

6-2 所 感

ビルマの農業はGDPの40%強を占め、外貨獲得に占める割合が65%を有する基本産業である。この基調は今後も変わることなく、より一層の農業振興を推進する姿勢が農林省幹部等の発言からうかがい知れる。各種農産物のうち、最重点作物は全耕作面積の49%を占める稲作であり、コメがビルマ経済を支配しているといっても過言ではない。この水稲作付面積は1,231.8万エーカー(492.7万ヘクタール)で、1,500万トン近い籾生産をあげているが、除実歩合や籾すり歩合が低いため、10ブール換算の玄米収量は180kgと低収であり、また、品質不良も大きな問題となっている。

水稲の前後作や畑作における落花生、ごま、ひまわり、とうもろこし、豆類、小麦などの主要な畑作物も単位収量が低迷しているようである。したがって、栽培に関する当面の重点課題は、稲を筆頭に主要畑作物の単位収量向上である。この目標到達のために重点作物の「アンポイント推進運動」が展開されているわけであるが、技術的中味には疑問点や不明確なところもあって、農民への技術移転は容易ではないと考えられる。また、ビルマ中部にあつては灌漑施設も整備されつつあるため、水管理技術の普及も今後の課題である。CADTCにおける栽培研修では、自国の試験研究データを収集整理し、CADTC圃場や各地のデモ・サイトの実証展示を通して具体的、実用的な技術内容に組み替え、「栽培基準や栽培ごよみ」として技術移転ができるよう一層の努力が要望される。

一方、平均耕作面積が約10エーカー(4ヘクタール)といわれ、乾季作を合わせるとかなりの経営規模となる。これを人力と畜力を主体に低性能な農具で耕作しているため、作業のおくれ、浅耕土、雇用費の増大などの諸問題が派生し、収量や品質並びに経営収支の悪化に大きく関係している。このため、適期に適切な作業が遂行できる小型農機の開発と普及が当面の課題と思われた。もちろん、すでに高性能農機もAC機械化局や協同組合組織に導入され稼働しており、今後も増加する見通しであるから、CADTCにおける高性能機械の研修や、それを使つての圃場実験は欠くことのできない重要な研修役割を果たしているわけである。

農産物の経営収支面では利益が極めて少なく、水稲にしても標準収量では僅かな利益しか得られないようである。このことは国の低価格政策に依るところであるが、世界的な農産物過剰生産が遠因となっている。ビルマの籾価格はバスケット当たり10チャット程度(籾20.9kg:210円)で、籾すり歩合が60%程度であるから玄米換算13kg=210円とすればトン当たり16,000円ほどの生産者価格となる。Nyaung Central Farmのエーカー当たりコメ生産費調査によれば、種子代18.00、耕うん代かき162.00、播種及び苗取り田植109.00、中耕除草65.00、肥料代181.80、収穫調製136.00、合計721.55チャット(約15,150円)であった。この生産費に見合う収量は72.2バスケットで、現状の平均収量が約58バスケットであることからみれば農民は大変厳しい経営収支といえよう。もっともこのFarmでは90バスケットの高収量をあげているし、一般農家では肥料をあまり使わないから、肥料代分を考慮すれば僅かながら利益が出

る計算になる。

以上のようなことからビルマの農業はこれから伸びる要素を多分に持ち合せてあり、21世紀に到来するであろう世界的な食料不足時代に、世界の食料生産の担い手国として大きく関与するものと推考している。その意味も含めて、現在及び今後のCADTCの果たす役割は極めて重要、かつ大なるものがあるといえよう。

付 属 資 料

1. 延長討議議事録（延長R/D）
2. 合同エバリュエーション評価報告書
3. 団 長 レ タ ー
4. 合同委員会議事録
5. 関連組織図及び関係者リスト
6. 実 績 一 覧 表

[The page contains extremely faint and illegible text, likely due to low contrast or scanning quality. The text is arranged in several paragraphs, but the characters are too light to be transcribed accurately.]

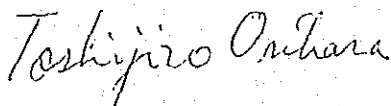
1. 延長討議事録 (延長 R/D)

THE RECORD OF DISCUSSIONS
ON EXTENSION OF THE PERIOD OF THE
JAPAN-BURMA TECHNICAL COOPERATION
FOR THE
CENTRAL AGRICULTURE DEVELOPMENT TRAINING CENTRE

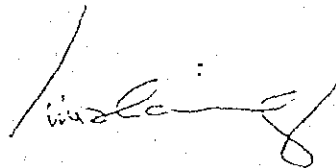
The Evaluation Team for the Technical Cooperation Programme for the Central Agriculture Development Training Centre (hereinafter referred to as "the Programme"), organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA"), with regard to the recommendation made by the Japanese-Burmese joint committee which was held at Rangoon on September 26, 1986, had a series of discussions with the authorities concerned of the Government of the Socialist Republic of the Union of Burma on extension of the period of the technical cooperation for the Programme based on the record of discussions (hereinafter referred to as "R/D") which was signed on September 29, 1983.

As a result of the discussions, both parties agreed to recommend to their respective Governments to extend the period of the technical cooperation for the Programme, until September 30, 1988, in order to achieve the initial objectives of the Programme.

