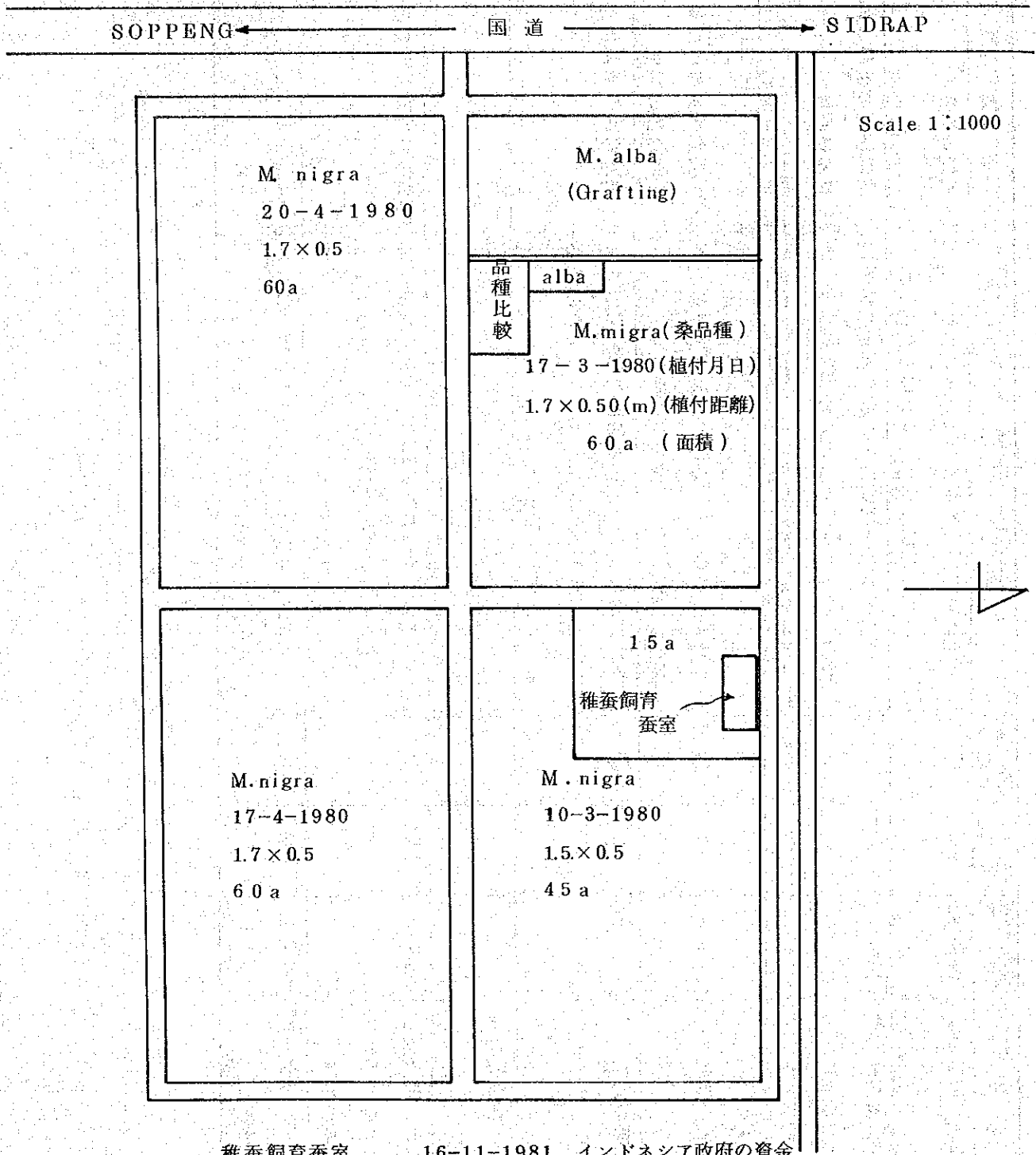
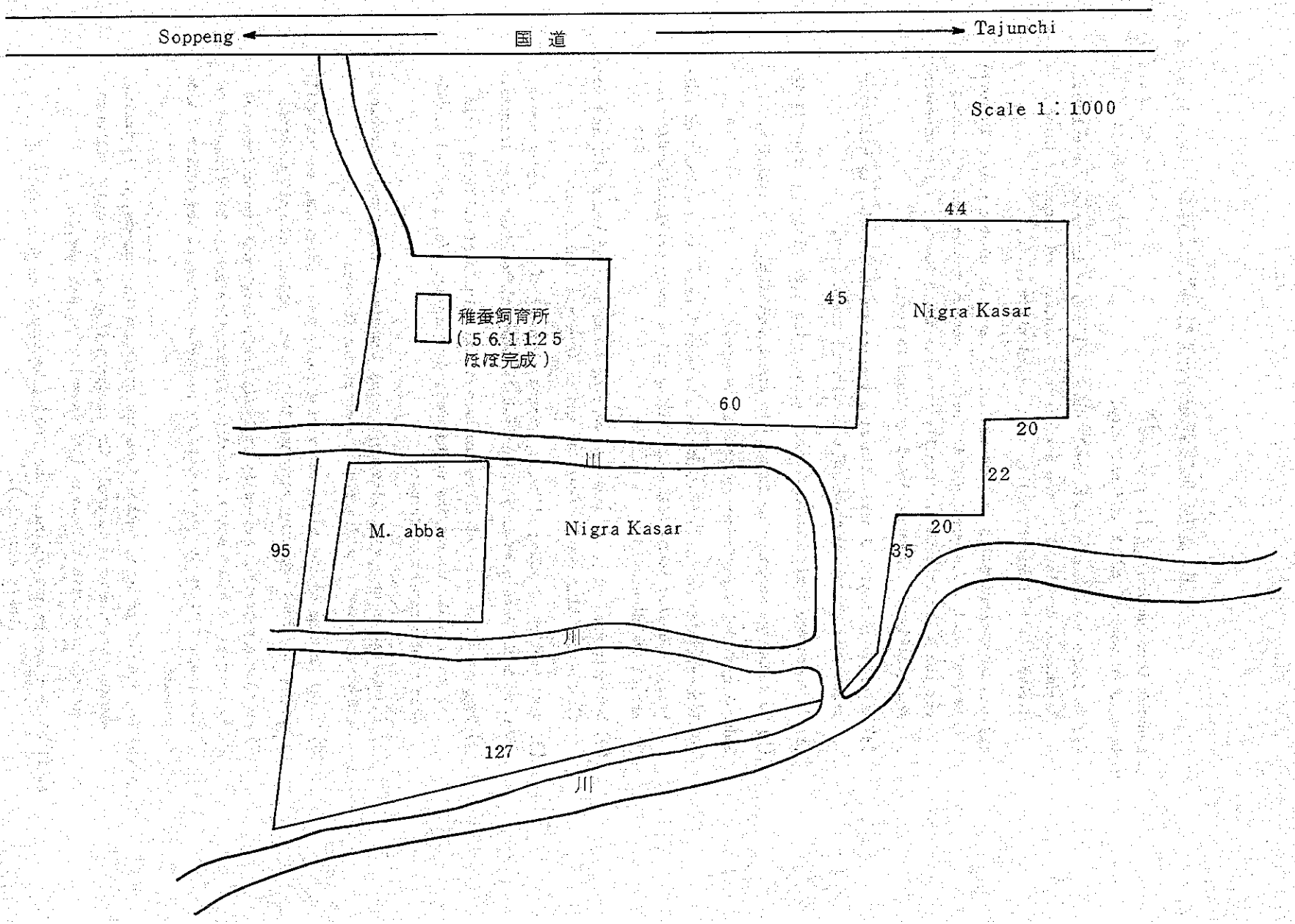
V－1.　Lupange のパイロットユニットの桑園



稚蚕飼育蚕室　　16-11-1981　インドネシア政府の資金
一部供与機材（蚕架，蚕箔等）

稚蚕第1回目飼育　17-11-1981

V−2 Pissing のパイロットユニットの桑園



VI PILOT UNIT OPERATION PLAN (FINAL DRAFT)

