

TURUNAN DARI TURUNAN

NOTA

No. 37/Menko Kompag/66.

Kepada : Jth. Sdr. Direktur Utama BPU- PN Gula.  
Dari : Menko Pertanian dan Agraria  
Perihal : Rehabilitasi Pabrik2 Gula  
Ref. surat Sdr. Dir. Utama tgl. 28  
Desember 1965 No. 690/V/44/65).-

1. Ingat bahwa Kredit Rehabilitasi Pabrik2 Gula pada dasarnya harus dapat terbayar oleh kenaikan produksi (faktor : kebutuhan gula untuk konsumsi dalam negeri dan ekspor serta soal annual bankguarantee yang rupanya diajarkan oleh pihak Djepang), maka kami dapat menyetujui approach sebagai yang Saudara kemukakan dalam usaha menemukan way-out, j.l.
- menekan jumlah kredit dan
  - memperpanjang waktu pembayaran.

2. Kami setuju dengan perkiraan Saudara mengenai kenaikan produksi rata2 setahunnya sebagai akibat rehabilitasi j.l. sebesar maksimal 25% atau  $\pm 106.00$  ton. Dengan menggunakan taksiran harga yang tidak terlalu tinggi (walaupun agar lebih optimistis dari pada perkiraan yang Saudara pakai), j.l. \$ 1/ton, maka kenaikan produksi setahunnya dapat dinilai  $\pm 6.3$  djuta. Ini berarti bahwa approach tsb. diatas hendaknya dapat menghasilkan suatu angka asuransi kredit tiap tahunnya yang mendekati perkiraan nilai meerproduksi.

Atas dasar itu maka hendaknya ditetapkan ketentuan2 sbb:

a. jumlah kredit:

dibatasi maksimal \$ 35 djuta (c.i.f. termasuk technical assistance); ini mengingat bahwa penekanan lebih lanjut nampaknya sulit dapat ter-tjapai.

b. jangka waktu pembayaran kembali :

diusahakan diperpanjang sampai 2 tahun + 6 th. ; diperpanjang yang lebih lama akan membebani kita dengan bunga yang (nominal) terlalu besar.

berdasarkan ketentuan2 tsb., maka jumlah angsuran setahunnya diperkirakan dapat ditekan sehingga mendekati angka \$ 6.3 djuta tsb. diatas. Bilamana dapat dikurangkan, maka dapat diusahakan penutupannya dengan :

hasil lain dari proyek, c.q. molasse :

dapat diharapkan adanya meerproduksi molasse pula yang k.l. evenrodig dengan meerproduksi gula.

hasil diluar proyek, misalnya djagung.

Kami minta agar perundingan2 teknis dengan pihak Djepang (yang telah diketahui pula garis2 besar dari ketentuan2 tsb. diatas) dapat segera dilakukan berdasarkan pedoman2 yang kami berikan itu.

Djakarta, 31 Djanuari 1966

ttd.

( SARDJANO S.A. )

ambusani:

- Jth. Brig. Djen Sujono Ongko.
- Sdr. Pedjabat Koordinator.  
Production Sharing dan Kerdja Sama Ekonomi.

Turunan sesuai turunan.

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A LIST OF THE REQUIRED PLANTATION MACHINES BY OCTOBER, 1966

1 Alteration of the Machines by That of Operation

- \* Ridging shall be done by additional 2 row Ridger, not by Trencher Plow.
- \* Trencher Plow shall be used only for the drainage channel.
- \* Trencher Plow Large Type shall be added to dig out the ditch  
80 cmW x 60 cmH

2 The Required Machines for 2400 ha. Fields by October, 1966

	Total No. of the Machines by Altera- tion of Operation	No. of the Machines for 2400 ha. Fields by October, 1966
1. D50	17	17
2. WD50	85	60
3. Front Loader	20	-
4. High Clearance	20	10
5. Disc plow 30 x 5 for D50	14	16
26 x 3 for WD50	15	16
6. Disc Harrow 24" x 20 for D50	6	4
32" x 20 for D50	5	-
20" x 24 for WD50	14	15
7. Trencher plow for D50	2	3
" " Large Type for D50	2	3
8. Spiketooth Harrow 30" x 3 for WD50	3	4
9. Planter 2 row for WD50	4	9
10. Fertilizer distributor 3 row for WD50	10	-
11. Ridger 3 row for WD50	3	3
" 2 row for WD50	3	6
12. Rime Sower 8 feet for WD50	3	3
13. Ratooning Machine 1 row for WD50	18	4
14. Disc Cultivator/w fertilizer 3 row for WD50	22	10
15. Sub-Soiler 1 row for WD50	4	4
16. Sugar Cane Cutter	0	-
17. Rice Drill	5	5
18. Self-propelling Rice Combine	1	1
19. Side dump trailer 3 ton for WD50	30	30
20. Rice Milling Unit	1	1

21. Hand Tractor LM800	62	1
22. Broad Caster $0.3 \text{ m}^3$ for WD50	3	3
23. Sprayer 450lit. for WD50	1	1

Remarks: In the case where the Time Schedule should be amended at the Joint Committee, Number of the Machines Required for 2,400 ha. Fields by October, 1966 shall be altered accordingly.

