Ⅵ　延長時の協力内容

本計画の延長後重点的に協力を行うべき項目については次のように考えられる。

1. 養　鶏　部　門

① 協力概要及び指導項目

鶏の初歩的な選抜育種手法技術の移転及びそれに伴う機材の供与。

◎供与機材としては、

（例）① ワイヤートラップ

② 系統孵化枠（バスケット）

③ 翼　帯：（アルミ製、連番のコク印のあるもの）発生時に使用

④ 翼　章：成鶏に使用

指　導　項　目

① 種鶏の個体記録の取り方

② 記録の集計、分析

③ 個体孵化の手法

④ 個体審査手法

⑤ 選抜の実際と交配法

② 到　達　目　標

日本人専門官の手から離れても、現在の保有系統の性能の維持と増殖が出来る程度までを目標とする。

2. 養　豚　部　門

① 協力概要及び指導項目

一般飼養管理については概ね技術移転が成されたものと解されるが、今後更に技術移転の必要がある分野は次の4点が考えられる。

(1) 育種理論及び調査実験の方法と処理について

(2) 仔豚の育成率に大きく影響を与えている無乳症と仔豚の下痢に対する調査研究及び人工乳の開発

(3) カウンターパートの重点的研修（日本での長期研修等）

(4) ワクチン製造技術の移転

しかしながら、(4)のワクチン製造技術の移転は当プロジェクトの範ちゅうから外れるので除くとして、他の3分野についての技術移転を考えるべきである。

② 到 達 目 標

(1)については、完全に技術移転し、ビルマに適した豚の作出まで行なうには数年を要するため、1年間の延長であれば基礎的な育種理論と統計理論に絞らなければならない。(より高度な育種技術については1年間の協力では無理なので、ビルマ側技術者の自助努力にまたざるを得ない)このための派遣専門家は育種学及び統計学に堪能な豚の技術者を1年間派遣する必要がある。また、カウンターパートの長期日本研修(畜産試験場等で育種学、統計学を専門に1年間研修)をすることが好ましい。

(2)については、(1)の専門家と共に6ヵ月間の短期専門家の派遣により相当の成果が上がり、人工乳の作出も可能と考えられる。

(3)については、日本において6ヵ月以上の研修を行う必要がある。研修内容は養豚に関する基礎的な知識(一般飼養管理、人工授精、屠体等)と現場実習(一般飼養管理等)を行なう。なお、育種学及び統計学については畜産試験場等で専門に研修する必要がある。

3. 飼 料 部 門

① 協力概要及び指導項目

配合飼料の品質向上を図るために、原料及び配合飼料について、飼料分析を行なうことが必要である。このため、我が国から、飼料分析に係る器具機材の供与並びに飼料分析専門家の長期派遣及びカウンターパートのわが国での研修を行なう。

指 導 項 目

(1) サンプル抽出法(標準的なサンプルを抽出する方法)

(2) サンプル粉砕法

(3) 分析試料の調整法(二分器、網ふるいを用いて、サンプルの混合と標準化を行なう)

(4) 一般成分析

ア. 水 分

イ. 粗たん白質(ケルダール法)

ウ. 粗脂肪(エーテル抽出法)

エ. 粗繊維

オ. 粗灰分

カ. 可溶無チッソ物

(5) 無機成分の分析

ア. 原子吸光測光法による分析 (Ca、Na、K、Mgの測定)

イ. 分光光度計による分析(Pの測定)

(6) 飼料鑑定

② 到 達 目 標

延長時においてカウンターパートのわが国での研修を行なうとともに飼料分析室の設置後にわが国から飼料分析の専門家を派遣し、飼料分析に係る諸技術（一般成分分析、無機物の分析、飼料鑑定）の技術移転を図り、１０マイルの農場で生産される配合飼料の分析及びＬＤＭＣの農場で生産される配合飼料の分析を行ない、配合飼料の品質向上を図る。

Ⅶ　合同評価調査に関する若干の所感

1.　本プロジェクトに関する一般的所感

ＬＤＭＣは、１９７６年に設置された公社であるが、ビルマ政府が農業開発、特に畜産開発に力点を置いていることもあり、現在までの間に急速に事業内容を拡大しつつある。本プロジェクト（１０マイル農場）の場合は、ＬＤＭＣ傘下の多数の農場の中でも最も重要な拠点農場として位置付けられており、ビルマに適した養豚・養鶏技術の改良はもとより、ＬＤＭＣ職員の技術研修の場及び種畜の他農場への供給基地として中核的な役割を果たしつつある。

このようなこともあって、本プロジェクトの施設建設、運営費の負担等については、日本的な感覚からすると若干の問題はあるものの、ビルマの現状からすればビルマ側の努力の跡がそれなりにうかがわれ、ほぼ良好な形で運営が行なわれていると言って良いのではないかと思われた（ちなみに、本プロジェクトは諸外国調査団の必見の農場となっている。）。

本農場をビルマの畜産に対する普及効果という観点からみると、ラングーン市を中心とする一部にではあるが、普及効果が現われていると言われている。ＬＤＭＣ職員への研修等を通じての技術の伝播は見方によっては軍優先との批判もあるが、退役軍人を中心とする軍関係の農場への技術及び種畜の供給が活発に行なわれていることもあり、本プロジェクトは単なる点として孤立するものではなくビルマの畜産開発に対し多大なインパクトを与えていると見受けられた。

技術面では、豚・鶏の飼料管理面、初生雛鑑別技術等については、ほぼ技術移転はなし得たと認められた。しかしながら衛生面、ビルマ産原料を活用した配合飼料の作出・分析及び将来のビルマ畜産の発展に備えるための育種システムの確立と遺伝能力の向上等に関する技術移転が今後に残された問題となっている。

2.　合同評価について

今回の評価にあたっては、先ず日・ビそれぞれが各評価項目について独自の評価を行ない、これをベースにして合同で検討を行ない双方が合意した段階で判定を記入する方法を予定した。

しかしながら、このような方法により作業を進めたにもかかわらず、実際には双方合意の判定を断念せざるを得なかった。

この理由は、一言で言えば、運営部門のグループ会合で最も顕著に現われ、特にプロジェクト運営に関するビルマ側の対応部分、即ちこれまで日本側が指摘してきた各施設の建設の遅れ、ローカルコストの負担或いはカウンターパートの配置等の評価にあたり、ビルマ側はこれまで自己の責任は十分に果たしてきており、プロジェクトの運営に支障を与えていなか

ったとの判断を堅持したのに対し、事業進捗状況との関連でこれまでの間に問題があったとする日本側との評価に大きな食い違いがあったことによる。

ビルマ側が、自己の責任は十分に果たしていると強く主張した背景は必ずしも明らかではない。考えられることは、一つには、先にも述べた如く、ＬＤＭＣは本プロジェクトに対して傘下の他の農場に比して確かに高いプライオリティを与えてきており、ビルマ側の感覚からすれば一貫してできる限りの配慮を行なってきているとの自負があったことは容易に考えられるわけであり、日本国内のこの種の農場運営及び予算措置等に馴れ親しんでいる日本側の感覚から見た判定との間に差異が生じたことは或る意味では当然とも言えることである。他に考えられる理由としては、ビルマ政府の外国援助の協力期間に関する基本方針との関連である。即ち、今回の評価を行なうに当たって明らかとなったことであるが、ビルマの場合、本プロジェクトの如き外国援助の受入れ期間は原則として４カ年間であり、かつ延長は極力行なわないとの方針となっており、止むを得ず延長をする場合には１年以内の延長は所管大臣の権限で、またそれを超える場合にあっては閣議の承認を要することとなっている（但し、かかる原則の存在は末端担当者は承知しておらず、極く一部の上級官僚のみの胸に納っているようであった）。また、延長にあたっては、その必要性と協力期間内に所期の目的が達せられなかった原因につき、かなり厳格に審査が行なわれるとのことであり、ＬＤＭＣ側としては、この関連で、本プロジェクトの協力期間の延長を念頭に置きつつ、合同評価を通じて自国サイドの対応の不手際が明確にされることの無いように責任の回避を図ることが必要であったのかも知れない。

以上のようなこともあり、合意を得るために無用の摩擦を生じさせてもいけないし、また無用な時間をかけることも適当でないと判断されたので、ＬＤＭＣ側には、あえて双方合意の判定を行なわず、評価を通じて行なわれるお互いのコメントを今後の参考としつつ協議を進めることで了解を得た次第であった。

なお、技術面の評価に関しては、双方共技術者と言うこともあってスムースに協議が進められたが、概して日本側の判定よりも低い評価をビルマ側が行なったことが特徴であった。これは技術者としての良心及び積極的な自己主張を行なわない東洋人気質の現れとみて良いのではなかろうか。

3. 延長問題について

合同評価を終了し、Joint Report を作成する段階で最も問題となった事項は、協力期間の延長の問題であった。

評価調査団の訪ビ前の段階では、現地日本人専門家の意見としては、今後２カ年の延長が必要である旨の連絡が寄せられており、また、ＬＤＭＣ総裁のＵ Pyi Soeから、非公式にビルマ畜産開発のために流通等の新分野を含む向う４カ年の延長希望が伝えられていた。

このため調査団は、合同評価の結果にもよるが延長が必要と考えられた場合には、最大限2カ年の延長を一つの目途として対応することで、関係省の了解を得て合同評価に臨んだわけである。

合同評価及びJoint-Report作成の過程において協力期間の問題に関しては、現行プロジェクトの目的を達成するためには、技術的見地からみて2カ年間の延長が望ましいとの意見が大勢を占め、ビルマ側からもJoint-Reportの中で勧告を行なうにあたってはこの旨を明記すべきであるとの積極的な発言もあり、最終的にはこのラインでJoint-Report(案)の取り纒めを終えた。

しかしながら、ビルマ側においてこのReport(案)をU Pyi Soe 総裁に説明し了解を求めたところ、総裁は、協力期間の延長に触れている部分を基本的には1カ年との方向で修文するようにとの強い意向を示し、具体的にはReport(案)の5—(2)及びVにつき修文を求めてきた。

参考までにV勧告の部分につき原文と修正文を掲げると次のとおりである。

Report(原文)

「The proposed cooperation period will be two (2) years from April 12, 1982 to April 11, 1981 for the emphasis of the following activities」

修正文

「The proposed further cooperation should be for initially about one year or until the following activities agreed to in old R/D of April, 1978 has been Fully completed.」

総裁がこのような修文を行なってきた背景は、修文をめぐる議論の過程で判明したわけであるが、前記したビルマ政府の外国援助の協力期間に関する基本的方針との関連で2カ年間は無理との判断があったほか、総裁の考えとして、本プロジェクトに関しては1カ年間の延長を行ない、この間で現行R/Dで予定されており、かつ、未実施の食鶏処理プラント及び栄養実験室を完成させたうえで本プロジェクトを終了させ、次いで畜産開発に関する第2フェーズとして食肉加工施設及び流通分野を中心とする新規プロジェクトにつき我が国の協力を得たいとの願望があったようである。

以上のような経緯もあり、この間長時間の論議も行なわれたが、最終的には、Sommary Report of Joint Eralvution に記述してある通りの文言で纒ることとなった。

最後に、この種のReportとしては、協力延長の勧告を行ないながらその期間を明記しておらず、また、双方のこの点に関する発言を付記の形で挿入してあることは、極めて変則的と思われるかも知れないが、次のような判断のもとで止むを得ず行なったものであることを

明らかとしておきたい。即ち、

(1) Report 全体、特に延長後の協力内容の技術的側面に亘る事項は、日・ビ双方の技術者の討議の結果ほぼ2年の延長を想定して記述されているものであり、勧告においてこのような背景を無視して協力延長期間を1カ年とすることは問題があると思われたこと。

(2) 総裁の意向を踏まえて、LDMC側事務担当者は1カ年の延長のラインを勧告に明記するよう主張するところとなったが、これは栄養実験室等現行R／Dで未完の施設の設置を期待してのものであり、これが不可能な場合には延長そのものも必要なしとの態度を示したこと。

(3) 我が方としては、1年程度の延長ならばフォローアップによる協力でも十分と思われるし、またビルマ側の上記(2)の如き姿勢が明らかとなった段階で、かかる考え方を前提として勧告本文に1カ年間の延長を明記することに一抹の危惧を憶えたこと。

Ⅷ　畜産農場視察の感想

チーム滞在中、視察できた農場は次の５農場である。

1.　ワンベーイン農場

この農場は、ＬＤＭＣ農場の１つであり、アヒルを飼育している。現在１１,８００羽（ビルマ在来種、外来種）を飼養しており、年間６０万個の卵と、肉を出荷している。

飼料は、砕米、米ヌカ、エビカスであり、蛋白質は田の小魚をアヒルが自食しているとのことである。

2.　ピアジー農場

この農場は、ＬＤＭＣ農場の１つであり、鶏９,５４０羽、豚２０７頭、乳牛２６頭を飼育している。

鶏では、１０マイル農場からビルマノーリン（１１・０６系）を導入している。

豚はオーストラリアから輸入されたものとその生産豚で、成雄豚５頭、成雌豚５３頭を繋養していた。品種はバークシャー、ランドレース、大ヨークシャーの純粋種であり、いずれも、栄養状態、体型等はあまり良好ではなかった。

飼養管理は、種雄豚は１頭づつ運動場つきの小屋に収容されていたが、運動場の汚染が激しいようであった。種雌豚は群飼であり、コンクリート床の豚舎で飼われていた。

繁殖成績は産子数平均８頭で、離乳頭数は６頭とのことであったが、子豚の栄養状態や発育は悪く、出荷頭数は更に少ないものと思われる。離乳日令は４５日、出荷日令は２～３カ月で、大部分は種畜として出荷されている。

3.　ダニンゴン農場

この農場は、ＬＤＭＣの飼料工場であり、１０マイル及びイワダヂ農場以外のラングーン近辺の農場に配布する配合飼料を作っている。１０マイル農場もこの農場から原料の供給を受けている。現在日産２０トンの生産を行っており半分はラングーン週辺の農場へ、あとの半分は一般農家へ売っていた。飼料生産機は、シンガポールから輸入したものを使用しており、粉砕機、配合機と連動している近代的なものであり、ペレット（豚用）の生産も行なっていた。農場内に分析施設があり、６成分を行なっているとのことであったが蛋白質の分析に必要な器具はなかった。ラングーン大学を出た研究員と話したが分析技術に関する技術程度は低いように思われた。

4. ピンマービン農場

当場は１０マイル農場から北へ車で３０分の所にあり、面積は1,４９５エーカー(670 ha)で、世銀の借款を受け、オーストラリア、ニュージランドの協力により１９７８年に設立されたものである。飼養家畜は乳牛・豚・養鶏及びロバ部門からなり、経営はそれぞれ別になっている。