1. General introduction. (To be prepared)
2. General purpose of pilot unit activity.
   (1) To introduce & demonstrate newly developed and/or improved sericultural techniques developed in the sericultural center, and transfer these techniques to sericultural farmers around pilot units.
   (2) Through demonstration and propagation of newly developed and/or improved sericultural techniques, aim to increase cocoon production of farmers per box & per hectare and finally increase their income, while improving the quality of cocoon produced by those farmers.
   (3) To organize improved sericultural extension service system by utilizing pilot unit as show windows of sericultural techniques.
   (4) To encourage sericultural farmers to organize sericultural cooperatives.
   (5) To encourage surrounding farmers to start sericultural activities.
3. General activities performed in the pilot units.
   (1) Demonstration on establishment, maintenance & harvesting methods of mulberry field for young silkworm rearing using newly developed and/or improved techniques.
   (2) Demonstration on young silkworm rearing techniques at young silkworm rearing house using newly developed and/or improved techniques.
   (3) Distribution of young silkworm, reared at young silkworm rearing house with newly developed and/or improved techniques, to pilot unit farmers.
   (4) Demonstration on maintenance and harvesting methods of mulberry field for grown silkworm rearing using newly developed and/or improved techniques at demonstration farmers.
   (5) Demonstration on grown silkworm rearing techniques using newly developed and/or improved techniques at demonstration farmers.
   (6) Trial on mass disinfection activities using power sprayers, and on utilization of floss removing machines that cover all pilot unit members.
   (7) In case any problem arises in applying newly developed and/or improved techniques at pilot units, immediate information should be forwarded to the project so as to take necessary countermeasures at the earliest time possible.
   (8) Training of guidance technicians and sericultural farmers, while taking appropriate measures to avoid the contamination of silkworm & silkworm rearing house with pathogens that cause lethal diseases.
4. Pilot Unit management organization chart (General)
   (Chart attached).

5. Roles of each personnel or section.

(1) ATA -72

(A). Project manager

a. Supervise whole activities of pilot unit activities.

b. Perform coordination activities in the propagation of technical information among ATA -72, National project, Regional project & other outside organizations.

(B). Team leader of Japanese experts

a. Give necessary advices on technical & managerial activities of Pilot unit.

(C). Sub-Center manager

a. Responsible for the execution of all managerial and technical activities performed by project. (including budget execution).

(D). Japanese experts

a. Give appropriate advices and instructions to Indonesian experts in the sericultural technical activities performed in the pilot units.

(E). Technology

a. General

1. Make appropriate technical activity plan and finalize this plan together with pilot unit members or their representatives.

2. To coordinate, control and give appropriate advices on the technical activities performed in the pilot units, regularly and as occasion - calls through guidance technicians.

3. Monitoring, analyzing and reporting of the results of the introduction of newly developed and/or improved sericultural techniques.

b. Egg production

1. Give appropriate explanation on the characteristics of silkworm varieties, and give necessary instruction on the method of incubation.

2. Supply necessary amount of project produced eggs.

c. Pest & disease control

1. Give appropriate instruction on the methods of pest & disease control on silkworm rearing and mulberry cultivation based on the newly developed and/or improved techniques made by project.

2. Take immediate & effective countermeasures if any problem arises.

d. Moriculture

1. Introduction of recommended mulberry variety
2. Give appropriate instruction on establishment, maintenance and hervesting techniques of mulberry field for both young silkworm rearing & grown silkworm rearing.

e. R e a r i n g

1. Give appropriate instruction on the techniques of young silkworm rearing and grown silkworm rearing.
2. Introduction of locally produced new rearing equipments & materials.

(F). Pilot unit management personnel

(a). Carry out managerial activities under the instruction of Sub-Center manager.

(b). Observe and make report on the maintenance of buildings, equipments, materials, mulberry field & other management matters, and take appropriate countermeasures under the instruction of Sub-Center manager.

(c). Observe all technical activities of pilot units & demonstration farmers, and make sure that all technical activities are carried out as planned or advised by project.

(G). Guidance technicians in charge of pilot units

(a). Perform managerial & other general activities in cooperation with pilot unit members under the supervision of Sub-Center manager or his representative (pilot unit management personnel).

(b). Perform technical activities in cooperation with pilot unit members under the instruction of Japanese & Indonesian experts and/or their assistants.

(H). Each pilot unit and its members

(a). Carry out every managerial & technical activities as agreed with the Sub-Center manager of sericultural development project in the contract.

(b). Carry out all managerial activities together with the representative of Sub-Center manager and guidance technicians in young silkworm rearing, mulberry field and demonstration farmer activities.

(c). Carry out every technical activities planned, or advised by the project in young silkworm rearing, mulberry field & demonstration farmer activities.

(d). Keep good relationship & cooperation situation among members.

(2) National project, regional project & other organizations.

(a). Deputy of guidance performs activities as a coordinator among District manager, Guidance technicians and other concerning National project & Regional project personnel.

(b). Observe pilot unit activities closely, and try to employ effective techniques positively in extension service activities.

(c). Guidance technicians are especially required to conduct close watch on pilot unit activities, and absorb & employ new techniques.

6. Pilot unit steering committee

All obscure metters concerning the operation of each pilot unit should be settled in the regular or extraordinary committee meeting consisting of ;

(1). Project manager
(2). Team leader of Japanese experts
(3). Sub-Center manager
(4). Deputy of technology
(5). Deputy of guidance
(6). Other concerning deputies
(7). Concerning Japanese experts
(8). Concerning technology section chiefs
(9). Concerning district managers
(10). Concerning guidance technicians
(11). Representative of concerning pilot units (chief or his representative)
(12). Other necessary project personnel and pilot unit members
(13). Necessary local government representatives.

7. Management & operation policy of farmer initiated pilot units

7 - 1 : Sites & members

(1). Desa Solie, Soppeng (Pising) # Members list attached
(2). Desa Wanio, Sidrap # Members list attached
(3). Desa Bila Ugi, Wajo # Members list attached

7 - 2 : Detailed purpose

(1). G e n e r a l

(A). Transfer newly developed and/or improved techniques to member farmers, increase their cocoon production per box & per hectare, finally increase their income; as the result, make them (pilot units) the centers of technical extension services for all sericultural farmers in South Sulawesi.

(B). Add some supplementary techniques or make some modification to new standard tecniques in order to adapt techniques to local conditions.

(C). Search for the most economical sericultural activity system using locally produced equipements and materials as much as possible.

(2). Details

(A). Young silkworm rearing

(a). Rear young silkworms using newly developed and/or improved young silkworm rearing techniques at young silkworm rearing house constructed by the project, and distribute these young silkworms to member farmers.

(B). Mulberry field for young silkworm rearing

(a). Establishment of mulberry field using recommended variety.

(b). Maintenance and harvesting methods for young silkworm rearing are demonstrated using newly developed and/or improved techniques.

(C). Demonstration farmers

(a). Maintenance and harvesting methods of mulberry field for grown silkworm are demonstrated using newly developed and/or improved techniques.

(b). Perform grown silkworm rearing, cocooning & harvesting activities using newly developed and/or improved sericultural tecniques.

7 - 3 : Organization and roles within pilot unit

(1). Organization chart

attached

(2). Selection and roles of personnel

(A). Project assigned management personnel

Selection : Assigned by project manager

Roles :

(a). Perform all managerial activities in which project is responsible under the instruction of Sub-Center manager.

(b). Observe all technical activities and submit regular and extraordinary report to Sub-Center manager.

(B). Guidance technician in charge of pilot unit

Selection : Assigned by project manager

Roles :

(a). Assist project assigned management personnel in the execution of pilot unit managerial activities.

(b). Assist the activities of technology sections together with project assigned management personnel, and execute every technical activities exactly as planned and advised by - Japanese and Indonesian experts or their assistants.

(C). Chief of pilot unit

Selection : Selected by members from among the members

Roles :

(a). Assist project management personnel and guidance technician in performing their duties.

(b). Coordinate among members in managerial & technical activities.

(D). In-charge of young silkworm rearing house

Selection : Selected by members from among the members

Roles :

(a). Has an obligation to perform rearing activities exactly as instructed by project experts, guidance technician or management personnel.

(b). Responsible in rearing young silkworms for members.

(c). Rearing house must be utilized exclusively for young silkworm rearing for member farmers and prohibited to transfer any facilities to other persons or organizations.

(E). Owner of mulberry field for young silkworm rearing

Selection : Selected by members from among the members

Roles :

(a). Responsible in supplying mulberry leaves for young silkworm rearing.

(F). Demonstration farmers

Selection :

(a). Nominated by Guidance technicians and selected by project.