Rangoon, BURMA
August 13, 1987



Mr. Toshihiro Orihara
Leader, The Evaluation Team,
Japan International Cooperation
Agency, Japan.



U Tin Hlaing
General Manager (Extension)
for Managing Director,
Agriculture Corporation,
The Socialist Republic
of the Union of Burma.

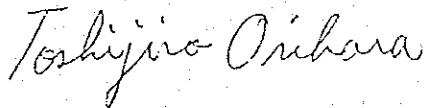
2. 合同エバリエーション報告書

NOTE OF EVALUATION
ON
THE CENTRAL AGRICULTURE DEVELOPMENT TRAINING CENTRE IN BURMA

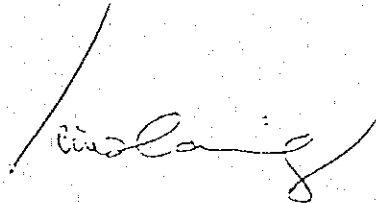
The Japanese Evaluation Team for the Central Agriculture Development Training Centre, Technical Cooperation Programme (TCP) in Burma organized by Japan International Cooperation Agency and headed by Mr. Toshijiro Orihara, visited the Socialist Republic of the Union of Burma, from Aug. 6 to 17, 1987, to carry out evaluation of the Programme performances together with the Burmese Evaluation Team headed by U Tin Hlaing, General Manager, Extension Division, Agriculture Corporation.

Both evaluation teams agreed to convey to their authorities concerned the results of their studies and recommendations, referred to in this report of the joint evaluation on the Programme of the Central Agriculture Development Training Centre in Burma attached herewith.

Rangoon, Burma
August 13, 1987



Mr. Toshijiro Orihara
Leader,
The Japanese Evaluation Team



U Tin Hlaing
Leader,
The Burmese Evaluation Team

SUMMARY REPORT OF THE JOINT EVALUATION ON
THE CENTRAL AGRICULTURE DEVELOPMENT TRAINING CENTRE,
TECHNICAL COOPERATION PROGRAMME (TCP) IN BURMA

1. INTRODUCTION

(1) Based upon the Record of Discussions (R/D) signed on September 29, 1983, the government of the Socialist Republic of the Union of Burma and the government of Japan have been proceeding the implementation of the technical cooperation programme (TCP) for the Central Agriculture Development Training Centre (CADTC) for the past four years.

The objectives of the programme are to improve the agricultural productivity in Burma through the training on application and extension of agricultural technology.

(2) Before the termination of the programme on September 30, 1987, the Japanese Evaluation Team for the Central Agriculture Development Training Centre, Technical Cooperation Programme in Burma has been dispatched from August 6 to 17, 1987.

(3) The Evaluation Team has objectives to make a review of the results of the Programme performance, and discuss about the future measures to be taken after the termination of the R/D period and accordingly make recommendations to the authorities concerned of both governments.

(4) Evaluation was conducted jointly by the Burmese Evaluation Team and the Japanese Evaluation Team consisting of the members as listed in the Appendix I.

2. PROJECT IMPLEMENTATION

(As mentioned in Appendix II)

3. EVALUATION

(1) At the CADTC, in total of 72 training courses have been conducted since its opening in September 1984. The total number of trainees who have completed the training reached 3,182 in July 1987.

These trained Agriculture Corporation staff are now taking an active role in their specific fields by making best use of what they have learnt during the training at the CADTC.

From this view point, it can be conceived that the CADTC plays a significant role in the enhancement of the extension activities and the advancement of the agricultural technology in Burma.

(2) Six demonstration sites have been established at various locations, and have been utilized, but it is expected to fill up the function of the demonstrative training at respective regions for the advancement of practical skills of the extension staff.

(3) Teaching materials have been developed by using printing, photographic and audio-visual equipment.

However, it is necessary to make some more teaching materials (for example crop cultivation calendar, pamphlet for extension, etc.)

(4) It is expected to promote the efficiency of the training staff by providing training instruction in crop cultivation in the field of Water Management, Agronomy and Crop Physiology.

4. RECOMMENDATION

In consideration of the successful implementation of the programme in accordance with the R/D , it is recommended to the authorities of both Governments for the continuation of the Programme up to 30, September, 1988 in order to fulfil the anticipated objectives.

M E M B E R L I S T

THE EVALUATION TEAMS FOR THE CENTRAL AGRICULTURE
DEVELOPMENT TRAINING CENTRE, TECHNICAL COOPERATION PROGRAMME
IN BURMA

ASSIGNMENT	NAME	PRESENT POSITION
<u>JAPANESE SIDE</u>		
Team Leader	Mr. Toshijiro ORIHARA	Senior Managing Director (Secretariat General), Research Association for Biotechnology of Organic Fertilizers.
(Training Method)		
Training Planning (Cultivation and Agricultural Machinery)	Mr. Tokitoshi KUMAZAKI	Professor, the Agriculture College of Saitama Prefecture.
Training Planning (Water Management)	Mr. Isao YONETSUKA	Chief Advisor, First Land Improvement Division, Agriculture Department, Aomori Prefectural Office.
Coordination	Mr. Masao SHIKANO	Staff, Development Planning Division, Agriculture, Forestry and Fisheries Planning and Survey Department, JICA.
<u>BURMESE SIDE</u> (Agriculture Corporation)		
Team Leader	U Tin Hlaing	General Manager, Extension Division.
Member	Dr. Myint Thein	General Manager, Planning & Projects Division.
Member	U Ba Toke	Deputy General Manager, Planning & Projects Division.