酪農は、フリージャー及びジャージー種からなり１９８１年3月末で３８０頭を飼養している。乳量は昨年末で２３7,４７３ビス(１ビスは1.６２kg)を出しており、一頭当たりの年間搾乳量は3,８４０kgであるとのことである。月別乳量は6～9月が低く、１１～３月が高い、死亡率は１９７８年１5.４％、１９７９年7.４％、１９８０年6.４％でありその原因は口蹄疫が多かったとのことである。

草地はギニアグラス、パラグラス、ネピアで、豆科ではスタイロサンテイスの混播草地であり、草種については、試験圃を作り適性調査をしている。平均草量は8.4トン／エーカーである。乳牛はすべて舎飼で、育成牛舎、成牛舎からなっており、スレートぶきで、側壁がなく、真中に通路があり両側に追込式の牛房がある。搾乳は人力で行なっており、朝夕の二回行なっている。飼料の内、濃厚飼料は、ダニンゴン農場で作っている。粗飼料は青刈、サイレージが中心で、乾燥も供与している。サイレージはトレンチサイロであり、２０×１２０×９フィートのものが２基で合計で1,４００トンのサイレージを作っている。埋込の終った後土を６～７㎜覆せ気密性を保っていた。

豚はオーストラリアから輸入されたものである。品種はバークシャー、ランドレース、大ヨークシャー、gron-gron(大ヨークシャーを主体にしたイギリスのハイブリッド豚)で飼養頭数等は下表のとおりである。

年　　度	１９７８～７９	１９７９～８０	１９８０～８１
年度始頭数	２７７頭	７２７頭	７００頭
生産頭数	1,３３７	1,６７４	1,９８１
配布頭数	３９９	1,３４２	1,６０７
死亡頭数	４８８	３６１	３８４
年度末頭数	７２７	７００	６９０

豚舎はスノコ自然流下式を採用しており、糞尿はメタンガス発生装置を造って利用していたが、ガスの発生状況はあまり良好でなかった。

豚の栄養状態はあまり良くなく、飼料に問題があるようであった。特に１腹当りの育成豚は少なく、栄養状態も不良のものが目立った。

5. イワダヂ農場

この農場は、ラングーンの東１４マイルに位置し、党の指導のもとに１９８０年から工事が進められた。農場面積は、９００エーカー、一日１０,０００羽のブロイラーを出荷出来る規模として計画されており、種鶏舎、ハッチャリー、ブロイラー育すう舎、飼料製造、貯蔵施設からなっている。ビルマにおける畜産振興政策の重点項目としてあげられ、すでに施設の６～７割程度完成しており、現在１日当たり３,０００羽のブロイラーを生産している。

ＬＤＭＣはこの農場の組織の内、種鶏、ハッチャリー、飼料生産及び食鶏処理を担当しており、ブロイラーの育すうは退役軍人が１戸当たり２,０００羽を飼養しており、現在２８８戸が生産を行なっている。最終的には５００戸のブロイラー生産農家が生産活動を行なうことになる。

(1) 種鶏舎（ＧＰ）

３万羽の種鶏を飼養できる施設を計画しており、すでに６割程度完成している。品種はアメリカのスヌブロー、アバエカー等のブロイラー専用種鶏を飼育しており、ＧＰをアメリカから１羽７ドルで輸入している。

(2) ハッチャリー

ハッチャリーは１０マイル農場のハッチャーの数倍の能力を有するジェームスウェイ社のものであり、一度に７５,０００個が孵化できる能力を有している　卵は当場産とピンマービン農場産のもを作っている

今までに４２万個の卵を孵化し、２０万以上のブロイラー雛の生産を行なっている。

(3) ブロイラー育すう舎

高床式の平飼舎であり、ピンマービンの鶏舎と同じ方式である。すでに２５０鶏舎が完成しており、最終的には５００鶏舎に達するとのことである。一日当たり、１万羽のブロイラーの出荷を計画している。

(4) 飼料製造施設

フィードミルは完成しており、ドイツ製の４台の粉砕機、攪拌機は空気搬送システムになっており能率は良さそうであった。６戸の原料庫を建設しているが、このあたりは水位が高く湿気対策及びねずみ対策が必要と思われるが一見した限りでは、そのような施設はなく将来問題を残しそうである。

(5) 食鶏処理場

一日当たり一万羽のブロイラー処理、フローズン、チルドで貯蔵できる冷凍冷蔵施設及び内蔵物処理場からなっており、現在貯蔵庫が８割処理場が４割完成しており、１９８２年の初めには稼動したいとのことであった。施設はすべてデンマーク製であり、デンマーク人が技術指導を行なっていた。処理場は、オートメーションシステムがとられており、わが国の近代的な処理場と同程度の能力を有するものと思われる。

貯蔵庫は、－３５℃、０℃の貯蔵施設があり、チルド及びフローズンの貯蔵を計画している。内部はほとんど完成しており、停電にそなえて三基の発電装置があった。内蔵物処理場は、食鶏処理施設から１００ｍの所にあり、乾燥後粉砕して飼料工場へ送る計画をしている。

(6) 販　　売

一日当たり一万羽のブロイラーの売払先については明確な回答が得られなかったが、今のところ予定ではラングーンへの出荷と、アラブ諸国への輸出を考えている。ラングーン市内に３ケ所の販売所を作る予定である。ビルマにおいては、肉類のコールドチェンは、ほとんどなく一日の販売量を店先に置いているのが普通である。肉類の流通面の整備が遅れていることは畜産振興にとって大きな問題である。

(7) 防 疫 対 策

当場は水田の中にあり、人家とは離れているが。農場内をトラック、人が自由に出入りしており防疫対策はほとんどとられていない。

参　考　資　料

1. 購送機材の利用及管理状況評価

2. MINUTES OF THE JOINT MEETING
（①，②）

3. PROGRESS REPORT〔UP TO 31ST OCTOBER 1981〕

4. ビルマ政府における二国間プロジェクト開始までの流れ

5. 供与機材輸送にかかるPACKING & MARKING INSTRUCTIONS

1. 購送機材の利用及管理状況評価

購送機材の利用及管理状況の評価については、本調査団が延長問題の討議に時間をさかれ、機材の調査が充分でなかったため参考資料として掲載することとする。

ビルマ側の評価は、ビルマ人カウンターパートの調査結果であり、日本側の評価は専門家への聞き取り調査結果である。

なお、昭和５６年度の供与機材の購送が遅れ現地に未到着のため、調査対象機材は昭和５６年３月に派遣された巡回指導チームの調査内容を基本とした。

（評　価　基　準）

1. 利　用　状　況

A. 十分活用している

B. 活用している

C. 時々活用している

D. ほとんど活用していない

D－1　スペアーパーツ不足のため

D－2　故障中のため

D－3　廃棄したため

D－4　とくに理由なし

D－5　利用の必要性なし

D－6　施設工事遅延のため

D－7　保　管　中

2. 管　理　状　況

A. 特に良く管理している

B. 良く管理している

C. 時々管理している

D. ほとんど管理していない

D－1　利用していないため

D－2　管理人不足のため

D－3　管理場所不足のため

D－4　管理経費不足のため

購送機材評価表

購送年度	機材名		数量	単価	利用状況		管理状況		備考
					ビルマ	日本	ビルマ	日本	
1978-79	養鶏部門（Poultry Sector）								
	ふ卵機セッター	Incnbator setter	4	1,481,900	A	B		B	
	ふ卵ハッチャー	Hatcher	2	1,287,500	A	B		B	
	エッグクーラー	Egg Cooler	2	767,500	B	A		B	
	換気扇	Exhaust fan	4	72,150	B	A		B	
	〃	〃	1		B	A		B	
	電圧調整機	Transformer	1		A	A		B	
	自家発電装置	Driven A Cgenerator	1		A	A		B	
	検卵器	Candling lamp	2	7,500	A	A		B	
	卵産運搬車	Hatching tray rack	3	57,900	A	A		B	
	集卵籠	Egg Collecting basket	100	1,900	A	A		B	
	電熱育すう器	Electric brooder	20	85,810	A	B		B	
	餌付給餌皿	Feeding pan	100	2,700	A	A		B	
	幼すう用給餌皿	Babychick feeder	200	1,975	A	A		B	
	ホッパー	Hopper	250	3,866	A	A		B	
	給水器	Water trough	200	5,516	A	A		B	
	デビーカー	Debeaker	2	45,000	A	A		B	
	弧輪車	Monocycle	5	13,000	D	A		C	
	空気入	Handy air pump	2	2,000	A	A		B	
	集卵車	Egg Rack	5	42,300	A	C		C	
	育すう器	Brooder	1			A		B	
	大すうケージ	Cage for grower	1			A		B	

購送年度	機材名		数量	単価	利用状況		管理状況		備考
					ビルマ	日本	ビルマ	日本	
1978—79	採卵ケージ	Cage for egg collector	1			A		B	
	台秤	Platform scale	1		A	A		C	
	自動台秤	Automatic platform scale	1		A	A		C	
	上皿自動秤	Automatic balance for chicks	2	5,100	A	A		C	
	動力噴霧機	Engine power sprayer	1		D	A		C	
	電力スプレー	Electric power sprayer	3	44,500	A	A		C	
	（小計）		915						
	（診断獣医器具）								
	顕微鏡	Microscope binocular	1		A	D6		A	
	乾熱滅菌機	Hot air oven	1		A	D6		D1	
	冷凍冷蔵庫	Freezer refrigerator	1		A	B		A	
	遠心分離機	Electric centrifuge	1		D7	D6		D1	
	蒸溜水製造装置	Water distilling apparatus	1		D2	D2		D1	利用状況評価の差は施設完成後，使用予定のものが混在しているため
	オートクレーブ	Autoclave	1		A	D6		D1	
	マイクロタイター	Microtiter set	1		A	D6		D1	
	煮沸消毒器	Instrument sterilizer	1		A	A		B	
	試験管立	Test tube Rack	10	2,200	A	B		B	
	ピペット自動洗滌器	Automatic pipette washer	1		A	D6		D1	〃
	ピペット自動硫酸槽	Sulfuric acid bath for pipette	1		A	D6		D1	〃
	ピペット自動洗滌籠	Pipette washing basket	2	4,700	A	D6		D1	〃
	試験管洗滌籠	Test tube basket	5	2,000	A	D6		D1	〃
	硫酸ツボ	Sulfuric acid jar	1		A	D6		D1	〃
	洗滌籠	Washing basket	2	9,900	A	C		B	

購送年度	機材名		数量	単価	利用状況		管理状況		備考
					ビルマ	日本	ビルマ	日本	
1978−79	洗篠金網籠	Washing wire net basket	5	8,200	A	C		C	
	白金耳	Platinum needle	5	3,800	A	D5		D1	
	数取器	Hand tally counter	2	1,150	D7	D5		D1	
	物品棚	Medicine cabinet	2	111,500	A	A		B	
	上皿天秤	Balance	1		A	A		B	
	自動上皿天秤	Auto balance	1		A	A		B	
	ゲル沈用ポンチ	Punch for Geletin sediment	2	6,300	D7	D6		D1	
	ゲル判定器	Detector for Geletin sedimont	1		D7	D6		D1	
	乾燥台	Support drain board	1		D7	D6		D1	
	貯蔵用タンク	Stainless steel vessels	2	21,500	D7	D6		D1	
	〃	〃	1		A	D6		D1	〃
	比重計	Balance	1		A	D6		D1	〃
		(小計)	54						
	(飼料関係)	(Feed Mill sector)							
	飼料撹拌機	Feed mixing machine	1		B	A		B	
	クロスコンベアー	Cross conveyer	1		B	D6		D1	〃
	〃	〃	1		B	D6		D1	〃
	飼料粉砕機	Feed grinder	1		A	A		B	
	スライダックトランス	Slide regulator transformer	2	21,000	A	A		B	
		(小計)	6						
	管理部門(Administration sector)								
	電子複写機	Electronic copying machine	1		D1	D1		B	
	印刷機	Printing machine	2	693,900		A		B	

購送年度	機材名		数量	単価	利用状況		管理状況		備考
					ビルマ	日本	ビルマ	日本	
1978−79	タイプライター	Typewriter	1		A	A		B	
	卓上電子計算機	Electronic calculator	4	14,010		D2		C	
		（小　　計）	8						
	トラクター	Farm tractor	1		D1	A		C	
	プレハブ冷蔵庫	Prefab walkin coolers & freezers	1		A	A		B	
		（小　　計）	2						
	養豚部門（Pig sector）								
	（飼養管理関係）								
	飼　槽	Feeder	102	16,060	B	A		B	
	給水器	Waterer for pig	102	3,600	B	A		B	
	〃	Water cup for pig	244	5,377	B	A		B	
	入墨器	Tattooing forceps	3	36,500	B	A			
	耳刻器	Ear notcher	3	4,500	B	A		B	
	体尺計	Animal cage for pig	1			C			
	鼻保定器	Hog holder	10	6,000	A	A		B	
	弧輪車	Monocycle	17	13,000		A		B	
	体重計	Livestock scale	1		B	A		B	
	体重秤	Balance	1			A		B	
	子豚用秤	Balance for baby pig	2	205,000	B	A		B	
	自動秤	Automatic balance	10	8,000		A		B	
	動力噴霧機	Mobile type power sprayer	1		C	A		B	
	リヤカー	Hand cart	2	29,000	A	A		B	
	浣腸器	Irrigator	1			C		B	

購送年度	機材名		数量	単価	利用状況		管理状況		備考
					ビルマ	日本	ビルマ	日本	
1978—79	解剖セット	Dissecting instrument	1		B	C		B	
	投薬カテーテル	Dosing catheter	3	1,500	D4	C		B	
	開口器	Mouth gag for pig	1		D4	C		B	
	浣腸器	Irrigator	1			C		B	
		(小計)	506						
	(人工授精関係)								
	擬牝台	Dummy for boar	1		B	A		B	
	煮沸消毒器	Instrument sterilizer electric heater	1		B	A		B	
	スライド加湿器	Spermotherm	1		B	B		B	
	精液保温器	Semen bottle bath	5	12,500	B	B		B	
	精液注入器	Semen inseminator	10	5,510	B	A		B	
	恒温器	Incubator	1		B	A		B	
	顕微鏡	Microscope monocular	1		B	A		B	
	数取器	Hand tally counter	1		B				
	上皿天秤	Balance	1		B	A		B	
		(小計)	22						
	放牧設備材料一式	(Equipment for grazing control)	1		B	A		B	
	養鶏部門 (Poultry sector)								
	タイムスイッチ	Timer	20	5,100	A	C		C	
	小型ふ卵機	Electric incubator	1		A	D6		D1	
	急速凝集反応器	Rapid agglutination testing box	2	37,500	A	B		B	
	エアコンデショナー	Air conditioner	3	189,000	A	A		B	