(b). Qualification # attached.

Roles :

(a). Perform grown silkworm rearing activities under the instruction of project experts & their assistants.

(G). Members

Selection :

(a). Selected by project

(b). Qualification

- Must own mulberry field & grown silkworm rearing place, and wish to become pilot unit members.

Roles :

(a). All members, including chiefs and other officials of pilot units, are subject to the basic management of sericultural development project within the framework stated in the contract concluded between Sub-Center manager and unit members.

(b). Cooperate with chief, in-charge of young silkworm rearing house, owner of mulberry field for young silkworm rearing & demonstration farmers, observe activities, study newly developed and/or improved techniques, and apply those techniques in their respective rearing houses and mulberry field.

7 - 4 : Equipments & materials - List attached to all articles

(1). Young silkworm rearing house

(A). Leased to unit by project #(L)

(B). Given to unit, by project #(L)

(C). Prepared by in-charge of young silkworm rearing house #(L)

(2). Mulberry field for young silkworm rearing

(A). Leased to unit by project #(L)

(B). Given to unit by project #(L)

(C). Prepared by owner #(L)

(3). Demonstration farmers

(A). Leased to farmer by project #(L)

(B). Given to farmer by project #(L)

(C). Prepared by farmer #(L)

7 - 5 : Expenses needed for the activities of pilot unit

(1). Young silkworm rearing house

(A). Shouldered by project

(a). Construction, of house, its improvement & remodelling if project considers it necessary.

(b). Supply of equipments & materials listed in the supply list.

(B). Shouldered by in-charge of young silkworm rearing house

(a). Maintenance & repair of house & equipments.

(b). Supply of equipments & materials listed in the agreed list, and all other necessary equipments & materials other than supplied by the project.

(c). Mulberry leaves (supplied by mulberry field owner, but has to pay for leaves if in-charge of rearing house & owner of mulberry field are different).

(d). Workers, fuel and other expenses needed for young silkworm rearing activities.

(2). Mulberry field for young silkworm rearing

(A). Shouldered by project

(a). Supply of equipments & materials listed in the supply list.

(B). Shouldered by owner

(a). Supply of equipments & materials listed in the agreed list & othe necessary equipments & materials other than supplied by the project.

(b). All expenses needed for the establishment & maintenance of mulberry field.

(c). Workers, fuel and other expenses.

(3). Demonstration farmers

(A). Shouldered by project

(a). Supply of equipments & materials listed in the supply list.

(B). Shouldered by farmer

(a). Supply of equipments & materials listed in the agreed list, and other necessary equipments & materials other than supplied by the project.

(b). Workers, fuel and other expenses.

(4). All advising activities carried out by Japanese & Indonesian experts and/or their assistants, project officials and/or their staffs are shouldered by the project.

7 - 6 : Expenditure distribution within pilot unit members

(1). Silkworm eggs :

Paid by respective member

(2). Expenditure for young silkworm rearing activities :

Expenses needed for young silkworm rearing are fully shouldered by the in-charge of young silkworm rearing house including the expenditure for mulberry leaves but excluding the payment for eggs. Other respective member pays certain amount, agreed among concerning parties including project, to the person in-charge.

(3). Expenditure for the establishment & maintenance of mulberry field for young silkworm rearing :

Fully shouldered by owner.

(4). Expenditure for grown silkworm rearing & mulberry field maintenance :

Fully shouldered by owner.

7 - 7 : Income distribution within pilot unit members

(1). Upon distribution of young silkworm :

Expenses needed for young silkworm rearing are fully shouldered by the in-charge of young silkworm rearing house (except for the payment of eggs).

Based on this expenditure, every member farmer must pay certain amount per box of young silkworms to the in-charge of young silkworm rearing house.

The amount of payment for rearing a box of young silkworms must be decided among project representatives (manager or his representatives), rearing house in-charge and member farmers.

(2). Cocoon

Harvested cocoon is absolute property of each farmer.

7 - 8 : Proposed activity plan

(1). General

(A). Six (6) rearing activities a year, that must be decided after-thorough discussion among project management personnel, guidance technician and members of Pilot Unit, are carried out using project produced silkworm eggs.

Imported eggs might be also used sometimes for comparison.

(2). Young silkworm rearing

(A). All eggs are reared intensively at young silkworm rearing house under the responsibilities of in-charge (0,5 - 1,5 box per farmer).

(B). Improvement of buildings, facilities and materials

(C). Training on disinfection method of room, equipments & silkworm.

(D). Training on countermeasures for the outbreak of pest & disease.

(3). Mulberry field for young silkworm rearing

(A). Establish mulberrry field with recommended mulberry varieties, and distribute mulberry cuttings to the farmers inside & outside pilot units.

(B). Improve farmers' techniques & knowledge on establishment & maintenance of mulberry field.

(C). Make local annual maintenance chart.

(4). Demonstration farmer

(A). Improve the techniques of farmers on mulberry field establishment & maintenance activities for grown silkworm rearing.

(B). Improve the techniques of farmers on grown silkworm rearing & cocooning.

(C). Improve the design of rearing house, equipments & quality of material.

(D). Disinfection of room, equipments & silkworm.

(E). Training on the countermeasures for the outbreak of pest & disease.

(5). Farmers' observation and seminar

(A). Periodical and/or non-periodical short-term observation and seminars are carried out for surrounding member & non-member farmers.

(B). Observation and seminar carried out at pilot unit must be conducted with utmost care to avoid bringing any pathogen into rearing house.

7 - 9 : Reporting & statistic recording

(1). Reporting activity

(A) Guidance technician in charge of pilot unit prepares regular (after rearing period) and non-regular reports together with chief of pilot unit, and submit them to Sub-Centre manager through management personnel.

(B) Management personnel (representative of Sub-Centre manager) prepares monthly, rearing periodical and non-periodical reports to Sub-Centre manager.

(C) Each technical section prepares periodical technical reports (after rearing period) and submit them to Sub-Centre manager.

(D) Sub-Centre manager arranges all managerial and technical reports came from respective personnel & section, and submit those reports to project manager.

(2). Statistic recording

(A). Every necessary statistic data are recorded and reported jointly by concerning member farmers, unit chief, guidance technician & management personnel, and submitted to Sub-Centre manager.

(B) Necessary data are defined, and data sheets are prepared by respective management & technical sections.

8. Management & operation policy of project initiated pilot units

8 - 1 : Sites, personnel & unit members.

(1). Desa Lalabata Riaja, Soppeng (Luppange) # Personnel & members' list attached

(2). Desa Baraka, Enrekang # Personnel & members' list attached

8 - 2 : Detailed purpose

(1). General

(A), (B), (C) } Same as 7 - 2 - (1)

(D) Concentrate all necessary techniques of sericulture and utilize these pilot units as show windows of extension services.

(2). Detail

(A), (B), (C) } Same as 7 - 2 - (2)

8 - 3 : Organization & roles within pilot unit

(1). Organization chart

attached (Same as farmer initiated pilot unit except in-charge of Mulberry field for young silkworm rearing).

(2). Selection & roles of personnel

(A). Project assigned management personnel

Selection : Assigned by project manager

Roles : (a), (b) } Same as 7 - 3 - (2) - (A) - Roles (a)(b)

(c) Take full responsibility in the managerial activities of pilot unit

(B). Guidance technician in charge of pilot unit : Selection & roles Same as 7 - 3 - (2) - (B)

(C). Chief of pilot unit

Selection : Assigned by project

Roles : (a) Execute all managerial & technical activities under the instruction of Sub-Centre manager or his representative

(D). In charge of young silkworm rearing

Selection : Assigned by project

Roles : (a) Perform young silkworm rearing activities under the instruction of project assigned management personnel, chief of pilot unit, guidance technician and/or project experts.

(E). In charge of mulberry field for young silkworm rearing

Selection : Assigned by project

Roles : (a) Perform mulberry field maintenance activity and supply mulberry leaves for young silkworm rearing under the instruction of project assigned management personnel , chief of pilot unit, guidance technician and/or project experts.

(F). Demonstration farmers

Selection : (a): Selected by project

(b): Qualification # attached

Roles : Same as 7 - 3 - (2) - (F) - Role - (a)

(G). Members - Same as 7 - 3 - (2) - G - Selection / Roles

(H). Project workers

Selection : Selected by project

Roles : (a) Perform actual technical activities at young silkworm rearing house and mulberry field for young silkworm rearing under the supervision of chief of pilot unit , in charge of unit section and/or guidance technician.

