理の点で困難がある。この場合先に25万円を業者に前払いしてレシートだけ先にもらう方法も考えられるかも知れないが，完全に品物の納入が終るまでの1年近くにわたって注意していないと，前払いしたけれど，それに見合う品物が納入されなかったと言う事がこの国では起りうるため，この方法も適切とは考えられない。従って現地調達する品物はタイヤ，バッテリー等1点の単価が高く，その場で支払ってレシートのとれる資機材，もしくは練瓦，砂，鉄棒等のまとめ買いが適切と前回の経験から判断される。
5.	機材の要請リスト（A4フォーム）作成とその手順	日本人専門家がカウンター・パートと協議して各分野別の原案を作成 → 調整員がとりまとめ → 要請リスト全体に対するバングラ側（CERDI Director）の了承取付け → 農業省を経て正式処理
(1)	フローチャート	DERDI → Ministry of Agriculture → E. R. D. Ministry of Finance → Embassy of Japan → 日本国外務省
(2)	機種選定及び数量決定に際し，日本側と相手側で意見の相異があったかどうか。	特になし
6.	バ国に於ける通関について	航空貨物で送付されたものは比較的短期間（2～3カ月間）で受取れるが，船便で送付された機材は引取りに1年以上かかる例もこの国では珍しくない。政府関係の援助機材はバクシーシ（袖の下）のうまみが殆どないため，速かに処理されず多大の時間がかかる結果となっている。しかしながら事務処理に多大の時間がかかる（非能率）と言う点については何も通関だけに限らず，バ国政府のあらゆる事務処理がそうであり，またこの国の日常生活の全てに共通している点である。その意味では，

		当国では通関に日本の常識では考えられないような時間がかかったとしても，それはこの国の他のあらゆる事務処理，ひいては社会現象と整合性を持っており，ただ一つ通関問題だけがボトルネックではない点に問題の根の深さがある。
7.	通関改善対策について	通関の改善策については前述のように問題の根が深いだけに，これと言う即効性のある名案は見当らない。せいぜい通関を必要とする援助物資を最少に抑え，できうる限り現地調達する方向で対処するのが現実的な対応策かと考えられる。また正式ルート（外交 channel）による対応策としては既に日本大使館からバ国関係当局に文書で通関問題の改善方要請がなされているが，通関の現場ではその効き目はなく，従前と何ら変らないのが実情である。
8.	輸入禁止物品	ゴム製品　ゴム長靴，ゴムボートは輸入禁止，但しゴム製品であっても自動車用タイヤ及びチューブは輸入可。リキシャ用タイヤ及びチューブ（バングラ国産品があるもの）は輸入禁止。 カメラ，テープレコーダー，個人使用程度の機種は輸入可，営業用あるいは本格的（ professional ）なものは輸入禁止。しかしながら，どこまでが personal use のカメラあるいはテープレコーダーで，どれ以上が Professional なもの（ Commercial use）かは規則にその点まで詳しく記されている訳ではないので，検査に当る税関係官の裁量で輸入禁止品目と見なされたりＯＫであったりする。勿論バクシーシの有無も通関に影響する。結論的に言えば現時点で輸入禁止品目かどうかを check してOKであっても，この国では規則は簡単に変るため無駄である。
9.	機材の検収調書	
10.	その他	

利用状況調査（１００万円以上の機材）

A．良く利用している
B．時々利用している
C．全んど利用していない
D．廃棄処分

年次別	資機材名	資機材の仕様，参考銘柄，型式又使用目的	A．B．C．D	保管場所	数量
	＜車　輌＞				
1971	ジープ	J34　2,700 cc　ガソリン車	D（1980年廃車　耐用年限）		1台
1972	ジープ	J36　2,700 cc　ディーゼル車	D（1980年交通事故により大破　廃車）		1
〃	ジープ	J36　2,700 cc　ディーゼル車	C（オイル漏れのため要修理）	CERDI	1
1974	トラック	3 ton 積　3,300 cc	D（1981年廃車　耐用年限）		1
〃	ランドクルーザー	3,600 cc　ガソリン車	D（1981年廃車　故障修理不可）		}2台
〃	ランドクルーザー	3,600 cc　ガソリン車	D（1981年廃車　故障修理不可）		
1975	クレーントラック	3.5 ton積	A	CERDI	1
1976	大型バス	8,000 cc	A	CERDI	1
〃	ジープ	J36　2,700 cc　ディーゼル車	C（オイル漏れのため要修理）	CERDI	1
〃	ニッサン　パトロール	4,000 cc　ガソリン車	D（1982年競売　燃費過大）		1
〃	ニッサン　パトロール	4,000 cc　ガソリン車	C（競売予定）	CERDI	1
〃	トヨタ　ステーション　ワゴン	2,000 cc　ガソリン車	D（1982年競売　燃費過大）		}2台
〃	トヨタ　ステション　ワゴン	2,000 cc　ガソリン車	D（　〃　）		
〃	ダットサン　ブルーバード　ワゴン	1,600 cc　ガソリン車	D（　〃　）		1
〃	トヨタ　クラウン　セダン	2,000 cc　ガソリン車	A（CERDI建物無償協力による建設の際，建設会社が持込んだ車）	CERDI	1
〃	ニッサン　ステーション　ワゴン	2,600 cc　ガソリン車	A	CERDI	}2台
〃	ニッサン　ステーション　ワゴン	2,600 cc　ガソリン車	A	CERDI	
1977	マイクロバス	25人乗　2,700 cc	A	CERDI	1
〃	ジープ	J36　2,700 cc　ディーゼル車	A	CERDI	1