購送年度	機材名		数量	単価	利用状況		管理状況		備考
					ビルマ	日本	ビルマ	日本	
1978−79	篩	Sieve	2	13,000	A	A		B	
	高圧洗滌器	Power sprayer hi−washer	1		D1	D6		C	
	電気洗滌器	Electric drying oven	1		A	D6		D1	
		(小計)	30						
	管理部門 (Administration sector)								
	スライドプロジェクター	Slide Projector	1		B				
	オートバイ	Motorcycle	2	159,000	A	A		B	
	黒板	Black board	5	25,555	A	A		B	
		(小計)	8						
	車両	Station wagon	1		A	A		B	
		合計	1,553						

購送機材評価表 (2)

購送年度	機材名		数量	単価	利用状況		管理状況		備考
					ビルマ	日本	ビルマ	日本	
1979−80	養鶏部門 (Poultry sector)								
	育すう器(幼すう用)	Brooder	2	194,250	A	A		B	
	育すうケージ	Cage for grower	4	250,000	A	A		B	
	産卵ケージ	Cage egg collector	5	282,200	A	A		B	
	コンテナーケージ	Broiler container cage	1		A	B		B	
	コンテナバスケット	Container basket	100	4,252	B	B		B	
	卵重計	Egg scale	3	20,400	A	B		B	
	検卵器	Candling lqmp	3	7,050	A	A		B	
	電動スプレー	Fogger	5	48,900		A		B	
	脚立	Step ladder alminum	4	13,900	A	B		B	
	(小計)		127						
	管理部門 (Administration sector)								
	カメラ	Camera	1			B		B	
	交換レンズ	lens	1			B		B	
	ストロボ	Stroboscope	1			B		B	
	三脚	Tripods	1			B		B	
	物品棚	Steel rack	4	27,300		A		B	
	黒板	Steel black board	2	50,000		A		B	
	鉛筆削り	Pencil sharpener	3	2,000		A		B	
	複写機	Copying machine	1			A		B	
	卓上電子計算機	Electric calculator	3	10,600		A		A	
	本立て	Book stand	4	2,700		A		A	

購送年度	機材名		数量	単価	利用状況		管理状況		備考
					ビルマ	日本	ビルマ	日本	
1979−80	レターケース	Letter case	4	3,950		A		A	
	(小計)		25						
	養鶏部門 (Poultry Sector)								
	ふ卵器セッター	Incubator setter	4	1,499,800	A	B		B	
	ふ卵器ハッチャー	〃 Hatcher	2	1,274,700	A	B		B	
	検卵選別機	Egg cleaner & grade distributor	1		A	A		B	
	トラクター	Tractor	1		A	A		C	
	巻上げカーテン	Curtain for chicken house	11		C				
	卵座運搬車	Egg tray rack	3	57,100	A	A		B	
	弧輪車	Monocycle	10	14,500		A		C	
	集卵車	Egg rack	3	60,000	A	B		B	
	配餌車	Feed rack	3	49,000	A				
	デビーカー	Debeaker	4	50,000	A	A		B	
	〃 スタンド	Debeaker stand	5	16,800	A	A		B	
	エアコンプレッサー	Air compressor	1			D6		D1	
	換気扇	Exhaust fan	5	81,540	A	B		B	
	高圧洗滌機	Jet cleaner	1		D1	A		C	
	消毒槽	Dressing drum	2	7,900	A	A		B	
	手洗鉢台	Bowl stand	7	8,500	A	A		B	
	手動噴霧器	Hand sprayer	1		A	B		B	
	指頭消毒器	Finger strilizing cotton container	3	1,300	A				
	消毒盤台	Instrument stand	1		A				

購送年度	機材名		数量	単価	利用状況		管理状況		備考
					ビルマ	日本	ビルマ	日本	
1979−80	ホルマリン消毒器	Formalin sterlizer	5	8,500	A	B		B	
	工具セット	Tool set	2	42,000	A	A		B	
	スポット熔接機	Spot welder	1		D7	D7		D1	
	集卵籠	Tray for egg basket	70	4,500		A		B	
	卵質計	Egg haugh unit tester	1		A	B		A	
		(小計)	147						
	養豚部門(Pig secter)								
	背負式噴霧機	Knapsack sprayer semi automatic	3	25,000	B				
	飼料粉砕機	Feed crasher	1		A				
	コンベアー	Conveyer	1		A				
	グロスコンベア	Gross conveyer	1		A				
	飼料撹拌機	Feed mixer	1		A				
	大工道具セット	Carpenter's tool set	1						
	高圧洗滌器	Jet cleaner	1		A	A		B	
	巻上げカーテン	Curtain for pig house	5	110,000	A	A		B	
	豚鼻保定器	Hog holder	5	7,000	A	B		B	
	手洗鉢台	Bowl stand	3	4,500	A	B		B	
		(小計)	22						
	電話交換設備	Equipment for telephone switching	1						
	養鶏部門(食鳥処理関係)(Poultry sector)								
	中型脱毛機	Picker	1		D7	D6		D1	
	角型放血機	Blood expeller	1		D7	D6		D1	

購送年度	機材名		数量	単価	利用状況		管理状況		備考
					ビルマ	日本	ビルマ	日本	
1979—80	大型湯漬機	Scalder	1		D7	D6		D1	
	移動水槽	Movable water tunk	2	185,000	D7	D6		D1	
	調理台	Cooking stand	1		D7	D6		D1	
	湯漬用ボイラー	Boiler for scalder	1		D7	D6		D1	
	（小計）		7						
	合計		329						

購送機材評価表 (3)

購送年度	機材名		数量	単価	利用状況 ビルマ	利用状況 日本	管理状況 ビルマ	管理状況 日本	備考
1980-81	養鶏部門 (Poultry sector)								
	育すう器	Brooder	3	62,824	A				
	幼すうケージ	Cage for baby chick	3	182,000	A				
	大すうケージ	Cage for grower	6	308,500	A				
	産卵用ケージ	Cage for egg collector	20	331,650	A				
	(小計)		32						
	管理部門 (Administration sector)								
	タイプライター	Typewriter	1			B		B	
	黒板	Black board	5	40,900		B		B	
	裁断器	Paper cutter	1			A		B	
	電子卓上計算機	Electric calculator	5	9,160		A		B	
	黒板	Black board	5	18,720		A		B	
	ファイリング キャビネット	Filing cabinet	3	23,700		A		A	
	(小計)		20						
	養鶏部門 (Poultry sector)								
	コンテナーバスケット	Container basket	100	8,560	D7	D7		B	
	給餌樋	Feeding trough	100	3,010	A				
	給水樋	Watering trough	100	1,805	A				
	高圧洗滌機	Jet cleaner	1		A	A		B	
	煮沸消毒機	Instrument sterilizer	2	56,500	A				
	自動秤	Automatic balance	10	5,000	B				
	精液稀釈保温器	Semen viaj bath	40	4,150	A				

購送年度	機材名		数量	単価	利用状況		管理状況		備考
					ビルマ	日本	ビルマ	日本	
1980—81	（小計）		353						
	養豚部門（Pig sector）								
	鼻保定器	Hog holder	10	5,760	A	B		B	
	耳刻器	Ear notcher	3	6,530	A	A		B	
	煮沸器	Instrument sterilizer	1		A	A		B	
	精液注入器セット	Semen inseminater	10	6,800	B	A		B	
	電牧器	Electric fencer	2	31,200	B	A		B	
	（小計）		26						
	管理部門（Administration sector）								
	給水配水装置	Equipment for Water supply	1						
	合計		432						

参考資料－２①

PIG AND POULTRY DEVELOPMENT PROJECT

Minutes of the Joint Meeting on the Evaluation of the Project between the Officials of LDMC and the Evaluation Mission of JICA.

Date ... 24th November, 1981.
Time ... 9:30 am.
Place ... Project Manager's Office.

Members present ...

(1)	Mr. Takayoshi Yamazaki	Mission Leader
(2)	Mr. Shinji Ogata	Pig Management
(3)	Mr. Yukihiro Narita	Poultry Management
(4)	Mr. Takao Hosomi	Animal Nutrition & Feed Mill
(5)	Mr. Shiro Nabeya	Co-ordination
(6)	Mr. T. Sawada	Liaison Officer
(7)	Dr. I. Nozaki	Pig Management Expert
(8)	Dr. T. Ishita	Poultry Management Expert
(9)	Dr. S. Minami	Animal Health Expert
(10)	U Tin Maung	Local Assistant
(11)	Daw Kinsa	Secretary, JICA
(12)	U Ohn Thwin	Project Manager
(13)	U Htay Aung	Farm Manager
(14)	U Tin Soe	Training Course Incharge
(15)	U Than Ko	Dy. General Manager, LDMC
(16)	U Chit Hlaing	Chief Accounts Officer, LDMC
(17)	U Tin Oo	Chairman, Construction Committee, LDMC
(18)	U Kyaw Myint	Manager, Procurement - LDMC
(19)	U Htun Naing	Manager, Planning Dept. - LDMC
(20)	Daw Mya Mya Nwe	Accounts Officer, JICA Project
(21)	U Saw Win	Dy. Manager, 10th Mile Farm (Poultry)
(22)	U Hla Aung	"
(23)	U Tin Maung Shwe	"
(24)	U Aung Kyaw Soe	Dy. Manager, 10th Mile Farm (Pig)
(25)	U Pe Than	"
(26)	U Swe Lwin	"
(27)	U Lu Hla	Feed Mill, 10th Mile Farm

The Project Manager of Pig and Poultry Project delivered a speech regarding the contents of the report prepared by Burmese project officials at the opening of the meeting.

The Team Leader of the Japanese mission explained the object of their mission. The Team Leader distributed the table for evaluation amongst the members present and explained how the evaluation was to be made in accordance with the items enumerated there in.

In the items of the evaluation, some items were concerning with the implementation of JICA side and some items were concerning with the implementation by Burmese side and there were also common items to evaluate on the implementation of both sides.

The common items for evaluation on the activities of both sides were the works done on pig sector and poultry sector in the fields of feed management, investigation and experiment, practical training, extension and exhibition of improved technology and production.

The assignment for the evaluation, the above mentioned common activities were entrusted to two teams of the Japanese Experts and Burmese counterparts attached to pig sector and poultry sector.

Mr. Y. Narita, one of the members of the mission and Dr. Ishita, Poultry Expert, lead the poultry evaluation team and Mr. S. Ogata, another member of the mission and Dr. Nozaki, Pig Expert, lead the pig evaluation team.

Implementation of the project by the Burmese side and the Japanese were evaluated by the following members present.

Japanese side represented by: -

(1) Mr. Takayoshi Yamazaki	Team Leader of mission
(2) Mr. Shiro Nabeya	Co-ordinator
(3) Mr. Tomio Sawada	Liaison Officer

Burmese side represented by: -

(1) U Ohn Thwin	Project Manager
(2) U Htay Aung	Farm Manager
(3) U Than Ko	Dy. General Manager, LDMC
(4) U Tin Oo	Chairman, Construction Committee
(5) U Kyaw Myint	Manager, Procurement
(6) U Chit Hlaing	Chief Accounts Officer
(7) U Htun Naing	Manager, Planning Dept.
(8) Daw Mya Mya Nwe	Accounts Officer, Project Office

The following points were discussed and resolved.

PART A 10:30 am to 12:00 noon

Sr No.	Particulars	Resolution
I.	Implementing System	
a	Construction of Facilities: Regarding construction of facilities, the mission raised enquiries as follows - 1) How the authorized quantity as per Annex IX of the report was fixed. 2) How the revised figures were fixed. The Burmese officials explained that the authorized quantity was formally fixed basing on the type of building which were enumerated in Annexure V of the R/D. But on actual implementation, the necessity for revision of the quantity arises due to the fact that there is not enough space of land and no such quantity of buildings are required to accommodate 250 heads of pigs, 5000 Layer Birds and 9000 Breeder Birds. The present constructed buildings were enough to accommodate the birds required for poultry sector, but accommodation for pig sector is a little bit behind the requirement for accommodation of 250 heads of pigs. However, more buildings will be constructed to enable to accommodate 250 heads of pigs before the end of the project. Moreover, the Burmese officials explained that the production target has not yet been effected due to insufficiency of the building up till now. The mission pointed out that the implementation of the project is interested not only on breeding side but also on transfer of technology. Processing plant and Nutritional lab has not yet been constructed as yet. Therefore, one of the objectives of Transfer of Technology cannot be implemented. The Burmese officials explained that buildings required for Nutritional lab is a technically complex building. A drawing for the same has been prepared and given to the Japanese Experts for approval. Physical construction will be done after that. So Transfer of Technology in this aspect will be	Graded as 'A'

	extended beyond the project period. Therefore LDMC has made a request for extension of the project period. The Burmese officials continued to explain that the electrical equipments supplied by the Japanese side is of 110 voltage type. Therefore, a step-down arrangement had to be undertaken with the help of Electrical Power Corporation, which resulted a delay in electrical installation work.	
b	Arrangement of Counterparts and Staffs: The mission raised an enquiry as to how the number of counterparts were fixed and the distribution of work was made and also the numbers so fixed was sufficient and they were undertaken continuous training from Japanese Experts. The Burmese officials explained that the actual number of counterparts required for both sectors is 80. viz 40 for pig sector and 40 for poultry sector. Where else there are about 140 counterparts engaged. But as some of the counterparts are attending the training courses of the farm, an interruption in transfer of technology was araised. However, necessary arrangement will be made for exemption of those counterparts from attending the training courses in future.	Graded as 'B'
c	Local Cost for Project: The mission enquired how the local cost for the project was provided. In other words, how the investment expenditure from the Burmese side was financed. The mission also enquired as to whether the shortage of construction materials was due to the insufficiency of funds and how the staff's salary and wages were paid and how the head of the labourers responsible for construction works were penalized if the delays in construction was accured. The Burmese officials explained that due to the prescribed financial regulations of the Government	Graded as 'A'

	the investment cost required for the project was to be met out of the surplus of operational income over operational expenditure. However, as this financial policy was adopted from the fiscal year 1975-76 and as the volume of investment of the Corporation from that time onwards were heavy, that particular procedure cannot be followed in p As an exception, Government had made on arrangement for the Corporation to incur investment expenditure by means of taking loans from Local Bank, carrying a rate of 5% per annum, and repayable when the production income arises. The Burmese officials continued to explain that the salary and wages of the staffs were out of the production income. The head of the labourers responsible for delay in construction work were penalized in two ways, namely, no further works were assigned to them and the recovery of damages from 10% retention money.	
d	<u>Procedure of Work:</u> The mission explained their procedure of work in undertaking a project and mentioned that they are also anxious to know the procedure of work in under taking a project in Burma, so that it will serve them as an indication in decision for undertaking of future projects in Burma. The Burmese officials explained that a particular project was to be undertaken only under the instruction of the ministry concerned. The Government had to extend a proposal to a financing agency who will despatch an Identification Team for making survey and discussions. The results had to be submitted to the ministry concerned for decision as to whether the project is to be undertaken or not. If the reply is in affirmative, the financial and economical analysis of the project was to be calculated and get the concurrance of FERD. Then the approval of the cabinet is to be sought for, through the minister concerned. Annual budget is to be prepared for the project scrutinized by the responsible department. After that it was passed by the Parliament by 'Budget Act'.	Graded as 'A'

	Investment Expenditure is to be incurred in accordance with the Rules and Regulations prescribed by the Government.	