Agenda of The Technical Meeting (Third Day)

Date & Time: 1965-12-11 9:00 a.m. - 12:00 a.m.  
Place: Oiso Long Beach Hotel  
Attendance: Indonesian (PN-GULA) Japanese (JISDECO)  
Mr. Amien Mr. Matsubara  
Col. Soenjoto Mr. Noya  
Mr. Adnan Thohier Mr. Hara  
Mr. Liem Mr. Ito  
Nr. Njoo Mr. Shimomura  
Mr. Nakanishi  
Mr. Yamashita  
Mr. Yoshida  
Mr. Ishikawa  
Mr. Yamada  
Mr. Urushihara

Interpreter: Mr. Nakajima, Mr. Takahashi  
Recorder: Mr. Saito, Mr. Imai

At the beginning of the meeting JISDECO President Mr. Matsubara, Mr. Amien, and col. Soenjoto made brief speeches as follows:

1 Mr. Matsubara's Speech

I heartily appreciate your kindness extended to JISDECO's team which has visited your country so far and also to JISDECO's Technical Assistance Team in Makariki. Considering the accomplishment of the Makariki Project for one and half year since the signing of the Contract, I can not be helped to point out the certain anxiety existing, that is, 1) lack of domestic communication in Indonesia such as among Ambon, Surabaya and Djakarta, and confusion of the command system, 2) lack of Transportation such as difficulty of hiring and making use of the Indonesian ships, 3) difficulty of supply of materials in Makariki such as shortage of Rupiah and of rice for labourers. Although when I talked over this matter Mr. Pudjono, PN-GULA President, in October, he promised me that he would handle the financial matters with Mr. Soenggono and that he would surely accomplish the Makariki Project, I could not regard the present situation as satisfactory. Thus, I have often been called up by our Government, specially Overseas Economic Cooperation Fund, and have answered many questions concerning the Makariki Project. I was requested to minutely report all contents of this Joint Committee to these people. For these reasons I wish all of you attending this meeting understand the importance of the situation facing to and discuss and study the subjects completely.

2 Mr. Amien's Speech

I take this significant opportunity on behalf of all members from Indonesia to express our heartfelt thanks for your efforts and kind invitation to Japan. Since the September 30th Incident it becomes very difficult for the Government officials to go abroad, and thus, Mr. Amat and Mr. Soenggono have not arrived here yet. They are supposed to be here on 14th of Dec., We met Minister Sadjarwo a few times before our departure and recognized that this Joint Committee is so important that we cannot afford to have it result in failure. We have to consider Sept., 1965 as the turning point for the execution of the Project and not the date of the signing of the Contract, when all land developping machines arrived at Makariki. For this matter we shall newly draw up the Time Schedule and the Shipping Schedule with the Technical Teams and both of us shall execute works accordingly. So the factory can be completed as also promised by you too to Mr. H. E. President Soekarno. We have discussed with the Technical team on this matter, reported, and received his consent from Minister Sadjarwo before leaving Djakarta. In order to smooth the erection work we have placed orders of two hundred tons (200 T) barge four (4) units, tug boat one (1) unit, crusher, and so on.

As we not used to have right to purchase such equipment, everything became clear two weeks before our departure and we could place these orders. The financial problems were solved to some extent, since we made prepayment for these equipment and obtained the foreign currency for the letter of credit in order to purchase some from the foreign country. We regards other problems shall be solved as well.

However, there is an anxiety which is how to supply rice. Since the Sep. 30th Incident not only transportation but also supply of rice became more difficult than ever. Specially it is now December because it is the time for planting rice. As I have mentioned so far, some problems are already settled, but there arise the new trouble, which cannot be overcome unless both parties cooperate to solve it.

Mr. Matsubara asked Col. Soenjoto to talk about the state of three (3) Projects being under way by PN-GULA.

3 Col. Soenjoto's Speech

These three (3) projects are as such Bone Project in Celebes with Czechoslovakia, Tjot Girek Project in Sumatra with Porland, beside the Makariki Project. All of them are executed on the government loan base and are to be completed in 1967 by Indonesian under technical assistance of the respective country. Transport of all materials and equipment shall be completed in 1966 for the Bone Project and for the Tjot Girek Project steel frame work has already started and transport of all goods shall be finished at the beginning of 1967.

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I recognize well that the Makariki Project stands in the most difficult condition because the Ceram Island is located in such a remote area as to cause difficulty of transportation. But, on the other hand, I can disclose that the Makariki Project is most luxurious because PN-GULA shall establish the radio station in Makariki and shall obtain barges for the Makariki Project. There would not be a big difference among these three (3) projects in technique. I seriously wish that Makariki Project shall be succeeded upon the mutual cooperation.