Appendix II

Progress Report on the Technical Cooperation Programme
(TCP) of the Central Agriculture Development Training Centre

1. Back-ground Information

Upon the mutual agreement between the Japanese Government and the Government of the Socialist Republic of the Union of Burma, the establishment of the Central Agriculture Development Training Centre was started on December, 1982.

The construction of the Centre was completed and handed over to the Agriculture Corporation on the 31st March 1984.

2. Project Cost for Construction

The amount of Grant aid by Japanese Government and the contribution by the Government of Burma were as follows:-

1. Grant aid by Japanese Government

1910 mil.Yen = 63.00 mil.K

2. Contribution by Burmese Government = 24.88 mil.K

Total = 87.88 mil.K

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3. Technical Cooperation Programme

For the successful implementation of the CADTC's Training Programme, the Technical Cooperation Programme was mutually agreed upon and signed on the 19th September 1983, covering four years of term starting from the 1st October 1983 to the 30th September 1987.

The TCP comprises of :

1. the despatch of Japanese Experts to undertake various assignments in CADTC,
2. the provision of Equipment and Machineries and
3. the overseas training of Burmese Counterparts.

The total expenditure to be borne by the Japanese Government is 417 million Yen equivalent to 13.96 million Kyats and the contribution by Burmese Government is 4.17 million Kyats totalling the Project cost of 18.13 million Kyats.

The situation of each component of the TCP is effectively going on according to the schedule as follows:

(1) Despatch of Japanese Experts

Long-term Experts

<u>Subject</u>	<u>Scheduled</u>		<u>Received</u>		<u>Remarks</u>
	<u>No.</u>	<u>Month</u>	<u>No.</u>	<u>Month</u>	
(1) Training method	1	48	1	44	Also serves as Team Leader
(2) Farm Machinery	1	48	1	44	
(3) Water Management	1	48	1	32	
(4) Co-ordinator	1	48	1	44	

Short-term Experts

(1) Audio-visual	1	0.5	1	0.5	
(2) Printing	1	1.0	1	1.0	
(3) Photography	1	1.0	1	1.0	
(4) Rice physiology	1	3.0	1	3.0	
(5) Editor for Slides	1	3.0	1	0.75	
(6) Photographer for Slides	1	3.0	1	0.75	
(7) Crop physiology	1	3.0	1	2.0	
Total:	11	206.5	11	173.0	

(2) Provision of Equipment and Machineries

For equipment and machineries, 200.3 million Yen has been used and a further 42.85 million Yen for the procurement of the remaining equipment is under process.

<u>List of equipment and machineries</u>	<u>Amount in million Yen</u>			
	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>Total</u>
(1) Spareparts	3.5	53.6	47.7	104.8
(2) Chemicals	40.5	-	-	40.5
(3) Agri: machineries	-	54.3	0.1	54.4
(4) Books and Stationaries	0.5	0.1	-	0.6
Total -	44.5	108.0	47.8	200.3

The remaining equipment being procured for 1987-88 are as follows:-

<u>List of equipment</u>	<u>Amount in million Yen</u>
(1) Spareparts for farm machineries, audio-visual aids, etc.	0.93
(2) Chemicals for laboratories, photo and printing	24.35
(3) Agricultural machineries	13.83
(4) Books and stationaries	3.74
Total -	<u>42.85</u>

(3) Overseas Training of Burmese Counterparts

<u>Subjects</u>	<u>Scheduled</u>		<u>Actual</u>		<u>Remarks</u>
	<u>No.</u>	<u>m/m</u>	<u>No.</u>	<u>m/m</u>	
(1) Farm Management	1	3.5	1	3.5	Attended
(2) Training Management	2	4.0	2	4.0	Attended
(3) Plant Nutrition	1	4.0	1	4.0	Attended
(4) Plant Protection	1	4-7	1	4	Attended
(5) Rice Cultivation (advanced)	1	7-10	1	10	Attending
(6) Crop Physiology	2	4.0	1	6	(1) Attending (1) Under process
(7) Study Tour	1	1.5	-	-	Cancelled
(8) Agri. Machineries, Repair and Maintenance	1	4-6	-	-	Under process
Total -	<u>10</u>	<u>-</u>	<u>7</u>	<u>-</u>	

4. Training Activities

A variety of training programmes are conducted at CADTC according to the need of the Agriculture Corporation and are categorically mentioned below.

- (1) Management and technical training courses
- (2) Pre-service training courses
- (3) Subject matter (specialized) training courses
- (4) Subject matter short training courses

Subject matter (specialized) training courses such as Rice cultivation (special) and Rice-based cropping system training courses, and other Subject matter short training courses, such as Farm machineries training courses and Water management training courses were conducted in collaboration with the Japanese Experts. The Japanese Experts also participated in some other courses as lecturers together with Burmese counterparts.

The number of trainings, started on the 3rd September 1984, and the number of AC staff of various levels trained up to the 31st July 1987 are mentioned below.

<u>Year</u>	<u>Number of trainings</u>	<u>Number of trainees</u>
1984-85	16	786
1985-86	25	1332
1986-87	21	602
1987-88 (April/July)	<u>10</u>	<u>462</u>
	<u>72</u>	<u>3182</u>

For the period from August 1987 to March 1988, a total of 22 trainings for 865 trainees are remained to be conducted at CADTC.