8 - 4 : Equipments& materials-list attached to all articles

(1). Young silkworm rearing house #(L)

(2). Mulberry field for young silkworm rearing #(L)

(3). Demonstration farmers

(A) #(L)

(B) Same as 7 - 4 - (3) #(L)

(C) #(L)

8 - 5 : Expenses needed for the activities of pilot unit

(1). Young silkworm rearing house

All shouldered by project

(2). Mulberry field for young silkworm rearing

All shouldered by project

(3). Demonstration farmers

Same as 7 - 5 - (3) - (A)(B)

(4). Same as 7 - 5 - (4)

8 - 6 : Expenditure distribution within pilot unit

(1). Silkworm eggs : Paid by project.

(2). Expenditure for young silkworm rearing activities

Fully shouldered by project

(3). Expenditure for the establishment & maintenance of mulberry field for young silkworm rearing:

Fully shouldered by project

(4). Expenditure for grown silkworm rearing & mulberry field maintenance,

Fully shouldered by farmer

8 - 7 : Income distribution within pilot unit

(1). Upon distribution of young silkworm :

All expenses including the payment for eggs are paid by project. Based on the expenditure, every member farmer must pay certain amount per box of young silkworm to the project.

The amount of payment per box of young silkworm must be decided between project representative (manager or his representative) and member farmers. This amount includes the cost of eggs.

(2). Cocoon

Harvested cocoon is absolute property of each farmer.

8 - 8 : Proposed activity plan

(1). General
(2). Young silkworm rearing
(3). Mulberry field for young silkworm rearing
(4). Demonstration farmers

} Same as 7 - 8 - (1)(2)(3)(4)

(5). Training of guidance technicians and farmers

(A). Long-term and/or short term technical trainings, observations & seminars for guidance technicians and farmers are held regularly and/or non-regularly.

(B). For carring out training, observation or seminar, utmost care must be taken to avoid contamination of silkworm and/or silkworm rearing house with any pathogens that cause lethal diseases.

8 - 9 : Reporting & statistic recording

(1). Reporting activity

(A)
(B)
(C)
(D)

(2). Statistic recording

(A)
(B)

} Same as 7 - 9

9. All activities in the pilot units will be finished when project thinks the goals have been achieved.

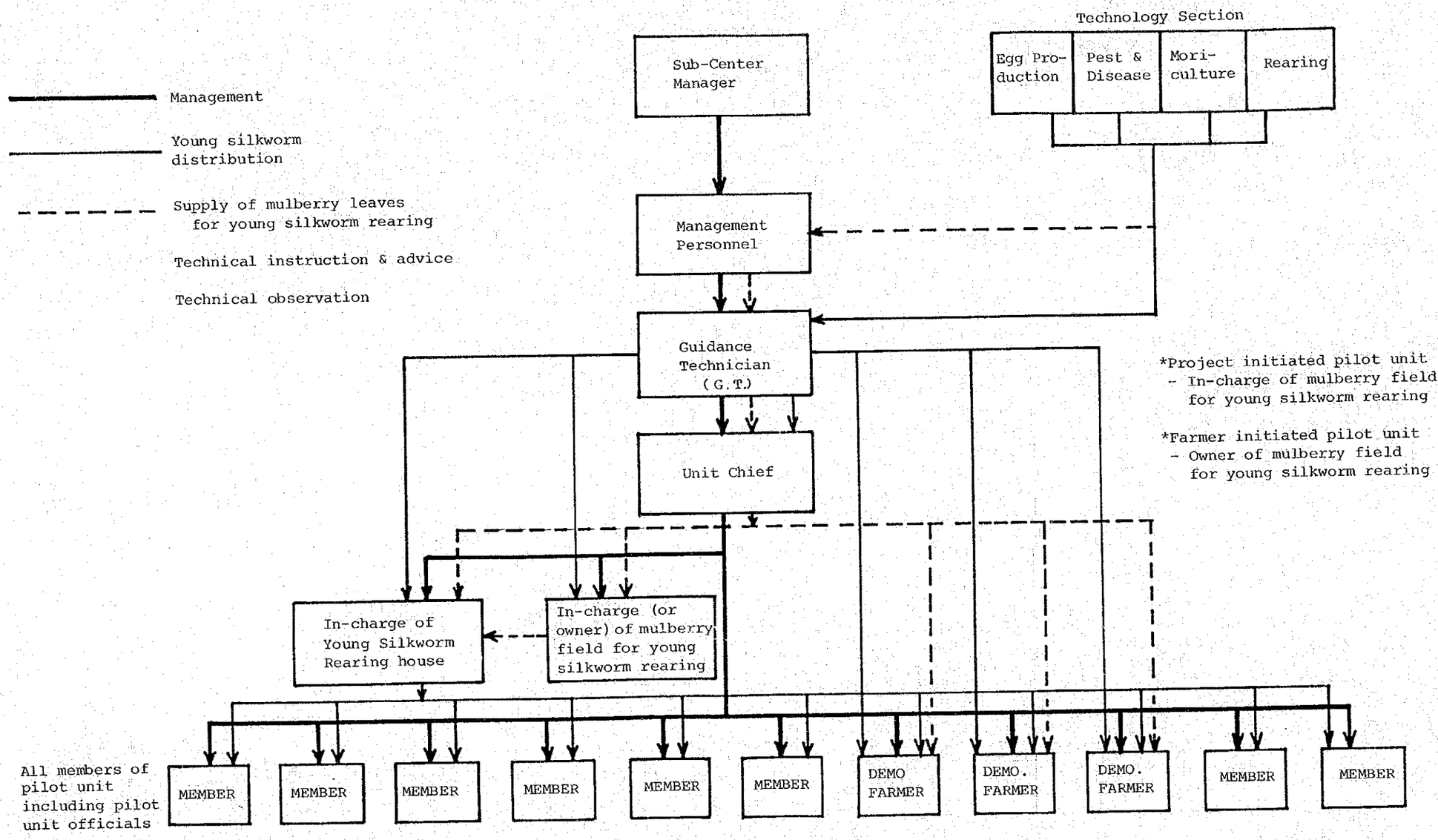
10. This plan is attached to the contract(agreement) which is concluded between pilot unit members and sericultural development project, and all pilot unit activities must be carried out based on the policy stated in this plan.

11. Articles needed to be added to this operation plan can be inserted upon the agreement of all concerning parties.

Date

Yohanes Richard	Nobuyuki Mori
Project Manager	Team Leader for Japanese expert

ORGANIZATION IN PILOT UNIT



*Project initiated pilot unit
- In-charge of mulberry field for young silkworm rearing

*Farmer initiated pilot unit
- Owner of mulberry field for young silkworm rearing

Report of the fourth meeting of Joint Committee ATA-72

Fourth meeting of the Joint Committee ATA-72 held on Aug. 27, 1981, at Sericultural Development Centre, Bili-Bili, Gowa, South Sulawesi, was attended by its members and representatives whose names are listed in the enclosed list.

Following are the results of the meeting.

1. Progress report on Sericultural Development Project.

The progress report of the project during the fiscal year 1980/1981 was presented by Mr. Yohanes Richard (Project Manager) and Dr. Nobuyuki Mori (Team leader for Japanese expert team).
This report was discussed thoroughly with deep interest and accepted by attendants.

The contents can be summarized as follows.

(1) Japanese experts :

A. Long-term Japanese experts were assigned accordingly to the agreement Annex II, consisting of six (6) members.
- Team leader
- Expert in the field of moriculture
- Expert in the field of egg production
- Expert in the field of silkworm rearing
- Expert in the field of pest & disease control
- Liaison officer.

(a) Following long-term experts terminated their assignments during the last fiscal year.

Name	Expertise	Period of assignment
Mr.H. Funasaka	Liaison officer	May 2, 1978-May 1, 1980
Mr.H. Sugiyama	Egg production	June 20, 1978-June 19, 1980
Dr.H. Inoue	Pest & Disease control	June 20, 1978-June 19, 1980
Mr.S. Fujiwara	Moriculture	Nov. 25, 1976-Nov. 24, 1980
Mr.J. Nakamura	Silkworm rearing	Nov. 25, 1976-Nov. 24, 1980

(b) Following long-term experts were assigned newly to their posts during the last fiscal year.