After these speeches such Joint Committee members as Mr. Matsubara, Mr. Amien, Col. Soenjoto left their seats and the technical meeting was proceeded.

#### 1 Plantation Machines

JISDECO submitted and explained to PN-GULA number of the machines necessary for farming of four thousand hectare (4000 ha) based upon the original JISDECO proposal, number of the machines necessary for digging-out of ditches as requested by PN-GULA in the preceeding day, and number of the machines required for farming of twenty-one hundred hectare (2100 ha) from October, 1966, on. Concerning digging-out of ditches, the Trencher Plow large type shall be used for a big ditch around forty hectare (40 ha) unit field, and the standard Trencher Plow for a small ditch. The Back Hoe shall be employed to dig out an irrigation and a drainage channel.

For this matter; PN-GULA asked JISDECO to figure out number of the machines under the following three (3) conditions:

- a Land development shall be started at full scale from February, 1966;
- b Since the start of the first crushing season shall be decided by the Joint Committee, it remains unsettled;
- c Cane from twenty-four hundred hectares (2400 ha) shall be processed in the first crushing season whenever it may be fixed.

PN-GULA also requested that when the afore-mentioned conditions become subject to change, number of the machines shall be recalculated accordingly. Thus JISDECO submitted and explained to PN-GULA number of three (3) conditions. PN-GULA mentioned that they will study it in detail and will discuss with Mr. Yamashita the ambiguous points if any, and JISDECO agreed to it.

#### \* Irrigation Channel and Drainage Channel

JISDECO recommended size of the irrigation and the drainage channels as follows:

Drainage Channel : 1 mH x 4~5 mW  
Irrigation Channel : 60 cmH x 1 mW

*of the required machines in consideration*

The drainage channel can be served for the irrigation channel.

\* Observation Study of Back Hoe and Hand Tractor

Although JISDECO replied to make their best to meet such PN-GULA's proposal that PN-GULA wants to observe the actual operation of the Back Hoe and the Hand Tractor, JISDECO found out upon investigation that there is no Back Hoe around Tokyo in operation and one for the Makariki Project is already packed and is in the warehouse. Thus, there is no chance to observe the Back Hoe, but the Hand Tractor is available.

PN-GULA understood it.

\* Number of Back Hoe

Three (3) sets of the Back Hoe can be used for foundation work of the factory buildings.



Date & Time: 1965-12-11, 2:30 p.m. - 6:00 p.m.  
Place: Oiso Long Beach Hotel  
Attendance: Indonesian (PN-GULA) Japanese (JISDECO)  
Mr. Adnan Thohier Mr. Noya  
Mr. Liem Mr. Hara  
Mr. Njoo Mr. Shimomura  
Mr. Nakanishi  
Mr. Yamada

Interpreter: Mr. Nakajima  
Mr. Bahrin  
Recorder: Mr. Saito  
Mr. Imai

The pending matters of the sugar processing equipment at Tretes Meeting in October, 1965, were discussed and fixed as below:

1 Clarifier

Rapi Dorr Clarifier as requested by PN-GULA is more expensive by seven-teen thousand five hundred and ninety U.S. dollars (U.S.\$17,590.00) than one laid out in the Contract Specification. Since the detailed drawings as requested by PN-GULA belongs to the technical secrecy of the manufacturer, JISDECO has to negotiate with the manufacturer under the condition that JISDECO shall purchase Dorr Clarifier. Thus, because the aforementioned price-up cannot be fixed, both parties agreed to postpone the detail technical discussion of the Clarifier later on.

2 Rotary Pressure Filter

JISDECO shall be free from obligation to guarantee the minimum Dutch Standard of Colour Normalization 25 stipulated in the Contract if the colour value of the product should be lowered by cancellation of the Rotary Vacuum Filter. There are a few items which become unnecessary by cancellation of the Rotary Pressure Filter such as:

- a Item D-25 Filtered Juice Tank
- b Item D-26 Filtered Juice Pump
- c Item I-5 Kieselguhr Melter
- d Item I-6 Kieselguhr Pump
- e Item I-27 Cloth Washing Machine
- f Item I-28 Cloth Sewing Machine

3 Raw Sugar Processing Equipment

The following equipment shall be required for processing raw sugar.