年次別	資機機　材　名	資機材の仕様，参考銘柄，型式又使用目的	A．B．C．D	保管場所	数　量
1977	三菱　コルト　ギャラン　ワゴン	1,600 cc　ガソリン車	A	CERDI	1台
1979	トラック	3 ton 積　3,300 cc	A	CERDI	3台
〃	トラック	3 ton 積　3300 cc	A	CERDI	
〃	トラック	3 ton 積　3,300 cc	B	CERDI	
〃	ジープ	J 36　2,700 cc　ディーゼル車	A	CERDI	2台
〃	ジープ	J 36　2,700 cc　ディーゼル車	A	CERDI	
1980	マイクロバス	28 人乗り 3,300 cc	A	CERDI	1台
〃	ジープ	J 36　2,700 cc　ディーゼル車	A	CERDI	3台
〃	〃	〃　〃　〃	A	CERDI	
〃	〃	〃　〃　〃	A	CERDI	
〃	〃	J 36　2,700 cc　ディーゼル車	A	CERDI	1台
	＜農業機械＞			E	
1974	ショベルドーザー	CAT 931	A	CERDI	1台
〃	フォークリスト	コマツ　2 ton 揚重	A	CERDI	1台
1977	トラクター	クボタ　L－3,500	A	CERDI	3台
〃	〃	〃　〃	B	CERDI	
〃	〃	〃　〃	B	CERDI	
〃	トラクター	クボタ　L－2,601	A	CERDI	4台
〃	〃	〃　〃	A	CERDI	
〃	〃	〃　〃	B	CERDI	

年次別	資 機 材 名	資機材の仕様，参考銘柄，型式又使用目的	A．B．C．D	保管場所	数 量
1977	トラクター	クボタ　L－2,601	B	CERDI	
〃	トラクター	クボタ　L－2,201	A	CERDI	5台
〃	〃	〃　〃	A	CERDI	
〃	〃	〃　〃	B	CERDI	
〃	〃	〃　〃	B	CERDI	
〃	〃	〃　〃	B	CERDI	
〃	〃	〃　〃	A	CERDI	5台
〃	〃	〃　〃	A	CERDI	
〃	〃	〃　〃	A	CERDI	
〃	〃	〃　〃	B	CERDI	
〃	〃	〃　〃	B	CERDI	
〃	トラクター	クボタ　B－6,000 DT	B	CERDI	2台
〃	〃	〃　〃	B	CERDI	
〃	籾摺精米プラント	1.0 ton/Hr モデル	C	CERDI	1台
1978	トラクター	フォード　6,000	A	CERDI	2台
〃	〃	〃　〃	C	CERDI	
1979	湿地ブルドーザー	コマツ　D20P	A	CERDI	1台
〃	深井戸用ポンプ	150 mm	A	CDC	
〃	〃	〃	A	CDC	
〃	〃	〃	A	CDC	

年次別	資　機　材　名	資機材の仕様，参考銘柄，型式又使用目的	A．B．C．D	保管場所	数　量
1979	深井戸用ポンプ	コマツ　150 mm	B（予備ポンプ）	CERDI	6台
〃	〃	〃	B（　〃　）	CERDI	
〃	〃	〃	C（据付時破損）	CERDI	
	＜実験機材，その他＞				
1977	印刷機械		A（但し，二色刷りは不可）	CERDI	1式
〃	船外エンジン付ボート		C（故障）	CERDI	1
1978	写真撮影，現像，焼付機械		A	CERDI	1式
1979	原子吸光光度計	Hitachi　170-30	A	CERDI	1