Name	Expertise	Period of assignment
Mr.O. Ihara	Egg production	June 6, 1980-June 5, 1982
Mr.Y. Abe	Pest & Disease control	June 6, 1980-June 5, 1982
Mr.K. Tominaga	Liaison officer	June 6, 1980-June 5, 1982
Mr.S. Nishi	Silkworm rearing	Nov. 14, 1980-Feb. 27, 1983
Mr.M. Yamamoto	Moriculture	Nov. 14, 1980-Feb. 27, 1983

B. Seven (7) short-term Japanese experts were assigned during the fiscal year.

Name	Expertise	Period of assignment
Mr.R. Sakanashi	Water supply (artesian well)	March 10-April 9, 1980
Mr.M. Taguchi	Water supply (artesian well)	April 1-April 26, 1980
Mr.M. Furuike	Water supply system	July 19-Aug. 30, 1980
Mr.H. Tsuboi	Cocoon testing	Sep. 26-Nov. 25,.1980
Mr.K. Taniguchi	Water pump maintenance	Nov.14,1980-Jan.18,1981
Mr.I. Iwai	Water piping survey	Feb. 25-April 25, 1981
Mr.Y. Kobayashi	Refrigerator maintenance	March 11-April 10, 1981

(2) Budget for the operation of the project :

A. Budget of the fiscal year 1980/81 for the technical oriented activities, including necessary construction works (mainly for ATA-72) prepared by The Government of Indonesia, was Rp. 114.220.000,- (total a mount of the project budget - including national & regional projects and administration - was Rp. 328.618.000,-).

B. Budget of the fiscal year 1981/82 for the technical oriented activities, including necessary construction works (mainly for ATA-72) prepared by The Government of Indonesia, is Rp. 178,995.000,- (total a mount of the project budget - including national & regional project and administration - is Rp. 494.118.000,-

(3) Equipment & material supplied by the Government of Japan :

Besides ¥ 100.000.000,- equipment for the irrigation facilities supplied during the fiscal year 1977/78, total amount of equipment and materials supplied by the Government of Japan, since the beginning of the project (including R/D period) reached ¥ 445.654.339,- until the end of the fiscal year 1980/81 (including all supplied equipment sent under the budget of the fiscal year 1980/81).

Of this total amount, the amount of equipment and materials supplied under the budget of the fiscal year 1980/81 was ¥ 69.846.918,-

These were consisting of ;

- Vehicles and spare parts
- Pebrine inspection machines and attachments
- Equipment, machinery & other instruments for silkworm rearing and silkworm egg production.
- Equipment, machinery & other instruments and chemicalss for laboratory works,
- Agricultural machinery, its attachments & other instruments for mulberry field maintenance
- Spare parts for water-pump and piping
- Generator & distributor panels.

Equipment & materials planned to be supplied by the Government of Japan under the budget of the fiscal year 1981/82 are estimated to be amounting about ¥ 51,000.000,-

(4) Counterpart training :

As of March 31, 1981, twelve (12) counterparts completed technical training in Japan.

In addition, six (6) counterparts are under training as of the day of Joint Committee meeting (six month training from May, 1981) in Japan.

Therefore, including six training participants of this fiscal year, sixteen (16) out of seventeen (17) counterparts stated in the Agreement Annex IV, joined the counterpart training in Japan so far.

(5) Indonesian experts (counterpars) and technical staffs (assistant counterparts) :

As of the day of the meeting (Aug. 27, 1981), the assignment of all seventeen (17) counterparts had been fulfilled accordingly to the Agreement Annex IV.

Since April 26, 1981, assignment of 32 assistant counterparts out of 37 stated in the Agreement Annex IV were fulfilled.

(6) Mulberry field :

A. Center (including Pakatto) :
The establishment of eight (8) hectare mulberry field (including one hectare grass land) was completed accordingly to the Agreement Annex V.

B. Sub-Center (Tanah BellangE) :

The establishment of 18,5 hectare mulberry field was completed, and one (1) hectare grass land is planned to be completed within this fiscal year.

C. In order to support the egg production activities of Center, 25 hectares of mulberry field will be established in Malino in this fiscal year.

(7) Buildings, other construction and repairing works :

A. Buildings :

(a) During the fiscal year 1980/81, one unit of dormitory was constructed at Bili-Bili Center.

(b) During the fiscal year 1980/81, two units of counterpart houses were contructed at Tanah BellangE.

(c) One unit of dermitory at Sub-Center (Tajuncu) is expected to be completed shortly.

(d) As of the day of meeting (Aug. 27, 1981), one unit of young silkworm rearing house of a Pilot Unit at Luppange, Soppeng, was about half-completed, and was expected to be completed shortly.
Four (4) other young silkworm rearing houses at four (4) other Pilot Units will be completed within two to three months.

B. Other construction works :

(a) As of the day of the Joint Committee meeting, road network inside Center compound, fencing in front of Center buildings, and other small relevant works in and around the Center compound had been completed.

(b) Drinking water supply system at Center was completed.

(c) Construction of artesian well and water supply system (pump, water tank and piping) at Tanah BellangE were completed by Japanese side. This artesian well is now supplying quite a big quantity of water.

C. Maintenance and repair works :

During the fiscal year 1980/81, following maintenance and repair works were carried out, and all those facilities are now under excellent condition.

	Kind of work	Period	Carried out by
(1)	In take pump repair & maintenance work at Center (two units including foundation)	Nov. 14, 1980 - Jan. 18, 1981	Japanese side (Mr.Taniguchi short term)
(2)	Refrigerator maintenance work and training of technicians at Center & Sub Center.	March 11.- April 10, 1981	Japanese side (Mr.Kobayashi short term)

In addition, Mr. Isao Iwai, JICA's short term expert in water piping, surveyed water piping at Center, and made the specification for the repair and maintenance works.

(8) Technical activities :

Technical activities in moriculture, silkworm egg production, silkworm rearing and pest & disease control were performed jointly by Indonesian & Japanese experts, and following main results were reported in the meeting.

A. Egg production :

(a) Production of pebrine free silkworm eggs during the fiscal year 1980/81 was as follows.

At Center	=	1.128,2 boxes
At Sub-Center	=	1.597,0 boxes
Total	=	2.725,2 boxes

(b) Yearly production of pebrine free hybrid silkworm eggs is expected to reach 10.000 boxes in the fiscal year 1981/82. As of the day of joint committee meeting, egg production section had produced 2.020,6 boxes since April this year.

(c) Project can now produce better quality hybrid variety silkworm eggs in a farely big quantity.

B. Silkworm rearing :

(a) Rearing techniques that can be applied to the farmers were already drawn. This technical system is planned to be first applied to Pilot Unit farmers.

C. Moriculture :

(a) Best mulberry variety was chosen (M. alba). Variety of almost all mulberry field of the project would be gradually changed to this variety.

(b) Two propagation methods of mulberry (namely cutting & grafting) were chosen for the technical transfer to farmers.

(c) Supply of recommended mulberry variety would be able to be started soon (by cutting).

D. Pest & disease control :

(a) Pebrine disease is now satisfactorily controlled within the area covered by project activities by the distribution of pebrine free silkworm eggs.

(b) Control of other silkworm diseases is also improving with the improving disinfection practices before and during rearing period.

E. Results of the training of guidance technicians and sericultural farmers held during the fiscal year 1980/81 were reported by Mr. Yoshihiko Abe. This training courses are planned to be carried out continuously throughout this fiscal year.

F. First draft of sericultural hand book is now under preparation, and will be completed shortly.
This hand book is being prepared for the use of guidance technicians during their technical training courses.
After completion of formal edition, this hand book will be also distributed to all concerning organizations and offices.

G. First draft of the sericultural techniques for the demonstration at five Pilot Units was proposed by Dr.N. Mori and was accepted by Joint Committee members.

2. Proposals and the results of discussion :

(1) Together with the proposed working plan for the fiscal year 1981/82, present technical problems and their possible countermeasures were pointed out by Japanese Team Leader, Dr.N. Mori, so as to show the real situation of the project activities clearly. Concerning parties were requested to support the implementation of those countermeasures.

(2) Japanese expert team declared its utmost effort in making the production capacity of silkworm eggs of ATA-72 for 20.000 boxes a year by the last year of the Agreement i.e. the fiscal year 1982/83.