- a Chute between F-10 A/B Fore Elevator:
- b Extension of G-1 Wet Sugar Elevator 9m to 14m

- c No.1 Raw Sugar Belt Conveyor between G-I Wet Sugar Elevator and G-II Sugar Bin by skipping over G-II Sugar Bin in order to distribute raw sugar to the Sugar Bin.
- d Hoppers (3 sets) placed under the Sugar Bin for charging raw sugar to jute bags.
- 4 Transport of Filter Cake out of the Factory  
A screw conveyor with a electric motor (18mLx 2 sets) is decided to use for this purpose.
- 5 Approval for Detailed Design  
Approval for the detailed design means that for catalogue or its equivalent in substance, which have to be approved by PN-GULA, such as of pumps, vacuum pumps, screens, Maxwell-boulogne weigh bridges, etc.
- 6 Cane Wagon  
Except forty (40) sets of the Cane Wagon transporting earth and sand, PN-GULA has not approved it yet because there is a problem of the frame strength.
- 7 Harvester and Cane Wagon  
MF 515 Harvester which PN-GULA intends to buy has mechanism to load by elevator automatically-harvested cane into a trailer pulled by the Harvester, on which rail is placed to carry the Cane Wagon. The Cane Wagon filled with cane shall be moved to the main rail by sloping rail attached to the trailer. Thus, the present structure of the Cane Wagon shall not fundamentally amended by applying this Harvester.
- 8 Continuous Blow-off Equipment  
A plan to mount the Continuous Blow-off Equipment is cancelled. PN-GULA asked whether there are equipped a steam flow meter and a water feed meter per each unit of the boilers, or not, and JISDECO confirmed it.
- 9 Cush-Cush Elevator  
Mixed Juice shall be sieved by the vibrating screen and the sieved cush-cush shall be returned to the intermediate carrier between the crusher and the first mill by the Cush-Cush Elevator.  
JISDECO, however, proposed that since there would be some trouble in layout if this method shall be adopted, JISDECO should like to study it, and PN-GULA accepted it.
- 10 Steam Flow Meter  
A Steam Flow meter shall be attached to the mill turbine, however, provided that its price is not included in the turbine price.
- 11 Mill Roll Revolution Counter  
The recording instrument of the mill roll requested by PN-GULA was

decided as the Mill Roll Revolution Counter, of which price is additional.

12 Full Automatic Synchronizer

PN-GULA withdrew their proposal to attach the Full Automatic Synchronizer to the turbo-generator, a semi-automatic will be provided according to the original plan.

13 Centrifuge

D-fore Centrifuge (7 sets) shall be equipped with all automatic mechanism, of which price is additional.

14. Piping Materials

JISDECO explained that in comparison with the planned layout of the tanks at the signing of the Contract, there is an addition of Piping Materials by the decision of layout of the tanks both in Makariki and in the factory site.

Item S-13 b & c of the Contract Specification shall be amended as below:

b Piping materials for Molasses, for storage tank at Amahai

Contract	Amendment	Addition
2.4 ton	26 ton	23.6 ton

c Piping materials for fuel oil, for storage tank at the yard

Contract	Amendment	Addition
3.1 ton	4.9 ton	1.8 ton

JISDECO promised that the detail shall be submitted to PN-GULA later.

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Agenda of The Technical Meeting (Fourth Day)

Date & Time: 1965-12-13, 9:40 a.m. - 6:00 p.m.

Place: Oiso Long Beach Hotel

Attendance: Indonesian (PN-GULA)

Mr. Adnan Thohier

Mr. Liem

Mr. Njoo

Japanese (JISDECO)

Mr. Noya

Mr. Hara

Mr. Nakanishi

Mr. Urushihara

Mr. Ishikawa

Mr. Yamada

Interpreter: Mr. Nakajima

Mr. Takamiya

Recorder: Mr. Saito

Mr. Imai

1 Bagasse House

- a 3 bagasse press<sup>es</sup> shall be placed in the Bagasse House.
- b A bagasse bale carrier is cancelled.
- c Wainscot (120 cmH) shall be made by horizontally piling blocks in order to establish vents.
- d A door shall be established at three (3) parts, such as one on the boiler house side and two on the other side *near the bagasse presses.*
- e Other parts are fixed according to JISDECO's drawing.

2 Locomotive House

PN-GULA requested as below:

- a Monitor roof shall be employed;
- b The Locomotive House shall be with wall;
- c There shall be open under the eaves;
- d There are three (3) lines of rail in the Locomotive House.

For these proposals, JISDECO explained that these points were already approved in the Preliminary Design and in the General Layout in conformity with JISDECO's plan. But since these proposals are fundamental, JISDECO proposed to keep them pending and PN-GULA agreed to it.

3 Rice Mill House and Rice Storehouse

- a Upper windows shall be pivoted windows.
- b Thin steel plate for metal work shall be #28 and be according to the drawing.
- c Other parts shall be in conformity with JISDECO's plan.

4 Tractor Repair Shop

PN-GULA proposed that wire netting under the eaves shall be "metal-deployer" ~~which is made by punching iron sheet and~~ of which mesh is about three centimeters (3 cm).

JISDECO replied that if the "metal-deployer" could be found in Japan, JISDECO should use it. Other points are approved by PN-GULA.

5 Cement Slate

PN-GULA asked that although PN-GULA had sent a letter proposing that thickness of the Cement Slate of the buildings should be changed from three millimeters (3 mm) as fixed in the Contract to six millimeters (6 mm), what is the answer of JISDECO on this matter. JISDECO replied that thickness is six millimeters (6 mm).