第１５章　研修員受入れ実績（48年～56年）

年度区分	研修員氏名	研修科目	区分	期間
48年	Mri Abdus Salam	農業事情視察	視	49. 2. 17 ～ 2. 30
〃	Mr. Mosharaf. Hossain	〃	〃	〃
49年	Mr. Moslchuddin Ahmed	農業機械整備	集	49. 6. 2 ～ 12. 1
〃	Mr. Md. Bellal Horrain	稲作普及	〃	49. 4. 5 ～ 12. 22
〃	Dr. A.H.M. Altaf Ali	農業事情視察	視	49. 11. 8 ～ 11. 24
〃	Mr. Shansal Houssain H.	〃	〃	〃
〃	Mr. Muhammad Abdus S.	野菜普及	集	49. 4. 5 ～ 12. 22
〃	Mr. Sudhangsu Bhuson S.	農業機械整備	〃	49. 6. 2 ～ 12. 1
50年				
51年	Mr. A. S. M. Kamaluddin	農業事情視察	視	51. 11. 6 ～ 12. 6
〃	Mr. Abdul Salak	農業機械整備	集	51. 6. 1 ～ 12. 1
52年	Mr. Nasirullah	農業普及	集	52. 4. 7 ～ 7. 6
〃	Mr. Qumrul Islam	農業機械整備	〃	52. 6. 2 ～ 12. 1
53年	Mr. Md. Nurul Alam	かんがい排水	集	53. 2. 9 ～ 11. 30
〃	Mr. Md. Mofassal Hossain	野菜栽培	〃	53. 2 9 ～ 11. 30
〃	Mr. Md. Afsar Ali Khan	農業普及	〃	53. 4. 6 ～ 9. 8
〃	Mrs. Momtaj Ara	図書館管理	個	53. 6. 9 ～ 9. 8
〃	Mr. Shahebe	車輻整備	〃	53. 6. 9 ～ 12. 9
54年	Mr. Md. Satar	稲作栽培	集	54. 3. 1 ～ 12. 21
〃	Mr. Md. Masuduzzaman	稲作機械化	〃	〃
〃	Dr. Altaf Ali	農業事情視察	視	54. 5. 9 ～ 5. 30
〃	Mr. Maman	農業普及事情	〃	54. 12. 4 ～ 12. 23
〃	Mr. Haque	〃	〃	54. 12. 4 ～ 12. 23
55年	Mr. M. R. Chowdhwry	農業普及	集	55. 5. 11 ～ 7. 31
〃	Mr. Quazi Rezaul Islam	〃	〃	〃
55年	Mrs. Monowara Habib	生活改善	集	55. 7. 24 ～
55年	Mrs. Fateme Zohura	生活改善	集	55. 7. 24 ～
56年	Mr. Nand Lal Das	農業普及	集	56. 5. 11 ～ 7. 31
〃	Dr. Mohammad Ishaque	農業事業視察	〃	56. 7. 13 ～ 7. 26
〃	Mr. Nowab Ali Dewan	稲の病害虫	〃	56. 5. 28 ～ 12. 15
〃	Mr. Md. Abdus Sattare	稲作機械化	〃	57. 3. 4 ～ 12. 14

年度区分	研 修 員 氏 名	研修科目	区分	期　　間
56年	Mr. Sahidul Islam	稲作栽培	〃	〃
	Mr. A. K. M. Azad	農業普及	集	56. 5. 7～ 7. 31
57年	Mr. A. K. M. MANSUR	視察	視	57. 5. 24～ 6. 14
〃	Mr. MD. YUNAS	農業普及	集	57. 5. 6～ 8. 5
〃	Mr. Abdus MD. MANAN	〃	〃	〃

Ex-participants のアンケート調査

1. Name:	A.K.M. AZAD Assistant Agronomist
2. Study subject in Japan:	Group Training Course in Agriculture Extension
3. Duration of study in Japan:	2 months 21 days
4. Facilities & conditions:	All expenditure borne by the Government of Japan
5. Duration of study was:	7th May to 31st July/1981
6. Allowance for living while you stayed in Japan:	3750 ¥en/day + Accommodation free at Tokyo International Centre
7. Teaching subject at present at CERDI:	Agronomy
8. Research title at present at CERDI:	1. Comparative Nitogen Top Dressing of Paddy at Panicle initiation Stage & Panidleneck Differentiation Stage. 2. Timing of Nitrogen application 3. Rice Fertilizer Trial.
9. Did you find your study/training useful for your present teaching/ research?	Yes
10. Comment/suggestion on the program on the whole	Actually, Agriculture science in Japan is very much sophistcated. The technology they apply is very much advance. So I think for any under developing country they can find out simple but useful technology which we can apply easily.