In 1988-89 the target number of trainings is 28 and the total number of participants is 1216, as mentioned below. Detailed training programme for 1988-89 is described in Annex (1).

<u>Type of trainings</u>	<u>Number of trainings</u>	<u>Number of trainees</u>
1. Management & Technical	3	180
2. Pre-service	1	200
3. Subject matter (specialized)	2	28
4. Subject matter (short)	<u>22</u>	<u>808</u>
	<u>28</u>	<u>1216</u>

Apart from the CADTC, other Divisions of Agriculture Corporation are also conducting various trainings on their respective fields with their own programmes. But beginning from the month of April 1987, the CADTC is monitoring all the trainings being carried out under Agriculture Corporation, with the prospect of strengthening the training programme of the CADTC.

5. Out-reached Demonstration Sites

According to the Record of Discussion, six Demonstration Sites are being established starting from 1985-86 at different States and Divisions.

<u>Name of Sites</u>	<u>Township</u>	<u>State/Division</u>
(1) Central Agricultural Research Farm	Tatkon	Mandalay Division
(2) Heho Central Agricultural Research Farm	Kalaw	Shan State
(3) Central Agricultural Research Farm	Magwe	Magwe Division
(4) South-Na-Win Pilot Farm	Thegon	Pegu Division
(5) Major Seed Farm	Henzada	Irrawaddy Division
(6) In-daing Seed Farm	Hlegu	Rangoon Division

In 1985-86 fiscal year, 16.38 acres for demonstrations and 25.92 acres for trials, totalling 42.30 acres and in 1986-87 fiscal year, 49.84 acres for demonstrations and 26.66 acres for trials, totalling 76.50 acres, over various crops were carried out at all Demonstration Sites. Farmers and members of local organizations were invited and demonstrated the improved technologies for increased production of crops.

In 1987-88, 71.50 acres for demonstrations and 54.00 acres for trials, totalling 125.50 acres on various crops are being conducted at different sites.

6. Evaluation of the Efficiency of Training Programme

Fully utilizing the available facilities, the CADTC have successfully conducted a great number of various trainings to various levels of AC staff as stated on page 4. Furthermore the various levels of AC staff trained at CADTC are also performing well with their respective duties, (i.e to educate and organize the farmers to follow the improved method of crops cultivation to promote the production of crops), after having a wide knowledge of agricultural technologies and improving their efficiencies.

During the visit of JICA Technical Guidance Team in September 1986, six officers and 44 ex-trainees at seven locations were interviewed with questionnaires by the Team; and the training programme was highly appreciated. Almost all the ex-trainees expressed their gratitude to the CADTC activities and are on the expectation of having more assistance in continuity. It was recorded in the Pre-evaluation Report by the Team.

7. Conclusion

Having the experience of training for about three and a half years, Training Programme of CADTC is becoming substantially more effective in approaching its objectives, i.e. to train the AC staff to be of higher working efficiency and enable to organize the farmers to produce more crops, by applying the modern agricultural technologies in their respective fields. Under the guidance of higher authorities and by coordinated efforts by the agencies concerned, the CADTC would achieve its goal in very near future with its exerted efforts.

CENTRAL AGRICULTURE DEVELOPMENT TRAINING CENTRE
 Training Program to be conducted during 1988-89

Type of Training	Period (weeks)	No. of Trainees per program	No. of Training	No. of Trainees	1988												1989			Remarks							
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar											
I. Management & Technical Training Courses	8	60	3	180		2 24				8 8					5 30				5 7						31		
II. Pre-service Training Courses	8	200	1	200																							31
III. Subject Matter (Specialized) Courses																											
1 Rice Cultivation	24	14	1	14						6 25																	31
2 Rice-based Cropping System	24	14	1	14																							31
IV. Subject Matter (Short) Courses																											
1 Rice Cultivation	4	40	2	80					4 29																		
2 Sunflower Cultivation	4	40	1	40											3 28												
3 Plant Protection	4	40	2	80					1 27						5 30												
4 Soil, Fertilizer	4	40	2	80					6 30						5 30												
5 Water Management	4	14	2	28					6 30						3 28												
6 Farm Machineries	4	14	2	28					6 30						5 30												
7 Extension Methods	4	14	2	28					4 29						3 28												
8 Planning & Implementation of the Projects	1	24	1	24											3 7												
9 Administration & Accounts	4	60	3	180					1 28						1 25												
10 Rodent & Storage Pests Control	2	50	2	100					1 13						8 19												
11 Pests Surveillance & Scouting	1	50	2	100					5 10						5 9												
12 Management Training for Farm Managers	1	40	1	40					8 12																		
			28	1216		-			210	152	68	164	154	120	128	138	114	274	214								

3. 団長レター

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

P.O. BOX 216 MITSUI BLDG
2-1, NISHI-SHINJUKU, SHINJUKU-KU TOKYO
160 JAPAN

August 17, 1987.

Managing Director
Agriculture Corporation.

Dear Sir,

I would like to express my great pleasure that the successful result on our evaluation and the agreement on the Record of Discussions for one year extension of the period of the Technical Cooperation from October 1, 1987 to September 30, 1988 have been made in cooperation with Agriculture Corporation.