6 Timber

According to JISDECO's design ridge, eaves, and gable of each building shall be to use timbers. Although PN-GULA agreed this plan, PN-GULA proposed that this problem shall be conferred with Joint Committee members since it involves in monetary problems.

7 Cane Carrier Shed

a A drawing of its building is approved.

b Although a driving motor of the Cane Carrier is 22 kW motor, PN-GULA agreed to adopt a combination of a cage motor and the "Vari-tex" speed controller because in addition to the contents of JISDECO's letter No. LT-25 dated December 9th the combination of the cage motor and the "Vari-tex" speed controller is better to overcome difficulty of remote control.

c Three panels shall be placed in the milling house such as one for control of the Cane Wagon Tipper and the Feeding Table, one for the Cane Carrier placed where labourers can watch cane dropping from the Cane Carrier to the Crusher, and the other for the whole mill rollers placed around the center area of five (5) milling units.

8 Foundation of the Buildings

PN-GULA explained their opinion on this matter as such that as according to the geographical survey data of the University of Bandung there would be a solid stratum somewhere from three meters (3 m) to five meters (5 m) deep, PN-GULA shall encounter to trouble by preparing twelve meters (12 m) piles when become unnecessary. If such piles are by all means necessary, "Stausz" piles or well foundation shall be employed in order to pay down

the construction expenditures and to reduce the construction period. PN-GULA submitted to JISDECO two (2) reports about piling, one made by the Laboratory of the University of Bandung, and the other made by Adhikarya, a governmental constructor. Both reports concluded that piling is unnecessary. PN-GULA said that they submitted these reports as the Basic Data. JISDECO proposed that this matter shall be discussed in the following day.

- 9 Cargo-working by Japanese in Ambon and in Makariki, Supplied Machines, and Demurrage

JISDECO said that they would like to explain the following shipping problems before taking up to the Joint Committee:

- a As JISDECO practiced the following services in order to smooth the cargo-working of the first, second, and third shipment, JISDECO proposed to add the expenses for these services to the freight in the credit:

- 1) Cargo-working Assistance by Japanese in Makariki

First shipment : 3 persons about US\$2,180.-

Second shipment: 2 persons about US\$1,800.-

Third Shipment : Since the third ship has not returned yet, precise calculation is not possible. According to rough calculation, it would be about US\$2,000.-

- 2) JISDECO had handed to PN-GULA in Ambon materials and equipment used for cargo-working, of which list was submitted to PN-GULA. According to the list the total amount shall be US\$3,150.-

- 3) Demurrage

First Shipment 1.4166 days x 1,100\$/day = US\$1,558.26

Second Shipment 1.944 days x 1,100\$/day = US\$2,138.40

Third Shipment unknown

JISDECO submitted the contract between JISDECO and a shipping company upon PN-GULA's request.

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Agenda of The Technical Meeting (Fifth Day)

Date & Time: 1965-12-14, 9:20 a.m. - 5:40 p.m.  
Place: Oiso Long Beach Hotel  
Attendance: Indonesian (PN-GULA) Japanese (JISDECO)  
Mr. Adnan Thohier Mr. Matsubara  
Mr. Liem Mr. Noya  
Mr. Njoo Mr. Hara  
Mr. Kawamura  
Mr. Nakanishi  
Mr. Yamashita  
Mr. Ishikawa  
Mr. Yamada  
Mr. Seto (Afternoon only)  
Mr. Yoshida ( " )  
Mr. Takahashi ( " )  
Mr. Ikeda ( " )

Interpreter : Mr. Nakajima  
Recorder : Mr. Saito  
Mr. Imai

1 Centrifuge

As speed control of the Centrifuge planned by JISDECO is the inching control system, PN-GULA worries about a shock at the time of "on-off" switching. For this JISDECO answered as below:

- a Number of "on-off" switching shall not be so many as to worry the shock;
- b Since starting current of the multi-poles motors to be used is equal to the rating current, the shock at the time of "on-off" switching shall be negligible;
- c The variable speed control shall be more economical in the magnet control than in the frequency control;
- d Number of revolution of an induction motor shall be differed by torque. There would not be a big difference between a constant speed motor and motor with the inching control system because torque at the time of charge and discharge of the Centrifuge shall be changed a great deal, and, thus, the motor with the inching control system shall be rather suggested.

JISDECO explained that all full automatic Centrifuges adopt the motor with the inching control system in Japan. Both parties agreed that this matter shall be determined after observation of a factory in Japan, since only the constant speed motor are used in Indonesia.

## 2 Yard Piping

According to the promise made by JISDECO on the third day, JISDECO submitted and explained the related drawing to the yard piping, and the following matters were resulted in:

- a JISDECO shall calculate the necessary quantity of piping for the tanks in Makariki according to the submitted drawing;
- b Piping shall not be laid in the cemetery.

JISDECO explained that the piping quantity submitted on the third day was drawn out of this drawing.