1. Name:	MRS. FATEMA ZOHURA KHATON
2. Study subject in Japan:	Home-life Improvement and Extension.
3. Duration of study in Japan:	44 (Forty four) days
4. Facilities & conditions:	Very good.
5. Duration of study was:	44 (Forty Four) days
6. Allowance for living while you stayed in Japan:	¥10,500 per day.
7. Teaching subject at present at CERDI:	No teaching work. At present I am working as a Catalogour in the CERDI Library. (Ex-Home Improvement Agent)
8. Research title at present at CERDI:	No.
9. Did you find your study/training useful for your present teaching/ research?	Does not arise.
10. Comment/suggestion on the program on the whole	Training course was very short. This may be designed for at least 3 (Three) months.

1. Name:	MRS. MONOWARA HABIB
2. Study subject in Japan:	Home Life Improvement Extension
3. Duration of study in Japan:	One month and fourteen days
4. Facilities & conditions:	Hotel accommodation was provided and free medical facility was available. Materials in connection with the study were supplied. Conditions of the study were perfectly allright.
5. Duration of study was:	One month
6. Allowance for living while you stayed in Japan:	Allowances for transport, food, kits, etc. were paid.
7. Teaching subject at present at CERDI:	Home Improving with special emphasis on Nutrition, Home Management, child care, development of kitchen gardens, handicrapts, etc.
8. Research title at present at CERDI:	I have been assigned to Extension service and not research work. But data and information collected by me are furnished for research on the subject.
9. Did you find your study/training useful for your present teaching/ research?	I have found my study tremendously useful in my present assignment of extension service where I have to teach two participating housewives.
10. Comment/suggestion on the program on the whole	Methods and techniques were very much technical which could easily infuse the dieas in the participants. The programme profoundly added factors to my professional experience. But the total period seemed inadequate to grasp the things which were told and shown in and outside lecture halls.

1. Name:	MD. ABDUL MANNAN
2. Study subject in Japan:	Group Training Course in Agricultural Extension
3. Duration of study in Japan:	2 months 22 days
4. Facilities & conditions:	Good
5. Duration of study was:	3 months
6. Allowance for living while you stayed in Japan:	3,800 Yen/Day
7. Teaching subject at present at CERDI:	Soil & Fertility
8. Research title at present at CERDI:	1. Yield response of wheat to nitrogen and sulphur firtilization. 2. Yield response of BR-3 rice to nitrogen, phosphorns, potassium & sulphur fertilization.
9. Did you find your study/training useful for your present teaching/ research?	Yes, this training helps me much to teach the mid-level extension personnel.
10. Comment/suggestion on the program on the whole	1. One week stay with extension advisors should be introduced to know how they disseminate production technology. 2. Follow-up programme should be introduced. 3. More study tour to visit differen research organizations should be included.

1. Name:	MD. YUNUS
2. Study subject in Japan:	Group Training on Agriculture Extension Service.
3. Duration of study in Japan:	May 17, 1982 to July 28, 1982.
4. Facilities & conditions:	Excellent
5. Duration of study was:	May 6, 1982 to July 31, 1982.
6. Allowance for living while you stayed in Japan:	Living Allowance ¥330,600 - Not sufficient in Japanese Condition.
7. Teaching subject at present at CERDI:	Farm Management (Agronomy)
8. Research title at present at CERDI:	To Study and Develop Farm Management Procedure
9. Did you find your study/training useful for your present teaching/ research?	Yes.
10. Comment/suggestion on the program on the whole	1. Duration of the Course may be extended. 2. Arrangement of practical work with the Extension Worker may be extended.

1. Name	A.K.M. MANSUR. (Ex-Director, CERDI)
2. Study subject in Japan:	Study on Agricultural Extension and Management in Japan.
3. Duration of study in Japan:	April 24, 1982 to June 14, 1982.
4. Facilities & conditions:	I was provided with all the facilities of visiting various concerned places like Offices, Research Stations, Educational Instt., Farm houses, Markets, etc. which provided good opportunities for me to come in direct contact with Field Workers, Office Managers, Researchers, Market Organizers, Agril. Implement Manufacturers, Farm family members, etc. & that helped me a lot towards achieving the objectives of my study tour.
5. Duration of study was:	April 24, 1982 to June 14, 1982.
6. Allowance for living while you stayed in Japan:	¥16,500 per day for 22 days plus air-passage from and to Bangladesh and train fares within Japan.
7. Teaching subject at present at CERDI:	Nil.
8. Research title at present at CERDI:	Nil.
9. Did you find your study/training useful for your present teaching/ research?	My study and observations in Japan may be possible to be utilised in the development of Agricultural Extension in Bangladesh.
10. Comment/suggestion on the program on the whole	Japan is highly advanced in the field of Agril. Extension, Research & Management and Bangladesh, being wholely dependent on the prospect of her agriculture, may be benefitted through transfer of technology being followed in Japan for which persons engaged in Agriculture (Planners, Executives, Researchers, Teachers, Extension Workers, etc.) in Bangladesh are required to be given chance for study/observation in Japan.