I understand that the team was impressed on the achievements of the Central Agriculture Development Training Centre for the past three and a half years.

I hope that the activities of the CADTC would be further developed during one year extension.

For the smooth and effective implementation of the CADTC,

(1) the team will report the results of the discussions of the Joint Committee meeting held on August 13, 1987 to the authorities concerned in Japan.

(2) It is desirable to assign more appropriate counterparts to the CADTC and to promote the activities of the personnel trained under the counterpart training programme in Japan for the CADTC.

(3) It would be appreciated if necessary arrangements could be made with the authorities concerned to expedite the departure procedures of Mr. Nakamura and Mr. Narita and for their substitutes.

Finally, I should like to take this opportunity to express our heartfelt thanks for your cooperation and hospitality extended to our team during our stay in this country.

Sincerely yours,

Toshijiro Orihara

Toshijiro Orihara
Leader, The Evaluation Team,
Japan International
Cooperation Agency, Japan.

団 長 レ タ ー

調査団の目的であるエバリュエーションの決着及び10月1日から1ヶ年延長の技術協力に関する合意（R/Dの調印）が順調にできましたが、これは、農業公社ほか関係各位の深い理解と暖かい協力によるもので、厚く感謝いたします。

過去3年半におけるCADTCの果たした役割は極めて大きく、その成果を調査団は高く評価いたしました。また、今後1ヶ年間継続して技術協力が可能となり、大変喜ばしく思っております。さらに、一層の成果をあげられることを期待しております。

本プロジェクトが今後円滑に、かつ、効果を高めるために、

- (1)、調査団は、8月13日に開催された合同委員会での提言事項を持ち帰り、JICA本部及び関係機関に十分伝えることとします。
- (2)、CADTCの機能をさらに高めるためには、カウンターパートの果たす役割が極めて大きいものと考えております。そのために、カウンターパートの充実とカウンターパートの日本での研修終了者をCADTCで十分活用されることを希望します。
- (3)、中村・成田両専門家の交替で新しい専門家が派遣されますが、その帰国および受け入れ業務が円滑に出来るよう希望いたします。

貴国の繁栄とCADTCの充実、そして皆様方のご多幸をお祈りいたします。

有難うございました。

1987年8月17日

ビルマCADTCエバリュエーション調査団

団長

折原俊二郎

4. 合同委員会議事録

Joint Committee Meeting Minutes on the Technical Cooperation Programme (TCP) of the Central Agriculture Development Training Centre, held in the Conference Room of the Managing Director's Office, Agriculture Corporation on the 13th August 1987.

Officials Presented at the Meeting:

Agriculture Corporation

1. U Tin Hlaing	General Manager (Extension)	Chairman
2. Dr. Myint Thein	General Manager (Planning & Projects)	Member
3. U Aye Kyaw	General Manager (Accounts)	Member
4. U Maung Ko	Dy.General Manager(Administration)	Member
5. Dr. Aung Myint	Principal (CADTC)	Secretary
6. U Nyunt Lwin	Add: Director (FERD)	Observer
7. U Khin Zaw	Lecturer (CADTC)	Observer
8. U Soe Myint	Farm Manager (CADTC)	Observer

Japanese Side

1. Mr.S.Nakamura	Team Leader of JICA Experts	Member
2. Mr.H.Tanaka	Coordinator	Member
3. Mr.T.Orihara	Leader of Evaluation Team	Observer
4. Mr.T.Kumazaki	Member of Evaluation Team	Observer
5. Mr.I.Yonetsuka	Member of Evaluation Team	Observer
6. Mr.M.Shikano	Member of Evaluation Team	Observer
7. Mr.E.Matsumoto	Farm Machinery Expert	Observer
8. Mr.R.Narita	Water Management Expert	Observer
9. Mr.Y.Kitamura	Representative , J I C A	Observer

The Main Points discussed and noted at the meeting were as follows:

1. It has been noted that the Training Centre is achieving its objectives with appreciable success through the cooperation of the JICA Experts in training the various levels of the staff of Agriculture Corporation for last three and a half years.
2. Training Programmes being conducted in the year 1987-88 by collaborated efforts of both Japanese Experts and Burmese Counterparts are achieving their respective objectives and are in steady progress (Annex-1).
3. Procurement of the Training Facilities during the four years term of TCP according to the Programme is completed (Annex-2).
4. It was also noted that the despatch of the JICA Experts meets its programme during the Project period and is very beneficial to the Training Centre to fulfil the training programme (Annex-3).
5. Counterpart trainings to Japan was almost completed except the last two for 1987-88, one for Farm Machineries Repair & Maintenance and one for Crop Physiology (Annex-4). Necessary process for the despatch of the remaining two trainees is being undertaken.
6. In the course of the discussion, several suggestions were made for the continuation of the Technical Cooperation Programme for one more year from 1st October 1987 to 30th September 1988 and the points agreed in principle are stated below.

(1) To receive four Long-term Experts as have been agreed for the last four years term of TCP and provision of Short - term experts as and when required upon mutual agreement (Annex-5).

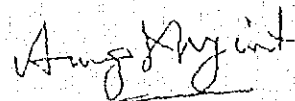
(2) To provide the training facilities from JICA to the Training Centre as mentioned in the Annex (6).

(3) To despatch four trainees to abroad and to undertake one study tour programme to Japan during the extended period mentioned in the Annex (7).