## 3 Milling Station

- a JISDECO shall later submit to PN-GULA a general machine arrangement of the Milling Station with the Vibrating Screen and the Cush-Cush Elevator on the assumption that there would be a pit on the floor of the mill house.
- b Details of the machines in the Milling Station, vibrating screens, and so forth shall be discussed after observation of Kobe Steel Works.

## 4 Thin Juice Screen

- a The Thin Juice Screen shall be of the Dorr type.
- b Since a screen surface is expensive, its spare shall be purchased with the Thin Juice Screen proper.

## 5 Packer Scale

The following alteration was decided without price amendment:

- a The Packer Scales (3 sets) with a capacity of 150 bags/hr. shall be supplied, however, provided that one (1) set out of them shall be stored in the warehouse as stand-by;
- b Both parties confirmed that the check Scale shall be three (3) sets. As the scale accuracy according to the Indonesian Regulations concerned shall be point six percent (0.6%) allowance, the specification submitted by JISDECO showing point two percent (0.2%) allowance was approved;
- c There should be a red mark within a scope from zero (0) to plus-minus fifty gram ( $\pm 50$  g) on the scale plate.

## 6 Machine Arrangement

PN-GULA made the following comments on the drawing submitted by JISDECO:

- a Location and size of the Laboratory Room are accepted;
- b The Chapel is accepted with 5m x 5m;



- c The Motor Room is accepted;
- d The Engineer Room is 3 m x 10 m and is extended to two (2) spans as shown in the drawing;
- e Other matters are approved according to the drawing of JISDECO.

7 Planter

PN-GULA approved the drawing and specification submitted by JISDECO with the following comments:

- a The Planter can avail for four (4) sorts of planting in number of cane such as ninety (90), one hundred and five (105), one hundred and twenty (120), and one hundred and thirty-five (135) in the ridge of fifty meters (50 m);
- b The box to which cane shall be loaded shall be capable of planting two hundred and seventy-five (275) liter of cane, and the box shall meet this requirement.

8 Cultivator

The box can hold thirty liter (30 l) of fertilizer. Other matters are approved.

9 Harvester & Trencher Plow

These items are approved according to the drawing and specification of JISDECO.

10 Foundation of the Buildings

As the result that JISDECO explained their interpretation and judgement on the geographical survey report made by the Laboratory of the University of Bandung, took account of PN-GULA's opinion, and discussed well, both parties came to the conclusion that because the survey report did not investigated soft stratum between three point five meters (3.5 m) deep and ten meters (10 m), both parties cannot decide the necessity of piling. Therefore, both parties decided the following matters as the most reasonable and practical method:

- a The factory site shall be decided at B45 and B47 as mentioned in the survey report;
- b The place where the buildings are actually constructed shall be decided in the factory site, and a well shall be dug out there;
- c A piling test shall be executed in "the place", of which method shall be indicated by JISDECO;

d The unmixed soil shall be gathered, of which method shall be instructed by JISDECO;

g So as to execute the afore-mentioned matters without delay, a JISDECO official, Mr. Nakanishi, shall deliver a letter of order in that direction made by Mr. Adnan, Project Manager, with him by the fourth shipment.

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Agenda of The Technical Meeting (Second Day)

Date & Time: 1965-12-10, 9:00a.m. - 7:00 p.m.  
Place: Oiso Long Beach Hotel  
Attendance: Indonesian (PN-GULA) Japanese (JISDECO)  
Mr. Adnan Thohier Mr. Noya  
Mr. Liem Mr. Hara  
Mr. Njoo Mr. Ito  
Mr. Kawamura  
Mr. Nakanishi  
Mr. Yamashita  
Mr. Yoshida  
Mr. Ishikawa  
Mr. Yamada  
Mr. Shimomura (afternoon only)  
Mr. Seto ( " )

Interpreter: Mr. Nakajima  
Recorder: Mr. Saito  
Mr. Imai

1 Plantation Machines

PN-GULA mentioned that since PN-GULA has not experienced such large-scaled land development as the Makariki Project in calculation of Plantation Machines and in preparation of the land development schedule and since there exists only a desk plan now, PN-GULA would like to fix only the total credit amount and to amend numbers of the Plantation Machines according to the situation in Makariki. Thus, both parties confirmed the required numbers and types of the Plantation Machines up to September, 1966 under the following conditions ~~(about difference of~~  
~~view points between PN-GULA and JISDECO)~~:

- a Number of the working days shall be unchanged;
- b Capacity of the machines shall be calculated upon the actual results in Makariki;
- c Efficiency of the machines shall be decided upon ability of workers and the nature of the soil;
- d Working hours of the machines shall be ten (10) hours per day at maximum.

\* WD-50

Sixty (60) units of WD-50 does not mean the change of numbers from eighty-five (85) to sixty (60), but stands for necessary numbers up to September, 1967.

\* Side Dump Trailer

- i Dumping shall be done one by one
- ii Coupling of two (2) or three (3) trailers shall be possible only for the purpose of transport.
- iii Dumping shall be possible only to the left.
- iv A chain and a hook shall be respectively attached to the trailers when coupling.
- v Since eight (8) tires per each unit is annually required, that is, it is necessary to change tires twice a year for each unit, this required spare tires must be obtained.