(3) Water supply system at Pakatto and Tajuncu will be constructed within this fiscal year by Indonesian side.

(4) Japanese expert team expressed the anxiety over the distribution of silkworm eggs produced in the project.

In order to distribute project eggs soomthly and more efficiently, Japanese expert team suggested following matters.

A. Project should keep good communication with egg importers and other bodies concerning egg production and distribution, and arrange importation and local production well in advance.

B. Project should inform all sericultural farmers about the eggs supplied by the project and try to gather correct egg-supply-order of farmers as early as possible. Egg production section will be able to produce eggs to meet the necessity of farmers if informed three months before distribution.

(5) Concerning the roles and the responsibilities in the management of Pilot Units, it was suggested that equipment and materials supplied by the project to Pilot Unit should be specified in the agreement between the project and the farmers.
Project Manager replied that those detailed contents of agreement were under preparation.

(6) As the common ideas of the Joint Committee members, following suggestions were made in the meeting, for the smoother and even more effective operation of all activities of Sericultural Development Project (including ATA-72, national project and regional project).

Though those suggested matters can not exactly be covered by ATA-72, it was agreed that ATA-72 activities should also be planned in line with this broader view.

A. It was agreed that periodical meeting consisting of all concerning parties.(BADAN MUSYAWARAH SUTERA ALAM) esp. in South Sulawesi, is important for the mutual understanding and effective implementation of the activities of project.

B. For the production and distribution of high quality silkworm variety eggs, following suggestions were made.

   (a) It is necessary to make an effort to maintain and improve the quality of silkworm varieties.

   (b) While perfecting egg production facilities, it is also necessary to try our best to improve the efficiency of the production of the eggs of high quality varieties.

   (c) Definite regulation for the production of pebrine free silkworm eggs and their supply should be made earlier for the effective control of pebrine disease. Sericultural Development Project was requested to produce the first draft of the regulation.

   (d) It is hoped that some good distribution system that enable to supply high-quality silkworm eggs so as to meet the real necessity of farmers, should be formed for the smoother distribution of silkworm eggs.

C. While personnel of technical sections of the project are making their utmost effort to develop techniques that can bring bigger amount and better quality cocoon harvest to farmers, Joint Committee members came to recognize that smoother transfer of those techniques can be achieved with a marketing system which gives higher price to better quality cocoon.

D. In order to promote the domestic production of sericultural equipment and materials, members of the meeting came to recognize that :

(a) Study on the suitability and/or quality of domestically produced equipment and materials for the use of sericultural activities is required.

(b) Encouragement of local industries for the production of sericultural equipment and materials is required.

E. While improving abilities of the Indonesian counterparts in the sericultural technical development, it is also necessary to make them qualified as an expert on sericulture for stable and improved activities, so that they will be able to concentrate their efforts to the development of sericultural techniques continuously in the future.

F. As the results of discussion, members of the meeting came to recognize that improvement of rearing techniques is inseparable from the improvement of reeling techniques and facilities.

3. Working plan for 1981/82.

Draft of working plan for the fiscal year 1981/82 was submitted to the meeting by Dr.N. Mori as enclosed, and approved by the Joint Committee after thorough discussion on the contents.

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repro : otto, sep.'81.

Working plan, problems and countermeasures to be worth due consideration.

ITEMS	PROBLEM	COUNTERMEASURES (The themes perform in ATA 72 are limited only a part of these countermeasures 対策
	In general	
	1. This working plan is for technical activity alone.	To extend the techniques, adequate political and economical measures must be required. Namely, cocoon and raw silk which producted by farmers must be transacted at a fair price.
	2. Delay of working plan.	Prompt the efficiency of progress.
SERICULTURE CENTER		
(a). Construction and management of mulberry field.	(a)	
(a)-1. Establishment and management of mulberry field.	(a)-1. Soil conservation and increase of soil fertility. Renewal of mulberry variety.	1. Effective use of grass land. 2. Fertilization of organic substance. 1. Replantation of M. nigra with M. alba.
(b). Trial experiments to develop techniques for moriculture and for the control of pests and diseases.	(b) Since mulberry tree is a perenial crop, it takes long years to get a reliable results.	Long term experiments must be sustained.
(b)-1. Investigation on the economical character of mulberry varieties.	(b)-1. Selection and breeding of high quality and high productivity variety of mulberry.	
	1. Flowering and seed production of tropical variety in mulberry.	1. Breeding by crossing method.
	2. High quality variety having ability of resistance to disease, adaptability to the region and special use.	1. Collection of wild variety of mulberry tree and selection. 2. Introduction of mulberry variety from abroad.
	3. Technique for multiplication.	1. Rooting ability and multiplication method. 2. Nursing method for seedling.
(b)-2. Promotion of soil fertility and technique of field maintenance of mulberry field.	(b)-2. Promotion of soil fertility and improvement of fertilization for tropical mulberry field.	1. Promotion of soil fertility with organic matter. 2. Improvement and conservation of mulberry field soil. 3. Fertilization method of Nitrogen, Phosphorus and Potassium to mulberry field.
(b)-3. Control method of mulberry pests and diseases.	(b)-3. Training and harvesting system adaptable to the region including integrated control of pests and diseases.	1. Agronomic control of pest and diseases. 2. Screening techniques of chemicals for mulberry field.

(b)-4. Training and harvesting method of mulberry for young and grown silkworm.	(b)-4.	1. Growth of mulberry for young and grown silkworm in rainy or dry season.
	1. Growth and dormancy of tropical mulberry tree.	1. Basic experiment.
	2. Sunshine and growth of mulberry.	
(c). Trial experiment to develop techniques for silkworm rearing and for control of pests and diseases.	(c)	
(c)-1. Protection and treatment of silkworm egg.	(c)-1. Influence of high temperature and high humidity on embryonic stage of the silkworm.	1. Realization of artificial hatching condition.
(c)-2. Comparison of silkworm races.	(c)-2. Maintenance of ability of silkworm races.	1. Silkworm races maintain method. 2. Breeding method.
(c)-3. Rearing technique of young silkworm.	(c)-3. Influence of high temperature and humidity on growth and physiology of young silkworm.	1. First systematism of young silkworm rearing method.
(c)-4. Rearing technique of grown silkworm.	(4)-4. Influence of high temperature and humidity on growth and physiology of grown silkworm.	1. First systematism of grown silkworm rearing method.
(c)-5. Silkworm mounting technique and improvement of cocoon quality.	(c)-5. Influence of high temperature and humidity on cocooning and cocoon quality.	1. Improvement of mounting method. 2. Preservation of silkworm larvae during cocooning. 3. Improvement of cocoon and silk quality.
(c)-6. Investigation on ecology of silkworm diseases.	(c)-6. Distribution of silkworm diseases and relation between infection period and appearance of symptom and sign under high temperature and high humidity condition.	1. Distribution of silkworm diseases and its outbreak in new extended region of sericulture.
(c)-7. Control method of silkworm diseases and pests.	(c)-7. High density distribution of formaldehide resistance Aspergillus.	1. Disinfection technique using bleaching powder. 2. Production of body surface disinfectant. 3. Development of cooperative disinfection system.
(d). Production of silkworm eggs and distribution thereof to the Sub-Center.	(d)	
(d)-1. Silkworm egg production.	(d)-1. Organization of silkworm egg mass production.	1. Establishment of Malino Silkworm Egg Production Station. 2. Stabilization of cocoon crop and improvement of egg deposition ability.
(d)-2. Pebrine inspection.	(d)-2. Introduction of mass pebrine inspection method.	1. Training of pebrine inspection method and regulation of mother moth inspection by law.
(d)-3. Scheme for silkworm egg production and distribution.	(d)-3. Silkworm egg production as meeting of supply and demand.	1. Instruction of rearing plan to farmers by Guidance Technicians.
(e). Training of Indonecian technical steffs.	(e)	
(e)-1. Training of Counterparts.	(e)-1. Delay of appointment. Education for the executives of the Project.	1. Training of newly assigned Counterparts. 1. Improvement of technique developing ability.
(e)-2. Training of technical staffs at the Sericulture Center.	(e)-2. Delay of appointment and transfer after assignment.	1. Training oriented on practice.