1. Name:	MR. ABDUS SATTAR (Ex-Principal Agronomist)
2. Study subject in Japan:	Vegetable cultivation and its extension
3. Duration of study in Japan:	9 months
4. Facilities & conditions:	Perfectly related to the subject and favourable for teaching, study & learning.
5. Duration of study was:	As programmed for 9 months
6. Allowance for living while you stayed in Japan:	2,300 yen per day excluding free lodging and free breakfast.
7. Teaching subject at present at CERDI:	During my tenure of works at CERDI, I was assigned to work as Principal Agronomist, dealing exclusively crop production Agronomy. Presently I am transferred in the Department of Agriculture Extension & Management. Now, Deputy Director, Extension and Management Div., Ministry of Agriculture.
8. Research title at present at CERDI:	During my service at CERDI, I conducted Studies mainly in Vegetable and Ride Agronomy.
9. Did you find your study/training useful for your present teaching/ research?	Yes.
10. Comment/suggestion on the program on the whole	Follow-up training on the impact and further development will make perfection of the training.

1. Name:	MD. NOWAB ALI DEWAN.
2. Study subject in Japan:	Control of Rice disease and insect pests.
3. Duration of study in Japan:	6 months and 15 days
4. Facilities & conditions:	Good.
5. Duration of study was:	28th May, 1981 to December 15, 1981.
6. Allowance for living while you stayed in Japan:	¥3,750 per day.
7. Teaching subject at present at CERDI:	Plant Protection.
8. Research title at present at GERDI:	1. Pesticide trial against insect pests and diseases of different crops. 2. Collection and preservation of disease and insect samples in the laboratory etc.
9. Did you find your study/training useful for your present teaching/ research?	Yes.
10. Comment/suggestion on the program on the whole	The course was lengthy but duration was short. I think this course duration should be at least nine worths and field oriented. Also this course should be included technique of making coloured slides and preservation of insect and disease samples. Besides these training programme should be based on the facilities which are available in the developing countries.

1. Name:	NANDA LAL DAC, Training Officer
2. Study subject in Japan:	Agriculture Extension Service in Japan
3. Duration of study in Japan:	2 months 21 days
4. Facilities & conditions:	Excellent.
5. Duration of study was:	3 months
6. Allowance for living while you stayed in Japan:	¥3,750 per day Not sufficient at per Japanese condition.
7. Teaching subject at present at CERDI:	All agricultural subjects and management and administrative subjects.
8. Research title at present at CERDI:	1. To study and development of training methodology. 2. To study and development of teaching methodology. 3. To study and development of extension methodology.
9. Did you find your study/training useful for your present teaching/ research?	Yes.
10. Comment/suggestion on the program on the whole	1. Duration of the course may be extended. 2. Duration of staying with farmers may be extended. 3. Arrangement may be made to work practically with the Japanese extension workers. 4. Workshop with the Ex-participants may be arranged

1. Name:	QUAZI REZAUL ISLAM
2. Study subject in Japan:	Agriculture Extension Service in Japan
3. Duration of study in Japan:	3 months
4. Facilities & conditions:	Good.
5. Duration of study was:	2 months 27 days
6. Allowance for living while you stayed in Japan:	3,750 ¥ per DIEM
7. Teaching subject at present at CERDI:	Agriculture extension
8. Research title at present at CERDI:	Study and development of extension methodology
9. Did you find your study/training useful for your present teaching/ research?	Yes.
10. Comment/suggestion on the program on the whole	1. Duration of the course is insufficient. 2. Observation of the extension activities by staying with the extension worker should be included. 3. Follow-up programme should be included.

1. Name:	MUJIBUR RAHMAN CHOWDHURY
2. Study subject in Japan:	"AGRICULTURE EXTENSION SERVICE IN JAPAN"
3. Duration of study in Japan:	3 months.
4. Facilities & conditions:	Good.
5. Duration of study was:	2 months 27 days.
6. Allowance for living while you stayed in Japan:	¥3,750 per day.
7. Teaching subject at present at CERDI:	Agriculture Extension.
8. Research title at present at CERDI:	Study and Development of Extension Methodology.
9. Did you find your study/training useful for your present teaching/ research?	Yes.
10. Comment/suggestion on the program on the whole	1. Duration of the Course is insufficient. 2. Observation of the Extension activities by staying with the Extension worker should be included. 3. Follow-up Programme should be included.