\* High Clearance Attachment

Although JISDECO misunderstood that this item is kept pending, PN-GULA has already approved it.

\* Disc Harrow 32" x 20

This item is kept pending.

\* Fertilizer Distributor

This item <sup>is</sup> ~~shall be~~ kept pending.

\* Sugar Cane Cutter

This item shall be decided at the Joint Committee

\* Back Hoe Attachment and Hand Tractor

This item shall be fixed after PN-GULA visits and studies the actual operation in Japan.

\* Disc Cultivator

- i There are six (6) chiesels of the knife edge type which go into as deep as the cane root.
- ii Disc cultivators shall be three (3) rows and so be weeders.
- iii Arrangement of the disc cultivators shall be made either one (1) row type or zigzag type.
- iv Diameter of tine shall be 8 mm~10 mm, and pitch be 6 cm, and center pitch be 15 cm.
- v Clearance shall be varied by three (3) pitches such as 650 mm, 700 mm, and 750 mm.

\* Axe

This item is cancelled.

\* Front Loader Attachment

This item is cancelled.

\* Planter

Two (2) rows planter with disc openers at the front shall be employed.

\* Pulling Chain

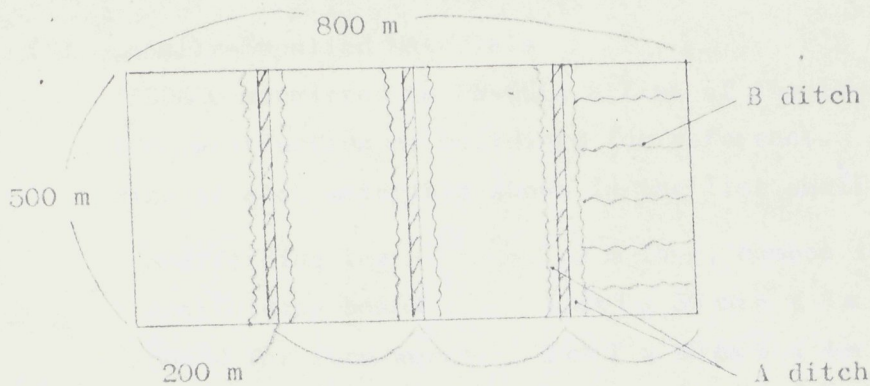
The pulling chain without Hi-Ball shall be added by two (2) sets and be shipped by the fifth shipment.

\* Number of D-50, Ridger Trencher, <sup>and</sup> Back Hoe

This matter shall be further discussed in the following day since there is difference of standpoint between PN-GULA and JISDECO concerning field area and area subject to operation by these machines which are the bases for calculation of numbers of these machines.

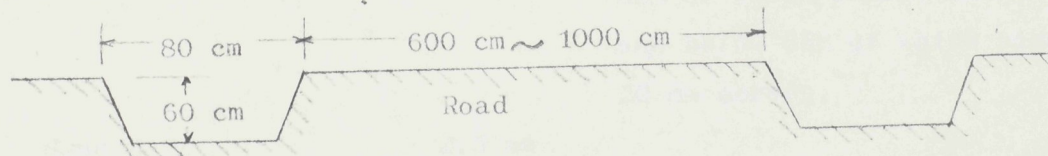
\* System of Agricultural Operation

In addition to JISDECO's plan of cane cultivation the drainage ditches inside unit field (500 m x 800 m) as shown below are considered necessary for full growth of cane:



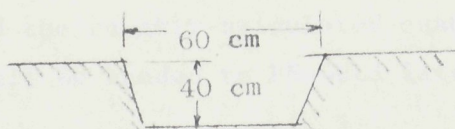
According to the discussion between Mr. Adnan and Mr. Yamashita on 15th, Dec., 1965, the afore mentioned drainage ditches shall be executed in the Ratooning fields as well as <sup>in</sup> the first planting field.

Section of A ditch shall be,



B ditch shall be dug out every fifty meters (50 m), altogether nine (9) ditches, in wet land and every one hundred meters (100 m) in dry land.

Section of B ditch shall be,



Both A and B ditches shall be for the temporary use, and A ditch shall be dug out right after soil preparation and B ditch right after soil

covering. Therefore, Trenchers which are to be used for ditches of seed beds are employed to dig out the drainage ditches, and Ridgers 2 rows shall be added for ditches of seed beds.

Operation	Machines
Seed Bed	Ridger 2 rows
Drainage Ditch (A)	Trencher Plow (L Size)
Drainage Ditch (B)	Trencher Plow

\* Planting shall be at least made on the fields of 2100 ha. at one time in October, 1966. The required number of the Plantation Machines shall be discussed in the following day because there is discrepancy as to the system of agricultural operation and its interpretation between both parties.