(f). Formulation of programme for demonstration of sericulture techniques at the farmers group.	(f)	
(f)-1. Planning of demonstration of sericulture technique.	(f)-1. Survey of the real condition of sericulture farmer.	1. Organization of demonstration at Pilot Unit. 2. Management of young silkworm rearing house.
(SUB-CENTER)	(SUB-CENTER)	
(a). Verifying experiments of sericultural techniques developed in the center.	(a)	
(a)-1. Moriculture technique.	(a)-1. Elucidation of locality.	1. Growth and yeld of mulberry tree. 2. Adaptability of mulberry variety to the region. 3. Training and harvesting method of mulberry for multiple rearing.
(a)-2. Control method of mulberry pests and diseases.	(a)-2. Locality of pest distribution.	1. Verifying experiment of pest control method adaptable to sericulture farmers.
(a)-3. Observation on the adaptability of selected silkworm races to the region.	(a)-3. Local adaptability.	1. Adaptability of silkworm races to the region.
(a)-4. Control method of silkworm diseases and pests.		
(b). Introduction and demonstration of the improved sericulture techniques adaptable at the farmers level.	(b)	
(b)-1. Improvement of farmers present moriculture techniques.	(b)-1. Extention to farmers.	1. Demonstration at the farmers mulberry field.
(b)-2. Improvement of farmers present silkworm rearing techniques.	(b)-2. Extention to farmers.	1. Demonstration at the farmers rearing place.
(c). Multiplication of silkwormegg and mulberry shoots for cutting and distribution thereof to farmers.	(c)	
(c)-1. Silkworm egg production and distribution to farmers.	(c)-1. Mass production.	1. Improvement the maintenance of parent moth. 2. Improvement the techniques of large scale egg production.
	Management of distribution system of silkworm eggs.	1. Real demand of silkworm eggs by farmers.
(c)-2. Pebrine inspection.	(c)-2. Regulation of pebrine inspection.	1. Establishment the low forregulation of pebrine inspection.
(c)-3. Shoot production and the distribution to the farmers.	(c)-3. Establishment of mass production and distribution system of mulberry shoots.	1. Multiplication of M. alba by field grafting. 2. Establishment of distribution method of mulberry shoots.

(d). Training of technical staffs and farmers.	(d)	
(d)-1. Guidance of Counterparts for training of technical staffs and sericulture farmers at the Sub-Center.	(d)-1. Improvement the guidance ability of Indonesian Experts.	
(e). Guidance for the demonstration of sericulture technique at the farmers group(Pilot Unit).	(e) Delay of Construction.	
(e)-1. Guidance on the demonstration of moriculture.	(e)-1. Delay of systematism of new technique.	1. Build up the techniques by refer to japanese experience.
(e)-2. Guidance on the demonstration of silkworm rearing technique.	(e)-2. Rearing method of grown silkworm in a shed.	1. Promotion the production of techniques.
(e)-3. Survey on present condition of sericulture farmers and assessment of their sericulture technique.	(e)-3. Establishment of reasonable standard for technical assessment.	1. Establishment of bench marks as standards for assessment.

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Joint Committee
Aug, 27, 1981.

IX GENERAL PROPOSALS CONCERNING THE DEVELOPMENT OF SERICULTURE INDUSTRY IN SOUTH SULAWESI Aug, 27, 1981.

In order to introduce newly developed sericulture techniques smoothly to sericulture farmers, anticipating the earlier development of sericulture industry in South Sulawesi, we think that following matters should be considered in the near future.

1. Increased production & distribution of the eggs of high quality silkworm varieties.
   1). It is necessary to make an effort to maintain and improve the quality of silkworm varieties.
   2). While perfecting egg production facilities, it is also necessary to improve the efficiency of the egg production of high quality silkworm varieties.
   3). Establishment of definite regulations for the production of pebrine-free silkworm eggs and their supply is necessary.
   4). It is hoped that supply of high-quality silkworm variety eggs should be carried out, so as to meet the real necessity of farmers.
2. Though personnel of technical divisions of the project are making their utmost efforts to develop techniques that can bring bigger amount & better quality cocoon harvest to farmers, the smoother transfer of these techniques can be achieved with a marketing system which gives higher price to better quality cocoons.
3. In order to promote the domestic production of sericulture equipments and materials ;
   1). Study on the suitability of domestically produced equipments and materials for sericulture activities is required.
   2). Encouragement of local industries for the production of sericulture equipments and materials is required.
4. Though we are aware of the efforts of the project in making closer communications and mutual cooperations among administrative organizations, extension service personnel and technical development personnel, more efforts in transferring newly developed techniques smoothly to farmers from the project would be required in the very near future.
5. While improving abilities of the Indonesian experts in the sericulture technical development, it would be also necessary to give stable positions to the excellent Indonesian experts at the earliest time possible, so that they would be able to concentrate their efforts to the development of sericulture techniques continuously in the future.

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X REFERENCE OPINIONS FOR THE FUTURE OF SERICULTURE INDUSTRY IN INDONESIA

AUG, 26, 1981

1. For the future of Indonesian sericulture industry, it is necessary to study the possible directions for the development of its industry in detail, and make steady schedules for the production increase.

   For the detailed study, following articles should also be included.

   a. In the world market, silk is basically at an over-production stage at present.

   b. People's Republic of China, the largest producer of silk, is now boosting the production of silk.

   c. Japan's consumption, the largest in the world, for the production of silk - fabric and its consumption is decreasing year by year, and as the result, Japanese Government is annoyed having a large stock of imported raw-silk, equivalent to more than her half-a-year consumption.

   With above situation, it is suggested that the production increase should always be supported by the real increase of consumption i.e. make a plan for production increase only with definite expectation of consumption increase. Otherwise, the farmers who produce bigger quantily of cocoons might loose due to marketing difficulty.

2. It is possible to produce better quality cocoons by diffusing techniques developed by the project among farmers.

   In addition, by improving the succeeding stage of reeling, dyeing, mechanical weaving and designing works to match the consumption of silk, the market of silk will be enlarged, and as the result, incomes of sericulture farmers and local silk fabric producers can be stabilized.

3. Strengthening of administrative bodies especially of the training of sericulture administration experts, and organizations specialized exclusively in sericulture administration will be necessary in order to assist sericulture technical personnel and sericulture farmers.

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XI　来日した研修員の調査表（桑栽培）

1. 氏　　名	Zito Sumardjito（個別）	Enjano Kuswiar（個別）	Noer Rasyid（個別）	Munassar Simbung
2. 来日年度	１９７９年	１９８０年	１９７８年	１９８１年
3. 研修時の所属，職名	桑栽培（Bil[2]），カウンターパート	桑栽培（Bil[2]），カウンターパート	桑栽培（Soppeng），カウンターパート	桑栽培（Bil[2]），アシスタント，カウンターパート
4. 現在の所属，職名	桑栽培，技術部長	〃　，　〃	〃　，　〃	〃　，カウンターパート
5. 日本での研修機関	農林蚕糸試験場九州支場	同　　左	同　　左	農林蚕試，栽培部（筑波）
6. 研修期間	４月～１１月	６月～１１月	３月～１０月	５月～１０月
7. 日本で行なった研修内容	主として桑栽培全般，他に蚕飼育，病理，土壌肥料の実習と講義	同　　左	同　　左	同　　左
8. 現在行なっている業務内容	技術部（桑栽培，蚕種製造蚕飼育，病理）の運営管理並びに桑栽培の実証試験一部担当。	桑の実証試験，桑園一般管理，アシスタント，その他技術職員の訓練	同　　左	同　　左
9. 日本の研修で特に良かったこと	日本人と共に仕事や実習をし，日本人の勤勉な仕事振りに接したこと。	講義と実習を繰り返し実施したこと。とくに桑育種の実習講義が興味深かった。		
10. 日本での研修中，当面した困難や問題点	・言葉と日本の文字 ・技術専門書のほん訳本がない ・人によってレベルの高い研修が必要	・言葉とくに技術用語 ・実習時間が長く，とくに最初は疲れた ・実験器具等の取扱い方 ・器具，薬品が日本語で理解しにくい。		
11. その他，研修全般	宗教的習慣による食べものの選択	・農家の実態見学は参考になった。 ・礼儀正しい生活習慣		