- (4) To conduct training as stated in the Annex (8) in the year 1988-89 in collaboration with Japanese Experts and also with their advices and recommendations during the later part of the year.

The meeting was closed at 12:30 p.m.

Recorded by



(Dr. Aung Myint)

Secretary

CADTC Joint Committee

Dated the 13th August 1987,

Distribution of the copies to:

1. All members of the Joint Committee and Observers.
2. General Manager ()

TRAINING PROGRAMME FOR 1987-88

Annex (1)

SR. NO.	TYPE OF TRAINING	DURA- TION WEEKS	NO. OF TRAIN- EES	1987 - 88												REMARKS		
				APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR			
A.	<u>SUBJECT MATTER (SPECIALIZED) COURSES</u>																	
1.	RICE CULTIVATION (SPECIAL) COURSE	24	14	4	///	///	///	///	///			30						
2.	RICE-BASED CROPPING SYSTEM COURSE	24	14									5						25
B.	<u>SUBJECT MATTER (SHORT) COURSES</u>																	
1.	WATER MANAGEMENT COURSE	4	14x2	4	29	///						5	30					
2.	FARM MACHINERIES COURSE	4	14x2	4	29	///												1
3.	EXTENSION METHODS COURSE	4	14x2															
						6	31	///										

EQUIPMENT TO BE PROCURED FOR THE CENTRAL AGRICULTURE DEVELOPMENT TRAINING CENTRE
IN THE YEAR 1987-88

Annex (2)

SR. NO.	LIST OF EQUIPMENT	AMOUNT (IN MILLION ₹)
1.	SPAREPARTS FOR FARM MACHINERIES AND AUDIO VISUAL ETC.	0.93
2.	CHEMICALS FOR LABORATORIES, PHOTO, AND PRINTING.	24.35
3.	AGRICULTURE MACHINERIES.	13.83
4.	BOOKS AND STATIONARIES.	3.74
TOTAL		42.85

PROCURED EQUIPMENT FOR CADTC UNDER TECHNICAL COOPERATION PROGRAMME
(1984-85, 1985-86, 1986-87)

Annex(2) Continued

SR. NO.	LIST OF EQUIPMENT	AMOUNT IN MILLION YEN			REMARKS	
		1984-85	1985-86	1986-87		TOTAL
1.	SPAREPARTS FOR FARM MACHINERIES AND AUDIO VISUAL ETC.	3.49	53.59	47.66	104.74	
2.	CHEMICALS FOR LABORATORIES, PHOTO, AND PRINTING.	40.56	-	-	40.56	
3.	AGRICULTURE MACHINERIES.	-	54.38	.11	54.49	
4.	BOOKS AND STATIONARIES.	.48	.02	-	.50	
	TOTAL	44.53	108.09	47.77	200.39	

TECHNICAL COOPERATION PROGRAMME WITH JICA

DESPATCH OF EXPERTS

Annex (3)

SR. NO.	TYPE OF EXPERT	1984	1985	1986	1987	DURATION (M/M)	REMARKS
1.	TRAINING METHOD (TEAM LEADER)	3/2			30/9	44	MR. S. NAKAMURA
2.	FARM MACHINERY EXPERT	3/2			30/9	44	MR. E. MATSUMOTO
3.	WATER MANAGEMENT EXPERT		30/1		30/9	32	MR. R. NARITA
4.	COORDINATOR	3/2		2/2	30/9	24+20	MR. NAKANO+MR. H. TANAKA
5.	DEVELOPMENT OF THE TECHING MATERIALS						
	(A) AUDIO VISUAL		21/1 2/2			0.5	MR. SHIMITSU
	(B) PRINTING		21/1 23/2			1	MR. OGINO
	(C) PHOTOGRAPHY		21/1 23/2			1	MR. KANAI
	(D) EDITOR FOR SLIDES			6/12 27/12		0.75	MR. M. KANAZAWA
	(E) PHOTOGRAPHER FOR SLIDES			6/12 27/12		0.75	MR. NAKANISHI
6.	CROP PHYSIOLOGY						
	(A) RICE			3/8 31/10		3	MR. ISHIHARA
	(B) OTHER CROPS			27/12 23/2		3	MR. N. SETOGUCHI

TRAINING PROGRAMME FOR BURMESE COUNTERPARTS IN JAPAN

Annex (4)

SR. NO.	SUBJECTS	DURATION MONTH	NO OF TRAINEES	TERMS OF YEARS			TOTAL	TRAINNEES		DURATION	
				1985	1986	1987		NAME	FROM	TO	
1.	FARM MANAGEMENT	3.5	1	1	-	-	1	U SOE MYINT	15-5-85	25-8-85	
2.	TRAINING MANAGEMENT	4.0	2	1	1	-	2	U SAW HLA DR. THAUNG TUN	14-8-85	15-12-85	
3.	PLANT NUTRITION	4.0	1	1	-	-	1	HLAUNG DR. TIN OO	16-7-86 23-3-86	10-12-86 20-7-86	
4.	RICE CULTIVATION (ADVANCED)	7-10	1	-	1	-	1	U MYA HLAING	4-2-87	-	
5.	PLANT PROTECTION (CONTROL OF RICE DISEASE AND INSECT PESTS)	4-7	1	-	1	-	1	U HLA AUNG KYAW	1-6-86	9-12-86	
6.	CROP PHYSIOLOGY	4	2	-	-	1	1	U MG KO (1) UNDER PROCESS CANCELLED	3-4-87	-	
7.	STUDY TOUR	1.5	1	-	-	-	-	UNDER PROCESS			
8.	AGRICULTURE MACHINERIES REPAIR AND MAINTENANCE	4-6	1	-	-	-	-	UNDER PROCESS			
			10	3	3	1	7				