1. Name:	M. A. MANNAN
2. Study subject in Japan:	Agricultural Development in Japan
3. Duration of study in Japan:	3 weeks.
4. Facilities & conditions:	Excellent.
5. Duration of study was:	3 weeks.
6. Allowance for living while you stayed in Japan:	US Dollars 12.60/-
7. Teaching subject at present at CERDI:	Guest Speaker on Agricultural Management Course.
8. Research title at present at CERDI:	- - -
9. Did you find your study/ training useful for your present teaching/research?	Useful for chalking out the training manuals, Programmes of the Junior Officers and field level workers of the Agricultural Extension Departments.
10. Comment/suggestion on the program on the whole:	CERDI Programmes are very essential for the top management of Agricultural Extension Departments.

1. Name:	MD. MASUDUZZAMAN
2. Study subject in Japan:	Rice Production Mechan
3. Duration of study in Japan:	About 10 (ten) months.
4. Facilities & conditions	Good.
5. Duration of study was:	From March to December - 1979.
6. Allowance for living while you stayed in Japan:	Good,
7. Teaching subject at present at CERDI:	Internal Combustion engines for Agricultural use Utilization of Agricultural Machinery for mechanized farming.
8. Research title at present at CERDI:	Adaptibility test of imported machinery to Bangladesh Agriculture Development of improved Indgenous hand tools. Test of Manually operated irrigation pumps.
9. Did you find your study/training useful for your present teaching/ research?	Yes.
10. Comment/suggestion on the program on the whole	Participants having similar educational Backgrounds and experience preferably in Agricultural Engineering should be selected for mechanization course practice on some more catagories of machinery is to be included provisions for preparation of different country oriented foodings will improve the lodging situation.

1. Name:	MD. ABDUS SATTAR (Agronomy Spt.)
2. Study subject in Japan:	"Extension & Rice cultivation"
3. Duration of study in Japan:	9 months 4 days.
4. Facilities & conditions:	Excellent.
5. Duration of study was:	9 months 14 days.
6. Allowance for living while you stayed in Japan:	¥3,750/ day. (in Japan condition it is not sufficient)
7. Teaching subject at present at CERDI:	Agronomy, Soil Science, Horticulture, Plant Protection. Extension and teaching methodology.
8. Research title at present at CERDI:	Experiment on HYV Rice in relation with different levels of fertilizer, spacing, depth of planting, No. of plants/hill in planting and application of fertilizer in different growth stages, supervision of farms & C.D.C.
9. Did you find your study/training useful for your present teaching/ research?	Very useful in teaching and also in doing demonstration
10. Comment/suggestion on the program on the whole	This programme need followup programme to time as the science is developing.

1. Name:	MR. MD. AFSAR ALI KHAN
2. Study subject in Japan:	Group training course on Agricultural Extension Service in Japan 1978
3. Duration of study in Japan:	2 months 22 days
4. Facilities & conditions:	Excellent.
5. Duration of study was:	3 months
6. Allowance for living while you stayed in Japan:	¥3,750 per day
7. Teaching subject at present at CERDI:	Agriculture Extension
8. Research title at present at CERDI:	Development of Extension and Teaching methodology
9. Did you find your study/training useful for your present teaching/ research?	Yes.
10. Comment/suggestion on the program on the whole	1. No follow-up programme.

1. Name:	MD. NURUL ALAM
2. Study subject in Japan:	Irrigation and drainage
3. Duration of study in Japan:	February 8, 1978 to November 30, 1978
4. Facilities & conditions:	Very good.
5. Duration of study was:	February 9, 1978 to November 30, 1978
6. Allowance for living while you stayed in Japan:	About ¥6,500 per day
7. Teaching subject at present at CERDI:	Irrigation and water management.
8. Research title at present at CERDI:	Dug well irrigation for paddy.
9. Did you find your study/training useful for your present teaching/ research?	Yes, perfectly useful.
10. Comment/suggestion on the program on the whole	More classes are necessary for design of irrigation and drainage structures.

1. Name:	MD. QAMRUL ISLAM
2. Study subject in Japan:	Agriculture Mechinery Maintenance and Repair.
3. Duration of study in Japan:	6 (Six) months.
4. Facilities & conditions:	Good.
5. Duration of study was:	3rd June to 3rd December, 1977.
6. Allowance for living while you stayed in Japan:	¥3,500 per day.
7. Teaching subject at present at CERDI:	Agriculture Mechinary Maintenance and Repair.
8. Research title at present at CERDI:	
9. Did you find your study/training useful for your present teaching/ research?	Yes.
10. Comment/suggestion on the program on the whole	6 (Six) months is not sufficient for this type of practical training. One year is better and for the Ex. participants refreshment course is necessary for smoothly running their present work.