PART B 14:00 to 16:30 pm

Sr No.	Particulars	Resolution
I	Despatch of Experts The mission explained the methods of marking system in this section. The Project Manager said that a list of long term experts and short term experts were included in the Report. Two short term experts, one for pig sector and one for poultry sector were urgently required.	
a	Field: The mission requested for despatch of application forms as early as possible. The Burmese officials replied that necessary arrangements have been made with FERD. The applications will be forwarded to JICA within (2) weeks. Necessary follow-up will be undertaken by the Burmese side.	Graded as 'B'
b	No: of Experts: The mission and the Burmese officials are of opinion that as the no: of experts engaged up till now is fall short of two persons, the situation is worthy of grading as 'B'.	Graded as 'B'
c	Period of Assignment: The mission mentioned that they were reported by the short term experts that the time specified for them was very short and they would like to know whether it was true or not. The Burmese officials explained that the fixation of the duration varies according to different circumstances. After discussion, both sides agreed that the time required for short term experts should be at least (6) months.	Graded as 'B'
d	Training Items: The mission pointed out that as the Nutritional lab and Processing plant cannot be constructed in time, training courses in these fields cannot be implemented by the Japanese side.	Graded as 'B'

II.	Counterpart Training in Japan	
a	Field:	
	The mission and Burmese officials are of opinion that the no: of counterparts despatched for training is much less than the numbers required for project.	Graded as 'B'
b	No: of Counterparts:	
	No counterparts has been despatched for training in the first two years of the project period. Only (3) nos: despatched in its 3rd year.	Graded as 'C'
c	Period of Training:	
	The Burmese officials pointed out that the Japanese side emphasize only on the no: of counterparts to be despatched by each project, but not on the period. But normally the period is (10) months inclusive of language training from (2) to (4) months.	Graded as 'B'
d	Result of Training:	
	The mission is of opinion that as the counterparts were very recently returned to Burma, the result of their efficiency cannot be evaluated in terms of their contribution on their various fields. So it is too early to fix a Grade in this aspect. The Burmese officials agreed to this point.	
III.	Material Grant	
a	Amount of Aid:	
	Both sides are of opinion that as % of the total value of materials agreed to be supplied by JICA has been despatched, it should be graded as 'B'.	Graded as 'B'
b	Quality of Material:	
	The Burmese officials pointed out that the materials despatched by JICA must suit the requirement of the project. A few of the materials despatched were outdated and a few were not working very well. Some of the medicine despatched were about to expire, so that they may not be utilized on veterinary coverage purposes before expiry date. The mission dxplained that the despatch of materials will be made to suit	Graded as 'B'

	the project in future. So far as the medicine is concerned, they have to purchase from the manufacturer as soon as an urgent request was received by the Burmese side. It is so happened that the manufacturer produced these medicine batch by batch and at the time of purchases the Balance of the Production of the first batch was not yet exhausted at such, it will take time to wait for our new batch. So as to enable the Burmese side to get the medicine as early as possible, purchase of the balance stock of the 1st batch is unavoidable.	
c	Time when received.	
	The mission pointed out that the despatch Meterials cannot be cleared by the Burmese side at Rangoon port in time. That like to know the reason. The Burmese Officials explaned that as Bill of Lading, Invoices, & packing list were received by the Burmese side together with the arrival of the goods they cannot make necessary arrangements as required under Burmese port Regulation and custom Regulations So the delay in clearing of the Material was unavoidable. The above mentioned documents required to be despatched to LDMC in advance.	Graded as 'C'
d	Management of Materials.	
	The mission pointed out that the materials despatched by the Japanese side were not properly stored and necessary up keep and maintainance has not been done before they were utilized in the fields an installation was made. The Materials installed or errected were also not properly maintain. The Burmese Officials promises to do the needfull from now on words.	Graded as 'B'
e	Use of Materials.	
	The same condition as above.	Graded as 'B'
IV	General.	
	The Burmese Officials pointed out that the value of materials Grant received from the Japanese side and also the value of consultancy services rendered by	

	them are to be brought on to Account. As the Accounts so kept was subject to audit of 'Council of People's Inspectors' all the necessary documentation are required. At present invoices for some consignment in despatch of marterials were not yet received. So also necessary documents for expenditure regarding consultancy services were not received. The Officials request the mission to make necessary arrangements for furnishing full documentation. The mission explaned that they will do the needfull when they get back to Tokyo. As for the consultancy services they are unable to furnish individual expenditure, as the amount of salary receivable by a particular staff is kept as a secret matter in their commercial practice. Therefore a quarterly statement of Expenditure will be furnish by them showing different categories of Expenditure. They also explaned that some statement in this respect has already been despatched to the Project Officials. However, they will prepare a more systematic and correct statement after proper examination when they get back to Tokyo. If necessary, they will certify that fresh statement so prepared are to be substituted in lieu of the formel statement.
2.	The Burmese Officials put forward a difficulty in clearing the materials despatched to the Project under the names of the Experts and made a suggestion to despatch them in the name of the Project in future. The Mission agreed.
3.	The meeting close down at 16.30 hours. (Stenographed by)

Letter No. 33/131/Basa(3970)
Dated : 25th November 1981.

Myamyi. 25/11

(Mya Mya Nwe)
Accounts Officer,
JICA Project Office.

c.c. :(i) Members of the meeting.
(ii) Managing Director, LDMC.
(iii) O/C
(iiii) Float.

参考資料－２②

MINUTES OF THE JOINT MEETING ON THE EVALUATION OF THE PROJECT BETWEEN THE OFFICIALS OF LDMC AND THE EVALUATION MISSION OF JICA. (2)

Date ..... 26th November 1981.
Time ..... 10:30 AM.
Place ..... Project Manager's Office.

Members present.

1.	Mr. Takayoshi Yamazaki	Mission Leader.
2.	Mr. Shinji Ogata	Pig Management.
3.	Mr. Yukihiro Narita	Poultry Management.
4.	Mr. Takao Hosomi	Animal Nutrition & Feed Mill.
5.	Mr. Shiro Nabeya	Co-Ordinator.
6.	Mr. T. Sawada	Liaison Officer.
7.	Dr. I. Nozaki	Pig Management Expert.
8.	Dr. T. Ishita	Poultry Management Expert.
9.	Dr. S. Minami	Animal Health Expert.
10.	Mr. K. Takeda	JICA Officer.
11.	U Ohn Thwin	Project Manager.
12.	U Htay Aung	Farm Manager.
13.	U Than Ko	Dy. General Manager, LDMC.
14.	U Chit Hlaing	Chief Accounts Officer, LDMC.
15.	U Tin Oo	Chairman, Construction Committee LDMC.
16.	U Kyaw Myint	Manager, Procurement Dept. LDMC.
17.	U Htun Naing	Manager, Planning Dept. LDMC.
18.	Daw Mya Mya Nwe.	Accounts Officer, JICA Project.

At the opening of the meeting the mission delievered a speech as to how the meeting was to be proceeded. He further explained that a joint report will be prepared after the final joint meeting.

The reports will be in (5) sections as follows:

(1) Back Grownd history of LDMC,
(2) Object of the evaluation meeting,
(3) How to evaluate the project,
(4) The project Activities and,
(5) Recommadation of the meeting.

The team leader then, distributed a draft " result of evaluation" amongest the members present and the following discussions were made after that.

Sr No	Particulars	Resolution
I.	Dispatch of Experts.	
1.	In pursuance of the Record of Discussions signed on April 12, 1978, two long@term experts (Team - Laader and Liaison Officer) arrived at Rangoon on September 30th 1978. Experts dispatched are as mentioned in Annexurs I.	
2.	Animal Nutrition and feed mill expert dispatched in December 1978, could hardly give guidance in the technical training on feed analysis because of incomplete nutrition laboratory.	
3.	Animal Health expert was dispatched in August, 1981. The reasons for delaying of dispatch were: (i) The emphasis of the project were put on feeding and management of pig and poultry for the half of the coorporation period. (ii) The diagnostic laboratory was not completed at that time. But it is now completed at this moment of writing this report. The transfer of technology on Animal Health will be expected from now on.	
II.	Counterparts Training in Japan.	
1.	Participants accepted are as mentioned in Annex-II. In 1981 - 82 two more participants will be trained in Japan.	
2.	Although chick sexing expert had been dispatched twice, and give the technical training on sexing, it is necessary for the Burmese counterparts to under go further training in Japan, so that it will be effective and efficient for the project works.	
3.	It is charaterized for this project that number of trained participants in Japan are very few. It is positively important to train more participants in Japan in order to promote the rest of the activities of this project.	
III.	Materials Grant.	
1.	JICA provided materials and equipment worth CIF Rangoon ( ) million Yen up to 1978 - 1980.	

In 1981-82 the amount of materials and equipment will be CIF (77) million yen.

2. Approximately 10% of the amount of materials grant were used for the purchase of Medicine and Feed-Additives up to 1980. At least the expenditure for medicine and feed additives are requested to be contributed by Burmese side in the future in Order to maintain the stocks. So that balances of fund can be utilized on more effective items, such as equiptments, machineries and livestock. On special request on Burmese side for specific medicine it is agreed to dispatch.

BURMESE CONTRIBUTION.

1. Implementing System.

i) Construction of Facilities.

(i) The condition of the present situation of the facilities are as mentioned in Annex IV.

(ii) Construction of office, pig houses and poultry houses have been almost proveded in accordance with the needs. But nutrition Laboratory and processing plant have not been constructed yet. Feed mill & diagnostic laboratory are under construction. The construction of the electric supply plant & water supply plant as part of infre-structure of the project were delayed because of lack of materials and technicians but these will be completed in near future Especially - completion of water supply system is strongly expected for the further development of the Project.

Burmese side explained the present completion of electric and water supply, construction of Feed-Mill and diagnostic Lab. as follows: -

(a) Construction of Feedmill	95 %	completed.
(b) Diagnostic Lab.	100 %	"
(c) Electric supply	100 %	"
(d) Water supply plant	90 %	"

2. Arrangement of Counterparts & Staffs.

i) Number of counterparts personnels are enough for the activities of the project.

ii) The frequent change of the staffs is the neck of the smooth transfer of the technology. Specially, effort should be exerted to assign the counter - part for a long time, at least (3) years, to the respective sector of the project. A syllabus for

each sector should be precribed with the time required in this case.

3. Local Cost.

Concerning with Local cost higher priority is given to the Project, among the farms under LDMC.

4. Procedure of the work.

In several cases the procedure matter such as dispatch of the experts and acceptance of ~~of~~ counterparts for the Training etc; had required long time.

Therefore Burmese Officials concerned and Japanese experts should fully discuss the matters through the fluent communications. We should make procedures as planned previously arranged, so that present sutuation will be improved.

Pig Sector.

1. The number of pigs produced and distributed until now is shown in the Annex O.

2. The Feeding and Management Technology on Breeding stock and Fattening stock has been almost transfered.

Especially Growth - Rate and Feed Conversion Ratio of Fattening stock shows good results. But Growth rate and raising ratio of Grower pigs are not so good. Especially counter measure to diarrhea and forming the starter for suckling pig is necessary.

3. The Artificial Insemination Technique has been almost transfered except the preservation Technique.

4. The transfer of technology necessary for research experiments and creation of the suitable breed in Burma is most important for the development of Swinery Industry in Burma. Some researches and experiments have been performed, but the statistics and the Breeding Science basically necessary for analysing the data have not been transfered. The emphasis should be put on this field in future technical transfer.

Poultry Sector/

1. The number of eggs, day-old-chickens and broiler produced & distrabuted until now is shown in Annex O.

2. The basic technology of Feeding, Management and Incubation has almost transfered.

3. the cage-system shows good performance results, and is well adopted to the Burmese climate - high temperature and humidity.

4. The Artificial Insemination Technique plays in important roles in Cage-system for producing the day-old-shicks (Semi - Broiler). The A.I Technique has been almost transfered.

5. Burma Worin (11-06)was selected as layer Type - Bird, and shows good results in egg-production. As Broiler Type Bird, Semi-broiler has been created successfully, and shows good resuhts. The transfer of Technology on Poultry Breeding, like individual investigation, selection and pedigree - hatching, were requested by Burmese - side, and has just started. Under this circumstances basical technique for maintaining the good performance of the line has not yet transfered at present, so technical transfer in this field is urgent necessity, from now on.

The contaminated environment has been purified & improved by complete washing & disinfection and Proper vaccination & medication, all stocks are kept in good condition now. But the Diagnostic Laboratory has just started to work, and transfer of technology on post-mortem, diagnose and pathological examination should be done in future.

Training Course.

1. The number of trainees and subjects of training course undertaken is shown in Annex O.

2. Two kinds if training courses have been undertaking. One is Farm Manager Training Course (general training on administrution, Pig and Poultry management). The other is shicks sexing course. Good result were shown in the course.

3.	To have effective transfer of Technology, Burmese side desires to run training course for futher(2) years with the hwlp of Japanese side.	
4.	For the further training specializedand advanced courses such as Artificial insemination, Animal Health and Breeding on Pig & Poultry, Hatchery managemrnt etc, are necessary.	
5.	The accomodation facilities should be needed for the trainees coming from whole Burma.	
	Feed Production	
1.	The amount of Feed produced until now is shown in Annex ( ).	
2.	It has almost achieved to transfer technology in production formular feed.	
3.	However, there is a problem in the quality of feed. It's essential to anolyze feed in order to improve the quality.	
4.	It's hardly to transfer technology in feed anolysis because Nutrition Laboratory is not built yet. It's necessary to transfer technology through dispatch of expert and counterpart training in Japan with contract of nutrition Laboratory.	
5.	It is quite necessary to develop the piglets, startor feed made of local feedstuff ~~take~~ soy beans, local beans & so on in order to improve the growth of piglets.	
6.	In poultry feed as it's difficults to get alfalfa meal for vitamine, weedo is used for green feed. But there is a problem in quality and amount. Therefore, it's necessary to cultivate suitable grass for Burmese climate.	
7.	The meeting close down at 17;00 PM.	

(Recorded by)

Letter No. 33/131/Basa(3978)
Date : 27th November 1981.