来日した研修員の調査表（蚕種製造）

1. 氏名	Lukman Amry Kurang （個別）	Lulkarnain Nurdin （個別）	Achmad Primon （個別）
2. 来日年度	１９７８年	１９７９年	１９８０年
3. 研修時の所属，職名	副センター，蚕種製造，カウンターパート	副センター，蚕種製造，カウンターパート	センター，蚕種製造
4. 現在の所属職名	センター，蚕種製造，カウンターパート	副センター，蚕種製造(室)長(チーフ)	センター，蚕種製造(室)長（チーフ）
5. 日本での研修機関	農林水産省蚕糸試験場九州支場蚕品種改良研究室	左同じ	左同じ
6. 研修期間	３月～１０月	４月～１１月	５月～１１月
7. 日本で行なった研修内容	原種の飼育法，蚕品種の育成，蚕種製造，蚕種の保護法，微粒子病検査法，他に病理，桑栽培，土じょう肥料の講義と実習	左同じ	左同じ
8. 現在行なっている業務内容	蚕種製造，蚕種の保護，微粒子病検査，原種の飼育，アシスタントその他技術職員の訓練	副センター，蚕種製造の運営管理と原種の飼育，蚕品種の比較，蚕種製造，微粒子病検査，アシスタント技術職員および農民の訓練	センター蚕種製造の運営管理と原種の飼育，蚕品種の比較蚕種製造蚕種の保護微粒子病検査，アシスタント，技術職員の訓練
9. 日本の研修で特に良かったこと	蚕種製造，微粒子病検査の講義と実習が繰り返し実施したこと。	蚕品種の育成の講義と実習を繰り返し実施したが日本人の勤勉な仕事振りが深く心に感じた。	蚕品種の比較とくに蚕品種の育成の講義と実習を繰り返し実施したこと。
１０. 日本での研修中当面した困難や問題点	日本のことば，実習時間が長く最初はつらかった	日本の文字とことば，技術専門書の翻訳が少ない	日本の文字とことば。技術専門書の翻訳が少ない。
１１. その他研修全般について	見学が参考になった。	日本人は優しい人達で蚕種製造の見学が参考になった。	蚕種製造所見学が参考になった。友達が大勢出来楽しかった。

来日した研修員の調査表（蚕種製造）

1. 氏名	Mohamad Kusnan （個別）	Amirullah Makka （個別）	Bertha Sampe（個別）
2. 来日年度	１９８１年	１９８１年	１９８１年
3. 研修時の所属，職名	センター，蚕種製造，カウンターパート	センター，蚕種製造，カウンターパート	センター，蚕種製造，カウンターパート
4. 現在の所属職名	同上	同上	同上
5. 日本での研修機関	農林水産省蚕糸試験場育種部，蚕品種改良研究室	左同じ	農林水産省蚕糸試験場，育種部，病理部，蚕品種改良研究室，微粒子病研究室
6. 研修期間	5月～１１月	左同じ	左同じ
7. 日本で行なった研修内容	原種の飼育法，蚕品種の育成，蚕種製造，蚕種の保護法，蚕具蚕体消毒法等の講義と実習	左同じ	原蚕の飼育法，蚕品種の育成，蚕種製造蚕種の保護法，微粒子病検査法他に蚕病等の講義と実習
8. 現在行なっている業務内容	原種の飼育，蚕品種の比較，蚕種製造蚕種の保護，アシスタントその他技術職員の訓練	左同じ	原種の飼育，蚕品種の比較，蚕種製造蚕種の保護，微粒子病検査，アシスタント技術職員の訓練
9. 日本の研修で特に良かったこと	蚕種製造の講義と実習で繰り返し実施したが特に原種の飼育法実習が良かった	蚕種製造，蚕品種の育成の講義と実習を繰り返し実施したこと。	蚕種の講義と実習はもちろん微粒子病検査の講義と実習が繰り返し実施したこと
10. 日本での研修中当面した困難や問題点	日本のことば，宗教の面で最初はつらかった	日本のことば	日本語のことば，技術専門書の翻訳本を多くほしい。
11. その他研修全般について	日本人は優しい人達が多い。また親切で見学が参考になった	日本は美しく蚕種製造所見学が参考になった	日本は美しく日本人は優しい人達が多い。蚕種製造関係の見学が参考になった。

来日した研修員の調査表（蚕飼育）

1. 氏　　名	Iyus Ramlan Ackub（個別）	Baharuddin Adam（個別）	Bambang Hartoko（個別）	Wariso Partodinomo（個別）
2. 来日年度	１９７７年	１９７７年	１９８１年	１９８１年
3. 研修時の所属，職名	ボゴール養蚕プロジェクト，普及部，次長	養蚕プロジェクト，エンレカン支所長	蚕飼育（Bili²）カウンターパート	蚕飼育（Bili²）カウンターパート
4. 現在の所属職名	蚕飼育（Bili²），室長（チーフ），カウンターパート	蚕飼育（サブセンター），チーフ，カウンターパート	〃　　〃	〃　　〃
5. 日本での研修機関	農林蚕試，中部支場	農林蚕試，中部支場	農林蚕試，養蚕部（筑波）	農林蚕試，養蚕部（筑波）
6. 研修期間	２月～９月	２月～９月	５月～１０月	５月～１０月
7. 日本で行なった研修内容	蚕飼育，栽桑蚕品種改良，病理，土壌肥料等の実習と講義	蚕飼育，栽桑蚕品種改良，病理，土壌肥料等の実習と講義	同　　左	同　　左
8. 現在行なっている業務内容	蚕飼育の実証試験，アシスタントその他技術職員の訓練	蚕飼育の現地適用試験，アシスタントや技術職員の訓練。パイロットユニットの運営業務	蚕飼育技術の開発，実証試験。アシスタントの訓練	同　　左
9. 日本の研修で特に良かったこと	・研修計画が綿密で能率的であり，整備された研修資料を与えられた ・ＪＩＣＡや中部支場の関係者が公私にわたり良く面倒を見てくれた。	・見学，研修旅行で新技術など，生きた勉強ができた。 ・日本人の親切心にうたれた	・研修中に作業服など現物支給は助かった。 ・宿泊施設が完備し環境がよかった。 ・日本の先生は，実習，仕事を進んで研修生と一緒にされ，感心した。	・資料提供を受け勉強しやすかった。 ・講義だけでなく実習もやり勉強になった。 ・研修旅行は楽しく，農家現場や地方試験場を見て勉強になった。

（次頁へ続く）

10. 日本での研修中当面した困難や問題点	・言葉の問題で困った。日本語がもっとできたら研修の効果が更に上ったと思う。	・左に同じ ・初め大変寒くて困った。	・日本語は勉強したが，先生が難解な言葉を使われ理解しにくい。 ・教材の中に，漢字のものがあり全くわからなかった。	・日常の日本語は理解できても早口で言われるとわからない。 ・初めは食事にもなじめなかった。
11. その他研修全般	・研修が総合的に行なわれ，広く勉強できたが，もう一度蚕飼育を重点に研修を受けたい。 ・日本で習得した技術を，インドネシアで応用する努力をしている。	・左に同じ	・研修期間6ヶ月は短かい。 ・日本の技術は最高で，インドネシアの技術は最低で開きが大きすぎる。 ・1週間に土，日曜と2日間の休みは多い。 ・もう一度日本で研修を受けたい。	・研修旅行は大変良いが，飼育中にあると研修が中断されて惜しい。飼育期間の前後が望ましい。 ・いろいろな機械が高度すぎて難しい。 ・同左。

来日した研修員の調査表（病害虫）

1. 氏　　名	Hatta Madjid	Achmad Anwar
2. 来日年度	１９７９年	１９８０年
3. 研修時の所属，職名	病害虫，カウンターパート	左　同　じ
4. 現在の所属職名	病害虫，チーフカウンターパート	病害虫，カウンターパート
5. 日本での研修機関	農林水産省蚕糸試験場九州支場	左　同　じ
6. 研修期間	４月～１１月	５月～１１月
7. 日本で行った研修内容	養蚕一般と蚕桑病害虫	左　同　じ
8. 現在行っている業務内容	蚕桑病害虫	左　同　じ
9. 日本の研修で特に良かったこと	日本人の勤勉さと責任感に接したこと	左　同　じ
10. 日本での研修中当面した困難や問題点	言葉，特に専門用語の修得が難しかった。	左　同　じ 英訳のものが望まれた。
11. その他研修全般	日本での研修に大変満足しており，関係各位に感謝する。	桑害虫の研修が不足であったので現在業務担当しながら苦慮している