1. Name:	MD. NASIRULLAH
2. Study subject in Japan:	Extension Management.
3. Duration of study in Japan:	3 (Three) months.
4. Facilities & conditions:	Good.
5. Duration of study was:	3 (Three) months.
6. Allowance for living while you stayed in Japan:	¥3,500 per day.
7. Teaching subject at present at CERDI:	Extension
8. Research title at present at CERDI:	Training needs of the Participants (Mid-level Extension)
9. Did you find your study/training useful for your present teaching/ research?	Very useful.
10. Comment/suggestion on the program on the whole	Duration should be increased.

1. Name:	ABDUS SALEQUE
2. Study subject in Japan:	Agricultural Machinery Maintainance and repair.
3. Duration of study in Japan:	6 (Six) months
4. Facilities & conditions:	Good
5. Duration of study was:	3rd June to 3rd December, 1976.
6. Allowance for living while you stayed in Japan:	Sufficient.
7. Teaching subject at present at CERDI:	Repair maintenance of Transport Vehicles and Agricultural Machinery.
8. Research title at present at CERDI:	Attached with research and development of Single cow plough, Paddling wheel of Power tiller.
9. Did you find your study/training useful for your present teaching/ research?	Yes.
10. Comment/suggestion on the program on the whole	More practice oriented training will be better.

1. Name:	A.S.M. KAMALUDDIN
2. Study subject in Japan:	Middle level Agricultural Training.
3. Duration of study in Japan:	21 days. 3rd and 4th week of November and first week of December, 1976.
4. Facilities & conditions:	Possible facilities were made available during the stay in Japan for the purpose stated above.
5. Duration of study was:	21 days.
6. Allowance for living while you stayed in Japan:	US$50 per day.
7. Teaching subject at present at CERDI:	Sugar cane Plantation, Horticultural development in Bangladesh and office management as and when requested by the authorities of Central Extension Resources Development Institute.
8. Research title at present at CERDI:	Nil.
9. Did you find your study/training useful for your present teaching/ research?	Useful to a certain extent.
10. Comment/suggestion on the program on the whole	Separate sheet has been used for this item, which is enclosed.

It is suggested that whenever any senior officer is invited by the Govt. of Japan for a study of a subject for a short duration arrangement should first be made for an orientation course for the participant (on teaching, research and extension system of Japan). This orientation course should be arranged for the participant before he leaves his country so that after arrival at Japan he can start his evaluative study without loss of time (for a period of seven to ten days on orientation).

It is also suggested that instead of drawing up a unilateral programme by the authorities in Japan, the programme should be drawn up by the representative of the Govt. of Japan (located at Dacca) in consultation with the participant so that the programme satifies the felt needs of the country of the participant.

It is also suggested that sufficient margin of time should kept at the disposal of the participant (while in Japan) so that a drat report may be prepared by the participant and placed it before interpretor (at Japan) for addition, alternation and correction etc. Final report should, however, be prepared by the participant on return to his country.

1. Name:	DR. A.H.M. ALTAF ALI (Chief, Agriculture Sector, Planning Commission)
2. Study subject in Japan:	Study tour in the field of Agricultural Research and Rural and Cooperative Development.
3. Duration of study in Japan:	3 (Three) weeks, sometimes in the month of August, 1978.
4. Facilities & conditions:	Well provided. The study tour would have been more effective, if some sorts of orientation programme was made prior to the tour.
5. Duration of study was:	3 (Three) weeks.
6. Allowance for living while you stayed in Japan:	As per rules of JICA U.S.$70 per day.
7. Teaching subject at present at CERDI:	Does not arise as I am working in Agriculture Division, Planning Commission.
8. Research title at present at CERDI:	Does not arise.
9. Did you find your study/training useful for your present teaching/ research?	Most useful and purposeful. The experience and knowledge obtained during the tour definetely helped me in formulating programme, policies, and strategies in the field of Agriculture and Rural Development.
10. Comment/suggestion on the program on the whole	Study tour should be more specific and area and problem oriented. Instead of drawing up the programme unilateraly, it would be better if the programme is drawn inconsulation with participants before hand by the representatives of JICA at Dacca.