(Mya Mya Nwe)
Accounts Officer,
JICA Project Office.

c.c. : (i) Members of the meeting.
(ii) Managing Director, LDMC.
(iii) O/C
(iiii) Float.

参考資料－3

THE SOCIALIST REPUBLIC OF THE UNION OF BURMA

MINISTRY OF AGRICULTURE AND FORESTS

LIVESTOCK DEVELOPMENT AND MARKETING

CORPORATION

LDMC/JICA.

PIG AND POULTRY DEVELOPMENT PROJECT

(APRIL 1978 to APRIL 1982)

PROGRESS REPORT [UP To 31st OCTOBER 1981]

RANGOON

19th NOVEMBER 1981.

C O N T E N T S

PROGRESS REPORT

FOR

PIG AND POULTRY DEVELOPMENT PROJECT

(UP TO 31st OCTOBER 1981)

1. INTRODUCTION.

The Government of the Socialist Republic of the Union of Burma made a request for the transfer of modern technology in the Pig and Poultry development to Government of Japan, on the basis of an investigation report made by the Livestock - Development and Marketing Corporation. The identification team, headed by Dr. Eguchi, visited Burma from 30th November to 10th December 1976. Through discussions with Burmese Officials concerned and surveys conducted by both sides, the Japanese Preliminary survey team headed by Dr. Hirofumi Kaitoku and the Japanese implementation survey team led by Mr. Yamashita, visited Burma from 19th January to 2nd February 1978 and from 6th April to 3rd May 1978 respectively, the Record of Discussions in connection with the Project, was signed on 12th April 1978 and the Project originated with a Co-operation period of four years.

In pursuance of the activities under the Record of Discussions, the two Japanese teams visited Burma for the purpose of reviewing the progress of the Technical Co-coperation Project and confering on the future plans for the Project with the Burmese Officials concerned.

Sr.No	Head of the Team	Arrival date	Departure date
1.	Dr. Hirofumi Kaitoku	26. 1.79	5. 2.79
2.	Dr. Masayoshi Hirose	29. 1.80	10. 2.80

These Teams observed the present activities of the Project, discussed problems involved and exchange views on the future plans with the Burmese Officials concerned including the Japanese Experts for the successful implementation of the Project

The progress of the Project from the very beginning up to 31st October is outlined in this report.

2. START OF THE PROJECT.

On the basis of the plans of J.I.C.A., Dr. Reiji Seki (Team Leader) and Mr. Keizo Egawa (Liaison Officer) were despatched to the Project site on 28th September 1978.

After the arrival of the Japanese Expert Team, discussions and meetings were held between the Japanese Experts and Officials of LDMC, on the matters relating to the reconsideration of proposal lay-out plan for Project site, construction of buildings, management system and donation of materials and equipments which were urgently required.

3. ASSIGNMENT OF JAPANESE EXPERTS.

Dr. R. Seki, the Team Leader, on completion of his assignment, left Burma on 25th October 1980 and Liaison Officer, Mr. K. Egawa, left on 26th April 1981. In place of them, Dr. M. Hirose, the Team Leader, arrived Burma on 9th October 1980 and Mr. T. Sawada, Liaison Officer, arrived on 9th April 1981.

For Pig production and breeding sections, Dr. Katsuyuki Nagata and for animal nutrition and Feed Mill sections, Dr. Noboru Kano served as experts from 20th December 1978 up to 27th March 1980. Dr. Isao Nozaki succeeded Dr. Nagata as Pig production and breeding expert on 25th March 1980 and Dr. Takaaki Ishita assumed the duty of Poultry management expert with effect from 12th April 1980.

Besides them, short-term Experts assigned were as follows: - Dr. Hidetaka Suganuma (Cage Assembly), Dr. Toshio Yusa (Chick Sexing), Dr. Takeshi Kayama (Incubator Installation), Dr. Masayoshi Kawai (Poultry Production), Mr. Masami Ito (Pig Production), Dr. Eizabur Furutani (Water Engineering), Dr. K. Watanabe (Water Purification Plant Installation) and Dr. Shigeru Minami (Animal Health).

The statement showing the position of these experts serving in Burma and the work undertaken by them is appended as Annexure I in this report.

4. COST OF JICA PROJECT.

Abstract of yearly expenditure of JICA Project is appended as annexure II and the detailed expenditure by description is appended as annexure III in this report.

5. PROVISION OF EQUIPMENT AND MATERIALS.

JICA provided the following equipment and materials from the Fiscal year 1978 - 79 up to 30th September 1981 (2nd Quarter).

Fiscal Year	Amount (in thousand)			Remarks
	Yen	Kyats Equivalent	US $ Equivalent	
1978 - 79	81,023.64	2835.84	405.12	The Details
1979 - 80	66,983.43	2344.37	334.91	appended as
1980 - 81	101,433.92	3550.19	507.17	annexure IV,
1981 - 82 up to Sept'81	2,956.02	103.46	14.78	V, VI & VII.
TOTAL =	252,397.01	8833.86	1261.98	

6. F. E. EXPENDITURE OF J.I.C.A PROJECT.

Against the total estimated cost of F. E. for the whole Project, the actual expenditure incurred for 1978 - 79, 1979 -80, 1980 - 81 and 1981 - 82 (up to the end of 2nd Quater) are shown in Annexure VIII A and B in this Report.

7. CONSTRUCTION SCHEDULE.

In pursuance of Annexure 'V' to the Record of Discussions, LDMC is responsible for the provision of all the lands and buildings required by the Project. The number of buildings constructed by L.D.M.C is outlined in this Report as Annexure IX.

Most of the Pig and Poultry sheds are nearly completed. Diagnostic laboratory, water purification plant and feed - mill

are in the position of final touch for interior works.

Only the Nutrition Laboratory, Broiler processing plant have not started yet.

8. ANIMAL PRODUCTION AND TECHNICAL GUIDANCE.

(a) Poultry Sector.

The following number of chicks were dispatched from the Japanese side to Burma on the dates mentioned against each,

	NO. of birds.	Arrival Date.
For the year 1978 - 79	1400 birds	30.11.78
	1300 birds	21.12.78
For the year 1979 - 80	200 birds	27. 7.79
	1200 birds	29.11.79
	600 birds	31. 1.80
For the year 1980 - 81	300 birds	26. 6.80
	313 birds	12.11.80
For the year 1981 - 82 (up to October 1981)	1200 birds	2. 7.81

The above number of chicks were multiplied at the 10th Mile Farm by the cage system introduced under the sponsorship of Dr. Suganuma. Performance test of broiler breeder has been conducted to select breed suitable for the climatical conditions of Burma. Mr. Suganuma contributed basic techniques for poultry raising. Mr. Yusa has been training selected trainees on chick - sexing techniques with considerably good results. Mr. Kayama has been devoted to installation of incubators and fulfilled his duty with success. Mr. Kawai has been engaged in techniques for - Poultry artificial insemination.

The production and distribution of baby chicks are as follows:-

	Production Nos.	Distribution Nos.
1979 - 80	136,338	131,515
1980 - 81	183,588	172,833
1981 - 82 (up to 31st October'81)	115,388	108,956
Total =	435,314	412,804

The closing Nos: as at 31.10.81 are as follows.

	Male	Female	Mix	Total
NORIN	1660	4191	461	6312
RIR	313	4573	31	4917
BROILER	514	646	1063	2223
WHITE LEGHORN	267	409	-	676
WHITE CORNISH + HUBBARD	87	16	69	172
	2841	9835	1624	14300

Actual performance during the fiscal year 1979 - 80, 1980 - 81, 1981 - 82 (up to 31st October) are appended as - Annexure (X, XI, XII)

(b) Pig Sector.

JICA despatched to LDMC, (65) heads of Pig consisting of (54) gilts and (11) boars. They arrived Rangoon by JAL on 17th January 1979. The second shipment of boars & gilts were arrived 18th November 1980 it consisted of (103) heads. This initial stock has been multiplied in the 10th Mile Farm. Mr. Ito has been engaged in providing technical guidance on pig production techniques, training in pig artificial insemination and fulfilled his duty with success. Veterinary coverage, viz; preventionof diseases, medical treatment and vaccination etc. was done under the guidance of Dr. Nagata from 22.12.78 to 27.3.80 and Dr. Nozaki from 25.3.80 up till now.

The production and distribution pigs are as follows:-

	Production No.	Distribution No.
1979 - 80	409	55
1980 - 81	953	573
1981 - 82 (up to 31st October'81)	1071	551
	2433	1179

The closing Nos: as at 31.10.81 are as follows.

	Male	Female	Total
BERK SHIRE	39	87	126
LANDRACE	144	157	301
DUROC	17	28	45
LARGE WHITE	53	70	123
CROSS BREED	124	129	253
TOTAL =	377	471	848

Actual performance by the Pig Sector is appended as Annexure (XIII, XIV, XV)

9. INCOME OF THE PROJECT.

An importation of Livestock (ie, chicken) was made on 30th November 1978. Production period relating to the Project started round about May 1979. Income of the Project for the fiscal year 1979-80, 1980-81 and 1981-82 (up to 31st October 1981) are as follows and the detailed statement is appended as Annexure (XVI, XVII, XVIII).

1979 - 80	Quantity	Value(Ks in thousand)
1. Sales of chick (Day old)	107,538	305.14
2. Sales of fowl	1,633	19.34
3. Sales of eggs	191,097	121.45
4. Sales of pigs	5	2.00
5. Sales of pork	50	36.45
6. Others		8.50
	TOTAL =	492.88

1980 - 81	Quantity	Value(Ks in thousand)
1. Sales of chicks (Day old)	38,172	394.87
2. Sales of fowl	1,964	119.09
3. Sales of eggs	441,556	300.29
4. Sales of pigs	13	198.76
5. Sales of pork	129	145.67
6. Others		16.14
	TOTAL =	1174.82

1981 - 82(up to October)	Quantity	Value(Ks in thousand)
1. Sales of chicks	106,151	244.48
2. Sales of fowl	7,916	125.07
3. Sales of eggs	680,934	244.33
4. Sales of pigs	454	244.20
5. Sales of pork	165	104.20
6. Others		7.39
	TOTAL =	969.67

TOTAL INCOME FOR 3 YEARS	Quantity	Value
1. Sales of chicks(Day old)	251,861	944.49
2. Sales of fowl	11,513	263.50
3. Sales of eggs	1,313,587	666.07
4. Sales of pigs	472	444.96
5. Sales of pork	344	286.32
6. Others		32.03
	TOTAL =	2637.37

10. ENGAGEMENT OF STAFFS IMPLEMENTATION OF THE PROJECT.

Implementation of the Project is managed by the Project Manager with (25) assistants of various grades. He has to manage the progress of the Project on the lines of management Committee as defined in the Record of Discussion as shown below.

BURMESE COUNTERPARTS AND OTHER PERSONNEL.

Category	Field
1. Project Manager	Administration and Management
2. Managers	Management for Project Management Unit
	Management for Pig Farm
	Management for Poultry Farm
	Management for Technical Training Centre
	Management for Feed Mill.

3. Counterparts — Pig Production and Breeding
Poultry Production and Breeding
Animal Nutrition
Animal Health (PIG)
Animal Health (POULTRY)

4. Other personnel.

11. TRAINING COURSES.

Apart from the management & breeding of pig and poultry, the Project also undertake Training courses for Transfer of Technology in Pig & Poultry Production. Two Basis Training Courses for Farm Managers, One from 10.11.80 to 1.1.81 and the second from 16.2.81 to 16.5.81 has been successfully completed. The third batch also of 12 weeks was started on 1.9.81 and it is still going on. It will be terminated on 31st November 1981. The total number of trainees are as shown below.

(1) Course No 1. (60) nos.
(2) Course No 2. (67) nos.
(3) Course No 3. (63) nos.

The Trainees are graduated in B.V.S, B.com, Bsc(Zoo), BSc(Agri) etc:, and some are diploma holders. The 4th course will commence in December 1981. [illegible]

Apart from the above basis training courses two specialized training courses for chick sexing were conducted. One in 17th January 1979 to 15th February 1979 and the second, in 17th January 1980 to 18th April 1980. Altogether ten selected trainees(7 men and 3 ladies) had attended the courses. Short-term Expert Mr. Yusa conducted the course and gave them intensive training. Three best trainees still remain on duty in our Project Farm and the other Trainees were sent to Two LDMC Poultry Farms.

Besides the basis training course, advance course in Pig & Poultry production and management, and then specialised courses on AI (Pig & Poultry), Sexing (Poultry) etc, will be carried out in the near future.

Having trained in this way, it will develop the LDMC staffs in modern Technology in Pig and Poultry breeding and administrative matters.

12. EXTENSION FOR FUTURE WORKS.

According to the Record of Discussion the Project will terminate on the 12th April 1981, but some necessary facilities such as Nutrition Laboratory, Broiler processing Plant and Trainees Dormitory etc: and the training of personnel for the Project have not yet started. The training & completion of construction works and installation of equipments and other facilities will need another twomore years. So the L.D.M.C. has requested the Agriculture & Forest ministry for permission to extend the Project for 2nd phase.

13. REINFORCEMENT OF EXPERT MEMBERS.

At present, there are five experts working on farm management & breeding as well as in training courses. Dr.Minami (Animal Health Expert) had arrived on 5.8.81 and has taking up his duty on diseases diagnostic laboratory and lecturing in the third basis training course.

Experts	Field	Name	Period.
Long Term	Team Leader	Dr. M. Hirose	7.10.80-11.11.82
	Pig Production	Dr. I. Nozaki	23. 3.80
	Poultry Production	Dr. T. Ishita	10. 4.80
	Animal Health	Dr. S. Minami	5. 8.81
	Liaison Official	Mr. T. Sawada	9. 4.81

As the present expert members are not sufficient for both farm side and training side, the LDMC of the Union of Burma has requested for two more short-term experts, One for Pig Sector and the other for Poultry sector from JICA side.

Beside the above two - short-term experts, the Project will need another (2) experts for Nutrition Laboratory and Broiler Processing Plant in near future to complete the Project work.

13. COUNTERPARTS AND FELLOWSHIPS.

There are at present (2) counterparts in Pig Sector under the supervision of Dr. I. Nozaki, (5) counterparts in Poultry Sector under the guidance of Dr. T. Ishita, and (1) counterpart in Animal Health Sector attached to Dr. S. Minami, respectively. The Team Leader, Dr. M. Hirose, is controlling and managing overall Project works since his arrival up till now.

Liaison Officer Mr. T. Sawada is also a very energetic person and cooperative with all Officials concerned.

Within the Project implementation period from 1978 to the present day 1981, (3) fellowships were sent to Japan for Pig & Poultry production and management of modern technology.

14. But, if extension for another two years is agreed upon, fellowships training programme should be revised after negotiation by the LDMC and JICA.