DESPATCH OF JAPANESE EXPERTS

Annex (5)

SR. NO.	TYPE OF EXPERT	1987			1988							REMARKS				
		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL		AUG	SEP		
1.	TRAINING METHOD (TEAM LEADER)															
2.	FARM MACHINERY EXPERT															
3.	WATER MANAGEMENT EXPERT															
4.	COORDINATOR															
5.	PROVISION OF SHORT-TERM EXPERTS AS & WHEN REQUIRED UPON MUTUAL AGREEMENT															

EQUIPMENT PROVISION FOR THE CENTRAL AGRICULTURE DEVELOPMENT TRAINING CENTRE

Annex (6)

SR. NO.	YEAR	LIST OF EQUIPMENT	AMOUNT IN MILLION YEN
1.	1988 -89	1. SPAREPARTS FOR FARM MACHINERIES AND AUDIO VISUAL ETC.	16.25
		2. CHEMICALS FOR LABORATORIES, PHOTO, AND PRINTING.	22.77
		3. AGRICULTURE MACHINERIES.	12.00
		4. BOOKS AND STATIONARIES.	7.80
		TOTAL	58.82
			=====

N.B. Budget provision for equipment- Subject to confirmation by both governments.

TRAINING PROGRAMME OF BURNESE COUNTERPARTS

Annex (7)

SR NO	SUBJECTS	DURATION MONTHS	NO. OF TRAINEEES	1988												REMARKS		
				1987						1988								
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		OCT	NOV
1.	TRAINING MANAGEMENT (HIGH LEVEL COURSE)	6	1															JAPAN
2.	CROP PHYSIOLOGY (WATER REQUIREMENT)	6	1															JAPAN
3.	SUNFLOWER AGRONOMY	6	1															JAPAN/ APPRO- PRIATE COUNTRY
4.	FARM MACHINERIES REPAIR & MAINTENANCE	7	1															JAPAN
5.	STUDY TOUR	0.5	2															JAPAN
6.	COUNTERPART TRAINEES REMAINED FOR 1987-88																	
6.	RICE-BASED CROPPING SYSTEM	6	1															JAPAN
7.	CROP PHYSIOLOGY	4-6	1															JAPAN

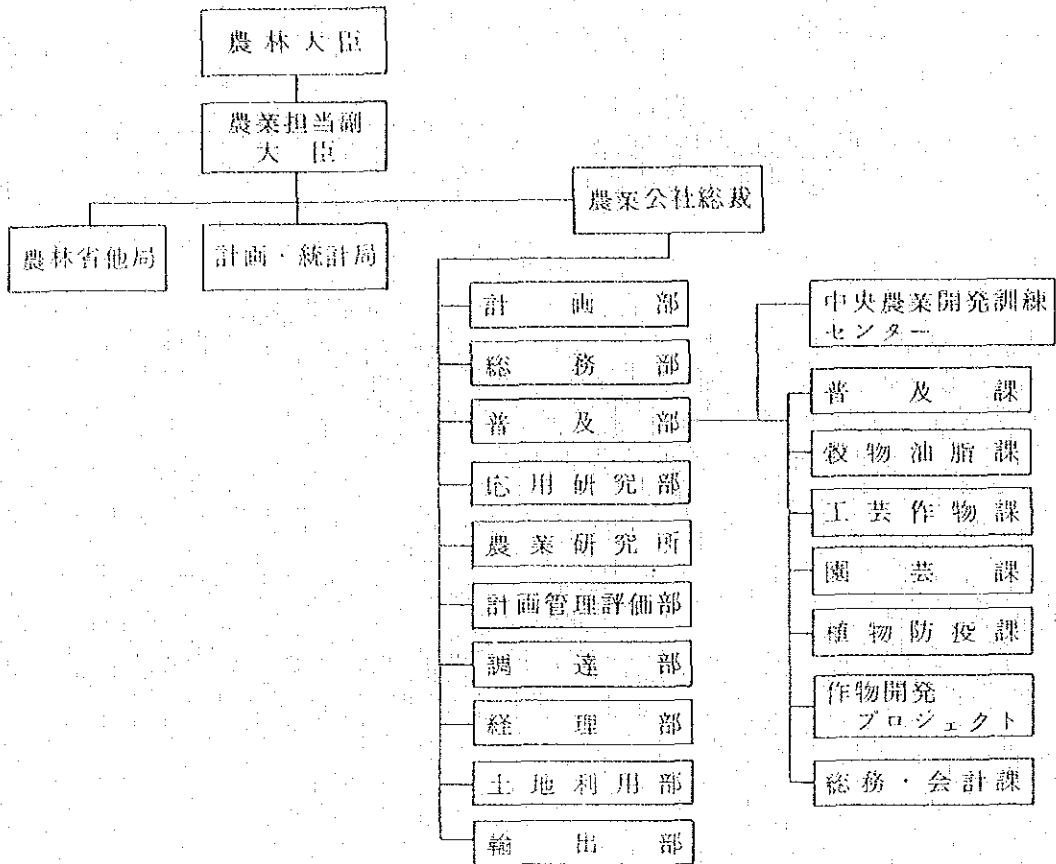
TRAINING PROGRAMME FOR THE YEAR 1988 - 89