1. Name:	MOSLEHUDDIN AHMED
2. Study subject in Japan:	Extension Specialist (with specilization production agronomy)
3. Duration of study in Japan:	Month - April / 1953 (7 weeks)
4. Facilities & conditions:	Good under those conditions. Could see extension activities at rural level, farm houses. 4 - H Club activities.
5. Duration of study was:	7 weeks.
6. Allowance for living while you stayed in Japan:	At that time about 12.00 US$/days.
7. Teaching subject at present at CERDI:	Agril. Extension for training classes an invitation periodically. Normally 90 minute talk and discussion in one training session.
8. Research title at present at CERDI:	Do not do research but get research results from CERDI. If needed, I may suggest research proposals.
9. Did you find your study/training useful for your present teaching/ research?	I had many studies and training abroad including Japan. I was impressed by the rural organization, intensive cultivation practices and in course of my deliberations I frequently refer to more applicability of Japanese Agriculture to that of Bangladesh. Japanese system of extension as such is attracting.
10. Comment/suggestion on the program on the whole	There are research activities and extension/development activities and broad areas of such activities. I suggest that programmes be built in consultation with a small advisory committee, both for research and development. Forthmore, an annual evaluation of activities on programmes decided should be done internally and also externally. Specifically, the technologies developed should be tried at village levels, selected or otherwise and it is this part which is very important last most neglected at CERDI.

第１６章　無償資金協力、モデルインフラ整備事業、応急対策、中堅技術者養成対策、普及効果測定事業各実績

無償資金協力実績

年　度	協　力　内　容	金　額
５１年	中央農業普及技術開発研究所の建設（ＣＥＲＤＩ）	７００百万円
５２年	〃	６０百万円
５３年	コミュニティーセンターの建設	１２０百万円
５８年	宿舎の建設	１２０百万円

モデルインフラ整備事業実績

年　度	協力内容（工事概要及び工期）	金　額
５５年	３カ所のコミュニティセンター（Nawjore, porabari, Bhabanipur ）に付属する農場の圃場整備並びにporabari 及びBhabanipurにあるため池の改修を進め普及訓練に資するため，55年１１月～５６年３月（工期）	巡遣諸費　1,529,000円 技術費　6,512,000円 8,041,000円

応急対策実績

年　度	協力内容（工事名等）	金　額
５１年(第1期)	仮排水溝堀削工事 試験圃場の雨期のたん水障害を除去するため応急排水溝水を堀削８００m	１,９７０千円
(第2期)	農機具等収納仮設建物工事 供をした農機具等を一時的に収納する仮設建物の設置，波板トタン葺平屋建，レンガ積側壁　１７５m^2	１,６２５千円

５２年(第2期)	既存溜池改修工事 １９７７年８月の集中豪雨によるcerdi圃場内にある既存のかんがい用溜池や削壊し利用不能の状態であり，これを応急的に改修し，用水の確保をはかる。 提防改修約９００ｍ，提高約1.８ｍ，巾約３ｍ，盛土高約2,５００ｍ³	2,４９０千円
５４年(第1期)	農業機械訓練棟他（シャッター付替と工事） １９７９年４月に襲来したサイクロンにより農業，機械棟等のシャッタードア及び巻きあげスプリングが破損し開閉不能となり機械の盗難，破損の恐れがあるため，シャッターの付け替え工事を行う。	2,１１０千円
（第2期）	試験圃場囲障補修工事 （囲障補修，有刺鉄線延長　７８０ｍ）	1,７００千円
５５年(第1期)	研究所本館２棟，階下窓に対する鉄格子仮設工事　（9フィート×9フィート）２５ケ所 農機具教室小窓のガラスが外部から破壊され泥棒の侵入による害から防ぐため	1,１８５千円
５６年(第1期)	車輛ガレージの補修，補強仮設工事 車輛ガレージの盗難防止他の理由による補強及び拡張工事	2,１６７千円
計		１3,２４７千円

中堅技術者養成対策費実績

年　度	所　要　経　費	金　額
５５年	(1)　研修参加旅費	1,９２８千円
	(2)　教　材　費	2,５３０千円
	(3)　実 習 旅 費	3,６８０千円
	(4)　研修資材費	6,７４９千円
	(5)　指導同行旅費	７４１千円
	(6)　特別講師謝金	1,９００千円
計		１7,５２８千円

年度	所要経費	金額
56年度	(1) 研修参加旅費	1,026千円
	(2) 教材費	1,732千円
	(3) 実習旅費	3,848千円
	(4) 研修資材費	5,130千円
	(5) 指導同行旅費	5,460千円
	(6) 特別講師謝金	1,650千円
計		13,932千円
57年度	(1) 研修参加旅費	1,980千円
	(2) 教材費	5,310千円
	(3) 実習旅費	660千円
	(4) 研修資材費	3,300千円
	(5) 指導同行旅費	240千円
	(6) 特別講師謝金	121千円
計		11,611千円

普及効果測定事業実績

56年度	所要経費	金額
	(1) 農家現地調査費	591,840円
	(イ) 調査費	510,840円
	(ロ) 謝金	81,000円
	(2) 調査集計費	324,600円
	(備上費)	
	(3) 報告書作成費	393,560円
	(印刷製本費)	
計		1,310千円