15. CONCLUSION.

The present Project will expire on 11th April, 1982. As the activities of the Project was satisfactory and as it was going at its full capacity of production, the LDMC desires to extend the Project period for another two years or else start phase II. By such an extension, the transfer of modern technology for the improvement of production efficiency in Pig and Poultry breeding would be greatly enhanced, and also the Burmese Livestock Breeders under LDMC would gain a well balanced and practical knowledge in Pig and Poultry management.

ANNEXURE I

LIST OF THE JAPANESE EXPERTS OF JICA PROJECT.

SR. NO.	NAME	DESIGNATION	ARRIVAL DATE	DEPARTURE DATE
1.	LONG TERM EXPERTS			
1.	Dr. Reiji Seki	Team Leader	30. 9.78	25.10,80
2.	Dr. Masayoshi Hirose	Team Leader	9.10.80	to date
3.	Mr. Keizo Egawa	Liaiaon Officer	30. 9.78	26. 4.81
4.	Mr. T. Sawada	Liaison Officer	9. 4.81	to date
5.	Dr. Katsuyuki Nagata	Pig production & Breeding Expert	22.12.78	27. 3.80
6.	Dr. Isao Nozaki	Pig production & Management Expert	25. 3.80	to date
7.	Dr. Noboru Kano	Animal Nutrition & Feed Mill	22.12.78	27. 3.80
8.	Dr. Takaaki Ishita	Poultry Management Expert	12. 4.80	to date
9.	Mr. S. Minami	Animal Health Expert	5. 8.81	to date

SR: NO.	NAME	DESIGNATION	
	SHORT TEAM EXPERTS		
1.	Mr. Hidetaka Suganuma	Cage Assembly	27.11.78 to 18.12.78 (22) days.
2.	Mr. Toshio Yusa	Chick Sexing	17. 1.79 to 15. 2.79 (30) days. 18. 1.80 to 17. 4.80 (3) months.
3.	Mr. Takeshi Kayama	Incubator Installation	25. 1.79 to 8. 2.79 (15) days.
4.	Mr. Masayoshi Kawai	Poultry Production	9. 8.79 to 29.11.79 (3) months.
5.	Mr. Masami Ito	Pig Production	9. 8.79 to 29.11.79 (3) months.
6.	Mr. Eizaburo Furutani	Water Engineering	17. 1.80 to 31. 1.80 (15) days.
7.	Mr. K. Watanabe	Water Purification Plant Installation	18. 6.81 to 22. 7.81 (1 month & 4 days.)

ANNEXURE = II

ABSTRACT OF YEARLY EXPENDITURE OF JICA PROJECT.

(IN THOUSAND)

PARTICULARS	L. D. M. C CONTRIBUTION			J. I. C. A CONTRIBUTION			TOTAL		
	US $	¥	K	US $	¥	K	US $	¥	K
TOTAL ESTIMATED COST.	3000.00	600,000.00	21,000.00	3000.00	600,000.00	21,000.00	6000.00	1200,000.00	42,000.00
FINANCIAL YEAR 1978 - 79	921.66	184,332.00	6,451.64	524.63	104,925.97	3,672.41	1446.29	289,257.97	10,124.05
1979 - 80	316.14	63,288.00	2,212.95	610.94	122,189.15	4,276.58	927.08	185,477.15	6,489.53
1980 - 81	168.43	33,686.00	1,179.04	689.26	137,852.09	4,824.82	857.69	171,538.09	6,003.86
1981 - 82 (up to 2nd yr.)	56.76	11,352.00	397.34	127.22	25,443.52	890.52	183.98	36,795.52	1,287.86
TOTAL EXPENDITURE =	1462.99	292,658.00	10,240.97	1952.05	390,410.73	13,664.33	3415.04	683,068.73	23,905.30
ADD:- FIXED ASSETS ON THE BEGINING OF THE PROJECT=	930.98	186,196.00	6,516.86	-	-	-	930.98	186,196.00	6,516.86
GRAND TOTAL =	2393.97	478,854.00	16,757.83	1952.05	390,410.73	13,664.33	4346.02	869,264.73	30,422.16
PERCENTAGE ON ESTIMATION =		79.8 %			65.07 %			72.4 %	

PIG & POULTRY DEVELOPMENT PROJECT CAPITAL EXPENDITURE FROM 1978 - 79 TO 1981 - 82 (up to 2nd Quarter)

ANNEXURE III

(KY.TS IN THOUS.ND)

SR: NO.	DESCRIPTION	TOT.L ESTIM.TED COST			..CTU.L EXPENDITURE												TOT.L EXPENDITURE			B.L.NCE		
					1978 - 79			1979 - 80			1980 - 81			1981-82 (2nd QU.RTER)								
		FE	LOC.L	TOTAL	FE	LOC.L	TOTAL	FE	LOCAL	TOTAL	FE	LOC.L	TOT.L	FE	LOC.L	TOT.L	FE	LOC.L	TOT.L	FE	LOC.L	TOT.L
1.	SITE PREP.R.TION		1438.92	1438.92		161.63	161.63		6.01	6.01								167.64	167.64		1271.28	1271.28
2.	RO.D & BRIDGES		840.00	840.00		447.87	447.87		3.68	3.68		28.28	28.28		31.61	31.61		511.44	511.44		328.56	328.56
3.	ELECTRIC.L INST.LL.TION		1470.00	1470.00		32.71	32.71		19.58	19.58		42.76	42.76		17.47	17.47		112.52	112.52		1357.48	1357.48
4.	W.TER & S.N.T.RY INST.LL.TION		1050.00	1050.00		-	-		34.23	34.23		10.75	10.75		2.78	2.78		47.76	47.76		1002.24	1002.24
5.	BUILDING CONSTRUCTION		11146.59	11146.59		5728.10	5728.10		1921.09	1921.09		1179.04	1179.04		309.99	309.99		9138.22	9138.22		2008.37	2008.37
6.	PURCH.SE OF MACHINERIES	7246.96	1195.95	8442.91	2043.93	14.75	2058.68	2077.32	55.87	2133.19	1855.42	56.34	1911.76	6.02	17.40	23.42	5982.69	144.36	6127.05	1264.27	1051.59	2315.86
7.	MACHINERY INST.LL.TION	8400.00	1277.85	9677.85	836.57	46.95	883.52	1932.21	67.64	1999.85	1274.63	30.00	1304.63	787.06	17.26	804.32	4830.47	161.85	4992.32	3569.53	1116.00	4685.53
8.	TR.NSPORT.TION VEHICLES		585.41	585.41		3.12	3.12		93.09	93.09		23.64	23.64					119.85	119.85		465.56	465.56
9.	PARKING & G.TE		420.00	420.00		15.00	15.00		-	-								15.00	15.00		405.00	405.00
10.	PURCH.SE OF MEDICINE	2635.36	928.78	3564.14	13.86	.48	14.34	179.48	6.56	186.04	597.45	4.89	602.34	3.64	.19	3.83	794.43	12.12	806.55	1840.93	916.66	2757.59
11.	PURCH.SE OF LIVESTOCK	2717.68	346.50	3064.18	778.05	.72	778.77	87.57	.65	88.22	1097.32	4.68	1102.00	93.80	.64	94.44	2056.74	6.69	2063.43	660.94	339.81	1000.75
12.	UN.LLOC.TED		300.00	300.00		.31	.31		4.55	4.55								4.86	4.86		295.14	295.14
	T.. =	21000.00	21000.00	42000.00	3672.41	6451.64	10124.05	4276.58	2212.95	6489.[illegible]	4824.82	1380.38	6205.20	890.52	397.34	1287.86	13664.33	10442.31	24106.64	7335.67	10557.69	17893.36

ANNEXURE = IV

JICA CONTRIBUTION MATERIALS AND EQUIPMENT TO PIG & POULTRY DEVELOPMENT PROJECT IN BURMA.

1978 / 79 FISCAL YEAR.

SR: NO.	CONVEYANCE	ARRIVAL DATE RANGOON	B/L NO.	MAIN EQUIPMENT AND MATERIALS	TOTAL ITEM	AMOUNT C.I. VALUE YEN.
1.	BY SEA HAMPTON	19. 9.78	20-001	STATION WAGON SUBARU 1600	1	1,195,958
2.	BY SEA MENAM	23.10.78	YART-0015	EQUIPMENT FOR PIG & POULTRY PRODUCTION	14	7,742,268
3.	BY AIR JL 171/29 TG - 305/30	30.11.78	217-3754	DAY OLD CHICK 1400 Nos.	1	497,794
4.	BY AIR TG - 601/1 TG - 305/2	2.12.78	217-07003743	ANTIGEN, VACCINE	17	720,063
5.	BY AIR JL 717/20 TG - 305/21	21.12.78	131-53766403	DAY OLD CHICK 1300 Nos;	1	704,885
6.	BY SEA MIIKE MARU	10. 1.79	022-61740	INCUBATOR(6) OTHERS SPAREPARTS FOR SUBARU.	-	38,219,250
7.	BY SEA MIIK MARU	10. 1.79	022-41771	TRACTOR (1), FEED GRINDER (1)	2	2,200,575
8.	BY AIR JL/477 CHARTERED	22. 1.79	131-54640224	BREEDING PIG(GILT 54, BOAR II) SWINE ERYSIPELAS VACCINE.	3	21,422,819
9.	BY AIR JL / 717 TC - 305	8. 3.79	131-54810431	MEDICINE, VACCINE.	44	2,112,362
10.	BY SEA HAMPTON	25. 4.79	20-056	EQUIPMENT (22), MEDICINE (20)	44	6,207,663
				G.A.D GRAND TOTAL =	¥	81,023,639
				EXCHANGE RATE 1 US $ = ¥ 200 US =	$	405,118
				1 US $ = K 7 =	K	2,835,826

ANNEXURE V

JICA CONTRIBUTION MATERIALS AND EQUIPMENT TO PIG & POULTRY DEVELOPMENT PROJECT IN BURMA.

1979 / 80 FISCAL YEAR.

SR. NO.	CONVEYANCE	ARRIVAL DATE RANGOON	B/L NO.	MAIN EQUIPMENT & MATERIALS	TOTAL ITEM.	AMOUNT YEN ¥	
1.	AIR CRAFT	28. 6.79	131-55242121	FOWL POX VACCINE, ETC	3	325,325	C. I. F
2.	BOSTON MARU	20. 7.79	20-005	CAGE FOR EGG COLLECTOR & etc:	15	8,166,371	"
3.	AIR CRAFT	14. 7.79	131-53767711	CHICKS	2	96,160	"
4.	HTANTAWYWA	14. 7.79	116-R	PUMPS, PIPES, AND PIPE FITTINGS	-	2,212,187	F. O. B
5.	AIR CRAFT	18. 8.79	-	WATER GLASS, etc (AI Accissories)	-	70,530	" NOT DEDUCTION IN BUDGET EXPENSE" OFFER FROM DR. KAWAI
6.	KINMASON MARU	18, 8.79	YHRG-0004	MEDICINE & SHUTTER	4	4,830,777	C. I. F
7.	HTANTAWYWA	18, 9.79	96 - R	' STOCK ' PUMP	--	364,445	F. O. B
8.	HTANTAWYWA	18. 9.79	87 - R	TRI PHOSPHATE CALCIUM	-	555,625	"
9.	AIR CRAFT	4.10.79	217-06523694	INFECTIOUS CORYZA VACCINE, etc	3	298,560	C. I. F
10.	HTANTAWYWA	14.11.79	148 - R	COPPER WIRE	-	1,213,500	
11.	AIR CRAFT	20.12.79	217-06523996	INFECTIOUS CORYZA	-	270,250	" NOT DEDUCTION IN BUDGET EXPENSE"
12.	AIR CRAFT	29.11.79	217-06523823	CHICKS	15	1,415,022	C. I. F

ANNEXURE V

SR. NO.	CONVEYANCE	ARRIVAL DATE RANGOON	B/L NO.	MAIN EQUIPMENT & MATERIALS	TOTAL ITEM.	AMOUNT YEN ¥	
13.	BY SEA BRILLIANCE	29.12.79	YHRG-0019	INCUBATOR, FEED MIXER, etc.	35	25,355,984	
14.	AIR CRAFT	31. 1.80	217-07003797	CHICKS	6	671,318	C. I. F
15.	SEA - PLAN	19. 1.80	148 - R	COLD STORAGE	-	2,674,670	F. O. B
16.	SEA MITANTAWYWA	28. 2.80	33-- R	NORTHEO HOG EQUIPMENT	6	2,585,145	"
17.	SEA - PLAN	27. 3.80	126 - R	MOWING MACHINE, VACCUM CLEANER, REFRIGERATOR, WIRE MESH	-	1,058,619	"
18.	SEA - PLAN	14. 5.80	28 - R	I UNIT KOMATSU D31H-16 ANGEL POWER TILT DOZER C/W BACBOE AND SPAREPARTS.	6	8,696,612	"
19.	AIR CRAFT	19.12.79	217-06523996	VACCINE	2	319,345	C. I. F
20.	AIR CRAFT		217-06523996	FARROWING PEN, CATCHING HOOK (L) CATCHING HOOK (3), etc.	-	1,387,099	"
21.	SEA-SUMIDA MARU	16. 5.80	20-16	MATERIAL (7) CASES BROILER PROCESSING MACHINE.	8	4,756,667	"
						67,324,221	
				EXCHANGE RATE = I US $ = ¥ 200		* - 340,780	
				I US $ = K 7		¥ 66,983,431	
						$ 334,917	
						K 2,344,419	

ANNEXURE VI

JICA CONTRIBUTION MATERIALS AND EQUIPMENT TO PIG & POULTRY DEVELOPMENT PROJECT IN BURMA

1980 / 81 FISCAL YEAR.