Annex (8)

SR NO	TYPE OF TRAINING	DURATION IN WEEKS	NO. OF TRAINEES	1988 - 89												REMARKS	
				APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR		
A.	<u>SUBJECT MATTER (SPECIALIZED) COURSES</u>																
1.	RICE CULTIVATION (SPECIAL) COURSE	24	14		6							25					
2.	RICE-BASED CROPPING SYSTEM COURSE	24	14							17							31
B.	<u>SUBJECT MATTER (SHORT) COURSES</u>																
1.	WATER MANAGEMENT COURSE	4	14x2		6	30											
2.	FARM MACHINERIES COURSE	4	14x2		6	30									5	30	
3.	EXTENSION METHODS COURSE	4	14x2											3	28		

5. 関連組織図及び関係者リスト

(1) プロジェクト協力機関関連組織図



(2) カウンターパート等主要関係者リスト

農 林 省	農 林 大 臣	Briquadier THAN NYUNT
	農業担当副大臣	Colonel AUNG WIN
	計画統計局長	U HLA MOE
農 業 公 社	総 裁	U TIN HLAING
	計 画 部 長	U MAUNG KO
	同 研 修 企 画 官	Dr. THAUNG TUN HLAING
	普 及 部 長	U MUNG THAUNG
中央農業開発 訓練センター	プロジェクトマネージャー	U CHIT NGWE
	教官 (全般総務担当)	U HGIN ZAW
	“ (研修企画)	U SAW HLA
	“ (化学実験室)	Dr. TIN OO
	“ (農業情報・広報)	U KYIN
	“ (農場長)	U TIN MG BO
	助教官 (油脂作物)	U MYA HLAING
	“ (園芸)	U KHIN MG YIN
	“ (稲, 棉, 植物)	U TIN NWE
	“ (植物保護)	U HLA AUNG KYAW
	“ (雑穀)	U PE THAN
	“ (豆類)	U NGWE THEIN
“ (研修指導)	DAW KHIN SAN MYINT	

6. ビルマ中央農業開発訓練センター計画 実績一覧表

会計年度	56	57	58	59	60	61
調査団派遣 〔派遣経費〕(千円)	事前調査 2 3,845	実施協議 3 2,230	実施設計 7 8 29,408	計画打合せ 7 2,825	巡回指導 9 3,095	レバレッジセッション 9 7,192
専 門 家 派 遣	〔長期専門家〕					
	〔短期専門家〕		後藤兵彦(長期調査員) 3 4 松野 正(") 3 4 上田克巳(") 3 4 平塚俊夫(") 3 4	平原秀夫(施工管理) 3	6 倉員光東(施工管理) 萩野榮一(印刷技術) 12 金井健二(写真技術) 12 清水秀男(視聴覚技術) 12	中村成一(リーダ一兼研修方法) 松本栄一(農業機械) 成田良一(水管理) 中野久雄(業務調整) 田中英統(業務調整)
〔派遣経費〕(千円)		5,172	13,026	49,337	56,595	54,189
研修員受入		視察 3 視察 3		4 7 農業普及 4 7 農業普及	5 8 農業経営 8 12 農業普及 3	農業普及 7 12 6 12 稲病害虫 7 3 植物栄養 稲作
機 材 供 与 (千円) 実績(計画額)		249	1,352	1,403 113,678	647 83,528	1,306 36,594
ローカルコスト負担事業 (千円)						
現地業務費 プロジェクト基盤整備費 応急対策費 普及効果測定調査費 技術交換費 計		752	696 10,681	6,110 24,329	6,696 4,518	6,696 1,269
特別事業(千円)						視聴覚教材等整備 8,455
経 費 合 計 (千円)	3,845	8,403	55,163	197,682	155,079	115,701
経 費 累 計 (千円)	3,845	12,248	67,411	265,093	420,172	535,873

会計年度		62	63	計(62年度実績まで)
調査団派遣 〔派遣経費〕(千円)		エバリュエーション 8 3,249		51,844
専 門 家 派 遣	〔長期専門家〕	中村成二 (リーダー兼研修方法)10 10	小田島正雄 10 (リーダー兼研修方法)	
		松本栄一(農業機械)	9	
		9 成田良一(水管理)		
	〔短期専門家〕	田中英統(業務調整)	9	
〔派遣経費〕(千円)		50,222		228,541
研 修 員 受 入		3	6 農業機械維持管理	
	4	9 植物生理	(作付体系) 予定	
		11 稲作	(研修管理) 予定	
機 材 供 与 (千円)		1,337		6,294
実績(計画額)		25,200		259,000
ローカルコスト負担事業 (千円)				
現地業務費		6,696		27,646
プロジェクト基盤整備費		-		35,010
応急対策費		-		4,518
普及効果測定調査費		-		1,269
技術交換費		1,505		1,505
計		8,201		69,948
特 別 事 業 (千円)				8,455
経 費 合 計 (千円)		88,209		624,082
経 費 累 計 (千円)		624,082		

JICA