SR: NO.	CONVEYANCE	ARRIVAL DATE RANGOON	B/L NO.	MAIN EQUIPMENT & MATERIALS	TOTAL ITEM	AMOUNT VALUE YEN	C.I.F RANGOON
1.	AIR CRAFT	24. 4.80	217-07961590	STRONG NEO MINO PHARYENE	8- " cases	245,530	399,39[illegible]
2.	"	"	217-07961601	OVER HEAD PROJECTOR	9- "	1,059,570	1,391,129
3.	"	26. 6.80	217-07003824	CHICKS, (4) CASES	4- "	353,109	353,109
4.	"	"	217-07961940	VET MEDICINE (FOWL POX - VACCINE)	495 pcs	1,312,090	1,312,090
5.	MIIKE MARU	19. 7.80	20-027	MEDICINE	2-cases	1,441,310	1,441,310
6.	AIR CRAFT	11. 9.80	217-24346091	PUEROGEN AND etc. 9.	1-carton	120,500	157,325
7.	"	27.10.80	217-14346765	COLOUR SLIDE FILM, etc	1- "	96,822	96,822
8.	"	13.11.80	217-14346846	LIVE CHICKS	4- "	708,908	708,908
9.	"	18.11.80	131-57902423	VACCINE , etc	329-cases	13,628,344	13,628,344
10.	"	18.11.80	131-57902423	BOAR & GILT	29- "	30,289,726	30,289,726
11.	WAKAMATSU MARU	18.10.80	20-010	SPECIFICATION FOR WATER TREATMENT PLANT & CHEMICAL	11- "	13,185,401	13,185,401
12.	"	"	20-002	CONTAINER BASKET etc.	6 - "	5,286,639	5,286,639
13.	AIR CRAFT	24.12.80	217@14897116	FOOT & MOUTH DISEASE VACCINE 750 DOZENS	30-bottle	US $ 338	73,346
14.	PHARSHWEGYAW	30. 1.81	23 - R	SUB STATION EQUIPMENT	25-gyas	US $ 170,240	17,925,530 (FO-
15.	AIR CRAFT	10.3. 81	217-15113873	FRAME (SCREEN)	3-pcs	175,835	175,835
16.	"	12. 3.81	217-15113884	FOWL POX VACCINE	5-cases	458,124	458,124
17.	WAKAMATSU MARU	29. 4.81	20-007	HOT WATER BOTTLE & etc.	10- "	14,550,883	14,550,883
						TOTAL =	101,433,918
				EXCHANGE RATE.= I US $ = ¥ 200		U.S $ =	507,169
				I US = K 7		K =	3,550,190

JICA CONTRIBUTION MATERIALS AND EQUIPMENT TO PIG & POULTRY DEVELOPMENT PROJECT IN BURMA. ANNEXURE VII

1981 APRIL TO SEPTEMBER.

SR: NO.	CONVEYANCE	ARRIVAL DATE RANGOON	B/L NO.	EQUIPMENT AND MATERIALS	TOTAL ITEM.	AMOUNT C.I.F VALUE YEN.
1.	BY AIR TG -305	28. 5.81	217-1567-2720	JAPANESE ENCEPHALITIS LIVE VIRUS VACCINE	(1) cases	¥ 103,919
2.	BY AIR TG -305	25. 6.81	FAVOUR PARCEL FROM MR.WATANABE	TOOLS FOR PURIFICATION	(1) pkg	-
3.	BY AIR TG =305	29. 8.81 21. 8.81	217-1635-8016	CONCENTRATED TONER & etc	(2) cartons	¥ 172,010
4.	BY AIR TG -305	2. 7.81	217-1635-8193	LIVE CHICKS (1200) P.C.S	(15) cases	¥ 2,680,095
					TOTAL =	¥ 2,956,024 $ 14,780 K 103,461

EXCHANGE RATE

I US $ = ¥ 200

I US $ = K 7

ANNEXURE VIII a

DETAILED STATEMENT OF F.E. EXPENDITURE OF JICA PROJECT

I US $ = ¥ 200. I US $ = K. 7

DESCRIPTION	1978 - 79			1979 - 80			1980 - 81			1981 - 82			TOTAL		
	¥	US $	Ks	¥	US $	Ks	¥	US $	Ks	¥	US $	Ks	¥	US $	Ks
Materials	58398.18	291.99	2043.93	59353.03	296.76	2077.32	53011.53	265.06	1855.42	172.01	.86	6.02	170934.75	854.67	5982.69
Medicine	396.36	1.98	13.86	5128.18	25.64	179.48	17070.44	85.35	597.45	103.92	.52	3.64	22698.90	113.49	794.43
Livestock	22229.10	111.15	778.05	2502.22	12.51	87.57	31351.95	156.76	1097.32	2680.09	13.40	93.80	58763.36	293.82	2056.74
Mat; Total	81023.64	405.12	2835.84	66983.43	334.91	2344.37	101433.92	507.17	3550.19	2956.02	14.78	103.46	252397.01	1261.98	8833.86
Consultants	23902.33	119.51	836.57	55205.72	276.03	1932.21	36418.17	182.09	1274.63	22487.50	112.44	787.06	138013.72	690.07	4830.47
Fellowships	-	N.A	-	-	N.A		-	N.A	-	-	N.A	-	-	N.A	-
Consultancy Total	23902.33	119.51	-	55205.72	276.03		36418.17	182.09	1274.63	22487.50	112.44	787.06	138013.72	690.07	4830.47
Grand Total	104925.97	524.63	3672.41	122189.15	610.94	4276.58	137852.09	689.26	4824.82	25443.52	127.22	890.52	390410.73	1952.05	13664.33

NOTE NA = NOT AVAILABLE

ANNEXURE VIII b

SUMMARY STATEMENT OF F.E. EXPENDITURE.

I US $ = ¥ 200 I US $ = K 7

NO.	DESCRIPTION	TOTAL ESTIMATE			1978 - 79 to 1981 - 82(Sept:)			BALANCE		
		¥	US $	Ks	¥	US $	Ks	¥	US $	Ks
1.	Materials + Equipment	207056.00	1035.28	7246.96	170934.75	854.67	5982.69	36121.25	180.61	1264.27
2.	Medicine + Feed Additives	75269.00	376.48	2635.36	22698.90	113.49	794.43	52597.10	262.99	1840.93
3.	Livestock	77648.00	388.24	2717.68	58763.36	293.82	2056.74	18884.64	94.42	660.94
4.	Material + Eqpt Total	360000.00	1800.00	12600.00	252397.01	1261.98	8833.86	107602.99	538.02	3766.14
4.	Consultants	139200.00	696.00	4872.00	138013.72	690.07	4830.47	1186.28	5.93	41.53
5.	Fellowships	100800.00	504.00	3528.00	-	-	-	100800.00	504.00	3528.00
	Consultancy Total	240000.00	1200.00	8400.00	138013.72	690.07	4830.47	101986.28	509.93	3569.53
	Grand Total -	600000.00	3000.00	21000.00	390410.73	1952.05	13664.33	209589.27	1047.95	7335.67

ANNEXURE X

STATEMENT SHOWING PRODUCTION, MORTALITY, CULLING AND DISTRIBUTION OF POULTRY FOR THE PERIOD

1.4.79 to 31.3.80.

MONTH	OPENING NUMBER	IMPORT NO	PRODUCTION NO	DEATH	CULL	DISTRIBUTION	CLOSING NUMBER.
1979 - 80							
APRIL	2488	-	-	37	22	16	2413
MAY	2413	-	811	320	17	614	2273
JUNE	2273	-	-	65	46	22	1140
JULY	1140	200	7496	62	35	6707	3032
AUGUST	3032	-	16760	56	17	15678	4041
SEPTEMBER	4041	-	16926	45	-	16627	4295
OCTOBER	4295	-	13485	54	-	12862	4864
NOVEMBER	4864	1228	18527	72	-	16695	7852
DECEMBER	7852	-	16463	157	55	16908	7195
JANUARY	7195	-	18757	40	63	18775	7074
FEBRUARY	7074	611	13694	174	115	13448	7745
MARCH	7745	-	13419	693	75	13163	7233
TOTAL =	-	2039	136338	1772	345	131515	

ANNEXURE XI

STATEMENT SHOWING PRODUCTION, MORTALITY, CULLING AND DISTRIBUTION OF POULTRY FOR THE PERIOD

1.4.80 to 31.3.81.

MONTH	OPENING NUMBER	IMPORT NO	PRODUCTION NO	DEATH	CULL	DISTRIBUTION	CLOSING NUMBER
1980 - 81							
APRIL	7233	-	9623	510	47	8790	7509
MAY	7509	-	7448	309	4	7995	6649
JUNE	6649	316	5938	165	9	5188	7541
JULY	7541	-	9917	283	23	9549	7603
AUGUST	7603	-	9628	263	49	8614	8305
SEPTEMBER	8305	-	12752	214	14	12112	8717
OCTOBER	8717	-	17412	391	1	16024	9713
NOVEMBER	9713	313	17197	363	2	17641	9217
DECEMBER	9217	-	23877	484	13	23174	9423
JANUARY	9423	-	30539	519	6	29062	10375
FEBRUARY	10375	-	17691	740	22	14303	13001
MARCH	13001	-	21566	1840	-	19781	12946
TOTAL =		629	183588	6081	190	172233	

ANNEXURE XII

STATEMENT SHOWING PRODUCTION, MORTALITY, CULLING, AND DISTRIBUTION OF POULTRY

FOR THE PERIOD 1.4.81 to 31.10.81.

MONTH	OPENING NUMBER	IMPORT NO.	PRODUCTION NO.	DEATH	CULL	DISTRIBUTION	CLOSING NUMBER.
1981 - 82							
APRIL	12946	-	15618	1893	6	13188	13477
MAY	13477	-	7339	693	25	5121	14977
JUNE	14977	-	6713	663	2	7687	13338
JULY	13338	1378	17991	446	18	17692	14551
AUGUST	14551	-	16360	691	23	17524	12673
SEPTEMBER	12673	-	27655	887	63	23730	15648
OCTOBER	15648	-	23712	899	61	24014	14386
TOTAL		1378	115388	6172	198	108950	

ANNEXURE XIII

STATEMENT SHOWING PRODUCTION, MORTALITY, CULLING AND DISTRIBUTION OF PIGS.

FOR THE PERIOD 1.4.79 to 31.3.80.

MONTH	OPENING NUMBER	IMPORT NO.	PRODUCTION NO.	DEATH	CULL	DISTRIBUTION	CLOSING NUMBER.
1979 - 80							
APRIL	65		-	-	-		65
MAY	65		-	3			62
JUNE	62		23	8			77
JULY	77		7	2			82
AUGUST	82		48	4			126
SEPTEMBER	126		68	9			185
OCTOBER	185		53	5			233
NOVEMBER	233		51	6			278
DECEMBER	278		41	3			316
JANUARY	316		45	14		1	346
FEBRUARY	346		43	12		12	365
MARCH	365		30	3		42	350
TOTAL =			409	69		55	

ANNEXURE XIV

STATEMENT SHOWING PRODUCTION, MORTALITY, CULLING AND DISTRIBUTION OF PIGS

FOR THE PERIOD 1.4.80 to 31.3.81.

MONTH	OPENING NUMBER	IMPORT NO.	PRODUCTION NO.	DEATH	CULL	DISTRIBUTION	CLOSING NUMBER.
1980 - 81							
APRIL	350		45	6		15	374
MAY	374		86	17		29	414
JUNE	414		70	9		37	438
JULY	438		99	19		23	495
AUGUST	495		73	16		28	524
SEPTEMBER	524		76	21		24	555
OCTOBER	555		63	18		19	581
NOVEMBER	581	103	106	27		22	741
DECEMBER	741	[illegible]	65	12		27	767
JANUARY	767		127	13		152	729
FEBRUARY	729		82	22		15	774
MARCH	774		61	25		182	628
TOTAL =		103	953	205		573	

ANNEXURE XV

STATEMENT SHOWING PRODUCTION, MORTALITY, CULLING AND DISTRIBUTION OF PIGS.

FOR THE PERIOD 1.4.81 to 31.10.81.

MONTH	OPENING NUMBER	IMPORT NO.	PRODUCTION NO.	DEATH	CULL	DISTRIBUTION	CLOSING NUMBER.
1981 - 82							
APRIL	628		199	23		69	735
MAY	735		252	56		119	812
JUNE	812		187	68		75	856
JULY	856		162	70		39	909
AUGUST	909		113	42		95	885
SEPTEMBER	885		82	28		41	898
OCTOBER	898		76	13		113	848
TOTAL =			1071	300		551	

ANNEXURE XVI

PIG AND POULTRY DEVELOPMENT PROJECT

INCOME FOR THE YEAR 1979 - 80.

SR: NO.	MONTH	EGG SALE		SALE OF CHICKEN		SALE OF FOWL		PIG SALE		OTHER INCOME.		TOTAL	
		K	P	K	P	K	P	K	P	K	P	K	P
1.	APRIL	2524	20	2767	00	370	35	-	-	36	-	5697	55
2.	MAY	6931	75	1587	50	298	80	-	-	-	-	8818	05
3.	JUNE	7945	25	-	-	294	10	-	-	-	-	8239	35
4.	JULY	9194	10	14917	50	535	35	-	-	500	-	25146	95
5.	AUGUST	9622	90	31771	50	274	00	-	-	2269	60	43938	00
6.	SEPTEMBER	9456	60	41477	00	228	80	-	-	-	-	51162	40
7.	OCTOBER	9390	85	29460	50	3524	81	-	-	500	-	42876	16
8.	NOVEMBER	7719	20	39046	00	624	05	-	-	1140	-	48529	25
9.	DECEMBER	7433	15	40543	50	3968	40	-	-	26	-	51971	05
10.	JANUARY	14279	30	36117	50	5542	60	-	-	2527	½	58466	40
11.	FEBRUARY	17248	55	29520	00	422	50	8154	40	147	-	55492	45
12.	MARCH	19704	85	37933	50	3257	95	28300	95	1356	-	90553	25
	TOTAL =	121450	70	305141	50	19341	71	36455	35	8501	60	490890	86

ANNEXURE XVII

PIG AND POULTRY DEVELOPMENT PROJECT

INCOME FOR THE YEAR 1980 - 81

SR: NO.	MONTH	EGG SALE		SALE OF CHICKEN		SALE OF FOEL		PIG SALE		OTHER INCOME		TOTAL	
		K	P	K	P	K	P	K	P	K	P	K	P
1.	APRIL	26969	20	18892	50	8290	70	11380	20	1081	00	66613	60
2.	MAY	29689	05	16197	50	8064	60	19029	00	35	00	73015	15
3.	JUNE	27477	30	9113	50	2862	50	26359	80	410	00	66223	10
4.	JULY	33294	40	25516	50	8749	00	15557	80	738	00	83855	70
5.	AUGUST	29498	70	19283	00	3220	00	19559	80	-	-	71561	50
6.	SEPTEMBER	28466	00	28387	00	5090	30	18953	40	738	80	81635	50
7.	OCTOBER	20851	60	38093	00	1449	61	14591	90	3884	00	78870	11
8.	NOVEMBER	15545	00	40133	50	15158	20	3138	00	267	00	74261	70
9.	DECEMBER	12974	45	57891	50	5061	40	17867	10	1835	00	95629	45
10.	JANUARY	15128	00	60678	50	21288	55	74760	00	1676	00	171531	05
11.	FEBRUARY	19738	39	35770	50	8965	95	6200	00	4939	00	75613	84
12.	MARCH	42662	50	44914	30	30897	10	117030	80	511	50	236016	20
	TOTAL	300294	59	394871	30	119097	91	344427	80	16135	30	1174826	90

ANNEXURE XVIII

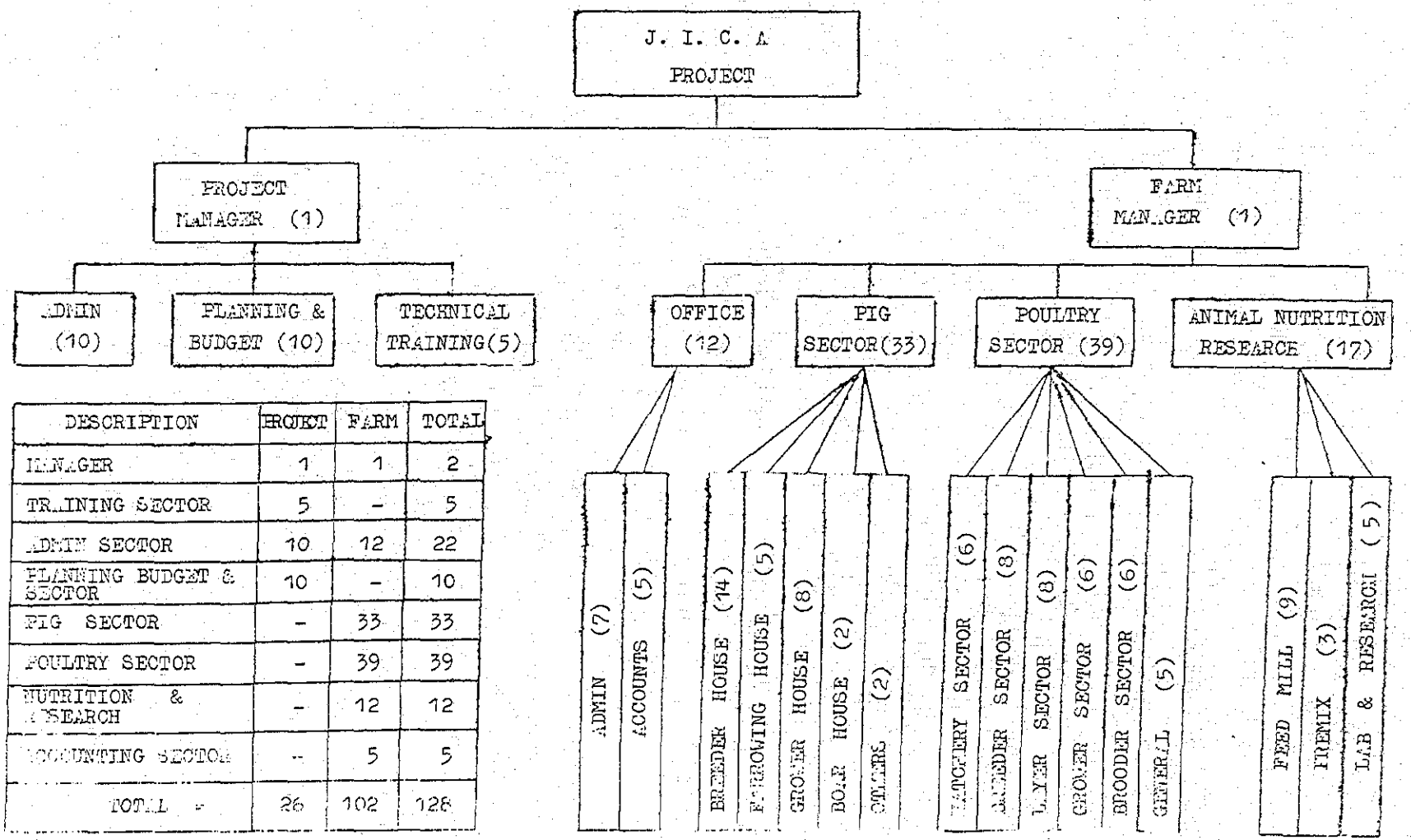
PIG AND POULTRY DEVELOPMENT PROJECT

INCOME FOR THE YEAR 1981 - 82 (UP TO 31st OCTOBER 1981)

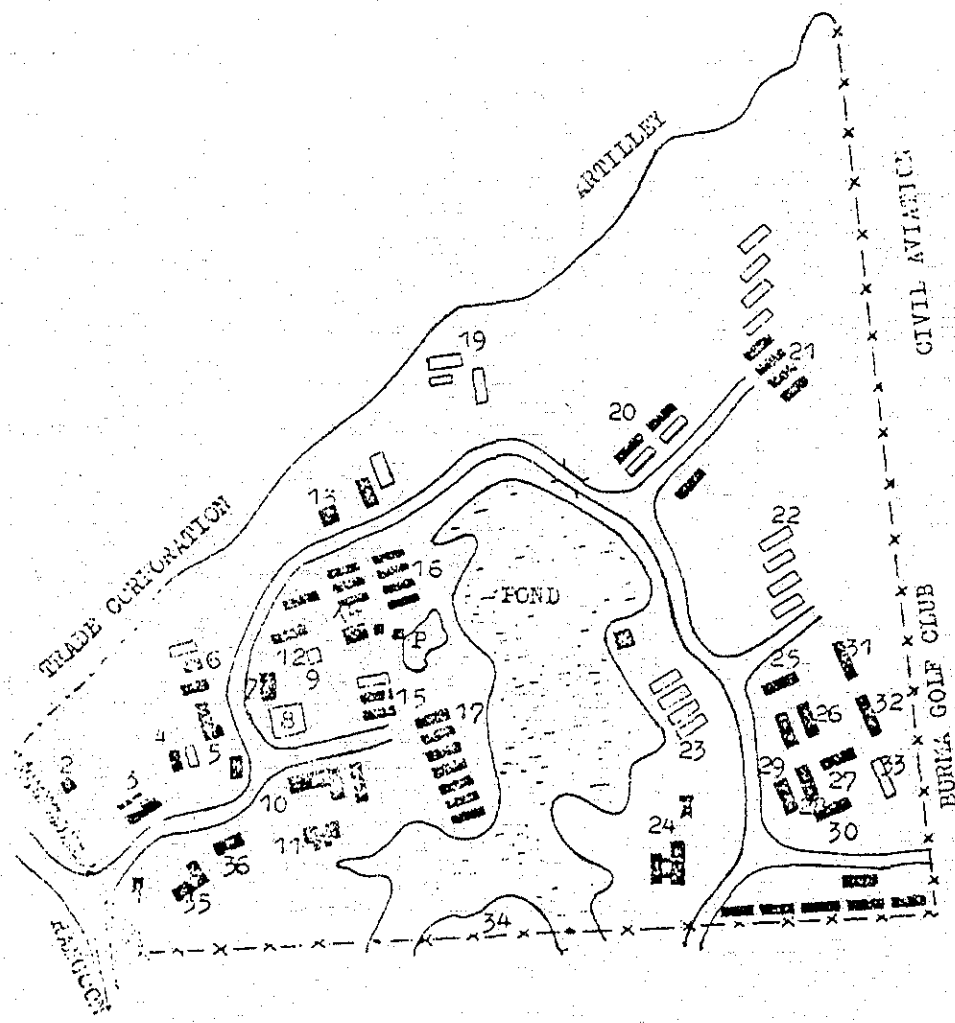
SR: NO.	MONTH	EGG SALE		SALE OF CHICKEN		SALE OF FOWL		PIG SALE		OTHER INCOME		TOTAL	
		K	P	K	P	K	P	K	P	K	P	K	P
	1981 - 82												
1.	APRIL	29854	90	28513	30	4372	50	54887	50	2655	85	120284	05
2.	MAY	24956	95	11459	00	4794	75	1600	00	188	60	42999	30
3.	JUNE	27284	30	15593	50	8834	12	92836	90	845	00	145393	82
4.	JULY	31780	85	37790	00	43867	30	44569	40	1077	80	159085	35
5.	AUGUST	29046	95	41762	50	19537	94	47952	20	30	00	138329	59
6.	SEPTEMBER	47409	50	39474	00	21821	19	44010	40	397	00	153112	09
7.	OCTOBER	54001	45	69896	15	21839	25	62539	30	2192	50	210468	65
	TOTAL =	244334	90	244488	45	125067	05	348395	70	7386	75	969672	85

ANNEXURE XIX

ORGANIZATION CHART OF PIG AND POULTRY DEVELOPMENT PROJECT.



DESCRIPTION	PROJECT	FARM	TOTAL
MANAGER	1	1	2
TRAINING SECTOR	5	-	5
ADMIN SECTOR	10	12	22
PLANNING BUDGET & SECTOR	10	-	10
PIG SECTOR	-	33	33
POULTRY SECTOR	-	39	39
NUTRITION & RESEARCH	-	12	12
ACCOUNTING SECTOR	-	5	5
TOTAL	26	102	128



1. Main Gate
2. Power House
3. Hatchery
4. Cold Storage
5. Store House
6. Cage Brooder House
7. Diagnostic Lab
8. Nutritional Lab
9. Broiler Process Plant
10. Main Office
11. JICA Office
12. Cage Grower House 1 - 3
13. Feces Storage
14. Water Purification Unit
15. Cage Grower House 4 - 5
16. Cage Layer House 1- 3
17. Cage Layer House 4 - 10
18. Broiler Experimental House
19. Trainees' Dormitory
20. Floor Brooding, Growing House
21. Floor Breeder House (Layer) 1 - 8
22. Floor Breeder House (Broiler) 1-4
23. Broiler Container House 1 - 4
24. Feed Mill, Feed Storage
25. Boar House
26. Dry Sow House 1 - 2
27. Farrowing House
28. Grower House
29. Finisher House
30. Breeder House.
31. Dry Sow House
32. Breeder House
33. Grower House
34. Residence House Area
35. Security
36. Sales counter.

Planning Stage.

Finished construction.

参考資料－4　ビルマ政府における二国間プロジェクト開始までの流れ

PRELIMINARY

1. Instruction by Ministry to undertake a Project by Aid or Grant.
2. Proposal to Financing Agencies.
3. Despatch of Identification Team by Financing Agency.
4. Appraisal by Identification Team jointly with the Implementation Department.
5. Agreement by both sides.

IMPLEMENTATION

PART (A) : Policy Matters

1. Submission of Results of discussion to the Ministry.
2. To obtain the concurrance of F.E.R.D.
3. Financial and Economical Evaluation of the Project by the Implementing Department.
4. To get the Approval of the Cabinet through Ministry concerned.
5. To sign the Agreement or Record of Discussion.

PART (B) : Planning and Budget

The works to be undertaken are to be laid down and necessary Budget to be prepared before six months of the commencement of the financial year (1st April).

The items included in the Budget are scrutinized by the Government Authorities.

(a) Construction Works

Construction works are scrutinized by the Construction Minister as to whether these ought to be carried out by their Ministry or by the Department itself.
The Minister gives decision.

(b) Procurement of Plant, Machineries and Equipments (Local and Import)

Equipment Control Committee formed under Ministry of Finance and Revenue undertake this work.

Objectives of the Committee

1) The materials that can be purchased locally cannot be purchased from abroad so that the saving can be utilized on more beneficial matters.
2) The materials proposed to be purchased is within the framework of R/D.

(c) Other Items

1) Consultants:
   Scrutinized by F.E.R.D. and Ministry
2) Others:
   Scrutinized by Planning Department formed under Ministry of Finance and Revenue.

Submitted figures are substituted by approved figures.

Ministry of Finance and Revenue consolidated for the whole country and submit it to the Parliament for sanction by an Act of Parliament which is known as "Annual Budget Act".

PART (C) : Implementation

(a) Construction Work

If the Minister agrees to do by departmentally, the construction work was done under the supervision of the Construction Committee formed by the Managing Director.

The Committee is responsible for:-

1) Preparation of Estimates.
2) Drawings of the Building.
3) Distribution of Work amongst the Heads of Labourers.
4) To watch the Physical Progress of the Construction.

(b) Procurement of Plant, Machineries and Equipment

Local:

1) If possible, we purchase from Government Department.
2) If not available, we can purchase from Co-operative Societies.
3) Lastly from Public Produces on the strength of no available certificate furnished by (1).

It was done either on tender or quotation basis and purchased from the lowest bidder.

Foreign:

1) Applied for F.E. utilization from Ministry.
2) I.C.B. if necessary.
3) Selection of Supplier after approval by
   a) Specification Committee formed under Ministry of Agriculture and Forests.
   b) Approved by Ministry.

4) To proceed on further commercial practices (Contract, L.C., Bank Guarantee, etc.)

(c) Other Items

1) Consultants:

a) Proposals made by L.D.M.C. in consultation with the Team Leader.

b) Get the approval of Ministry and F.E.R.D.

c) Request to J.I.C.A.

d) Despatch.

2) Others:

To observe the formalities laid down by the Government.

参考資料－5　供与機材輸送にかかるPacking & Marking Instructions

PACKING & MARKING INSTRUCTIONS

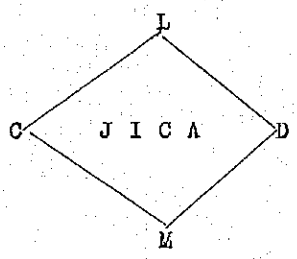
PACKING INSTRUCTIONS.

1. The Consignment of each shipping package shall be itemised on a detailed Packing List showing gross and net weight and extreme outside dimensions (Length, Width and Height) of each piece of container. Metric measures shall be used. One copy of the detailed Packing List shall be enclosed in each package to be shipped. On barrels, bags, drums or kegs, where it is not feasible to include the packing list inside the container, all pertinent information is to be stenciled on the outside of each barrel, bag, drum or keg, and will constitute a packing list. Packing materials shall be non-returnable.

2. The stores shall be packed in sufficiently durable packing material to withstand against handling at both ends.

Marking on the Packages:-

3. Each package is to be marked as follows:-



RANGOON

The suitable size of marking in green colour should be in the middle of one side. Number and date and Country of Origin to be written under Marking.

4. In addition, each package shall be marked to show:-

(a) Description and Quatity.

(b) Dimension.

(c) Invoice No.- .....

5. The package number i.e the quantity of packages relating to one Invoice will be numbered separately, e.g if the number of package relating to one invoice amounts to 100 packages these 100 packages will be numbered as under:-

The No. 1 package will be numbered 1 of 100

The No. 2 package will be numbered 2 of 100 and So on.

6. As soon as available, the JICA shall telex to the PROJECT MANAGER, JICA 10th MILE FARM, Livestock Development and Marketing Corporation, Rangoon Burma, following information:-

(a) Finacial Year .....

(b) Consignment No. .....

(c) Brief description of goods shipped.

(d) Number of packages being despatched.

(e) Port of departure.

(f) Invoice Value of shipment.

(g) Expected date of goods being ready for Shipment.

7. 6 (Six) Copies of invoices, certificates of inspection and tests and all other pertinent papers essential for immediate clearance shall also be forwarded by registered airmail to reach the PROJECT MANAGER, JICA 10th MILE FARM, Livestock Development and Marketing Corporation, at least 15 (Fifteen) days before arrival of each consignment at work sites in Burma.

JICA