## 2 Building

### (1) Locally-Supplied Materials

JISDECO submitted to PN-GULA a list of the locally-supplied materials for construction of buildings for reference.

Size of each materials shown in the list shall be as follows:

Scaffolding log : 7.2 m long, bamboo is also approved.

Scaffolding board : 4 cm T x 30 cm W x 4 m L

Board for form work: 2 cm T x 20 cm W x 4 m L

Timber for form work: 9 cm x 9 cm x 4 m L

Broken Stone: 15 cm dia.

Gravel: For concrete: 25 mm dia.

For concrete block : 10 mm dia.

Remark : According to JASS,

25 mm dia. gravel means one over 85% of which passes 25 mm screen and below 85% of which passes 20 mm screen.

Sand : 2.5 mm

Timber for carpentry work:

Already submitted at Tretes, October, 1965.

The table already submitted to PN-GULA is cancelled. A list of materials and the roughly-calculated quantity necessary for machine foundation shall be handed to PN-GULA later.

JISDECO promised that JISDECO shall send a test data of the primary stones for making the broken stone gathered at Saparwa Island to PN-GULA and to JISDECO's chief engineer Mr. Tada in Makariki.

(2) Construction Machines

A\* PN-GULA explained that the following machines are now available in Makariki or have already placed an order:

- a Guy Derricks 4 units with a lifting capacity of 20 tons and with 37 mH mast are now in Makariki;
- b Stone Crusher 1 unit with a capacity of 20 T/hr has already placed an order;
- c Concrete Mixer, three (3) of which came from Japan and are now in Makariki, and PN-GULA has placed an order of the Concrete Mixer 3 units with a capacity of 500 l;
- d Oxygen Plant with a capacity of 19 m<sup>3</sup> is now stored in Djakarta.

There are none of the construction machines other than those aforementioned and are no materials for the temporary use. It was a mistake that PN-GULA was able to obtain materials for the temporary use in the course of discussions of the Contract. Thus, JISDECO submitted to PN-GULA a list of these materials other than those shown in the Contract, and shall later hand a price list of these materials. PN-GULA mentioned that although small materials laid out in the list could be supplied anyhow by PN-GULA, big materials have to be purchased. Therefore, as this matter shall be discussed at the Joint Committee, both parties shall explain the situation to Joint Committee members beforehand.

B PN-GULA and JISDECO discussed about execution of the construction works as follows:

- a Since PN-GULA does not have a transit compass, PN-GULA requested JISDECO to ship one (1) set of it by the fourth shipment. For this JISDECO answered that since JISDECO has already applied and received the export license the price shall not be shown in the bill of lading, but that JISDECO shall make <sup>their</sup> ~~his~~ best effort to meet PN-GULA's proposal.

JISDECO explained that at least four (4) sets of level are necessary for construction, installation, and land development.

b Earthwork

Back Hoe and Bulldozer shall be used for this purpose.

c Concrete Work

JISDECO explained that the concrete work of the floor of the second stories and the beam of the second and the third stories

shall require a concrete tower, which can be used for lifting of concrete blocks, mortar, and so forth. PN-GULA replied that it is up to the price.

d Treatment of Reinforcing Bars

Cutting and bending shall be done by the workers.

e Steel Frame Work

As the steel frame work of the main house cannot be done by the guy derrick with 37 mmH mast, the mast has to be extended to 41 mH by adding another mast. JISDECO explained that a guy derrick and a truck crane shall be required for handling of the steel frames.

f Electric Power for Construction and Temporary-Use Wire for Lighting

Since the stock materials are short, PN-GULA considers preparation of them.

g Water Supply at the Construction Time

A pump shall be picked up out of the Contract, and old pipes or bamboo shall be used for substitution of pipes.

h JISDECO does not include any erection materials and equipment except Item V in the Construct Specification such as piping, electric materials, building construction materials and so on.

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## Agenda of The Technical Meeting (First Day)

Date & Time: 1965-12-9, 2:40 - 6:00 p.m.

Place: Oiso Long Beach Hotel

Attendance: Indonesian (PN-GULA)

Mr. Adnan Thohier

Mr. Liem

Mr. Njoo

Japanese (JISDECO)

Mr. Noya

Mr. Hara

Mr. Ito

Mr. Kawamura

Mr. Nakanishi

Mr. Yamashita

Mr. Ishikawa

Mr. Yamada

Mr. Urushihara

Interpreter: Mr. Nakajima

Recorder: Mr. Saito

Mr. Imai

### 1 Opening of The third Joint Committee

Both PN-GULA and JISDECO acknowledged that it is very significant and important for the Makariki Project to hold the Third Joint Committee at this time, that is, since there is a considerable time lag of the work at Makariki from the Time Schedule fixed at Tretes in February, 1965 due to the Malaysian Problem and such unusual political situation as the September 30th Incident on the Indonesian side, success or failure of this Committee affects the achievement of the Makariki Project a great deal.

### 2 The Technical Meeting

Both parties agreed that the Technical Meeting studies, determines the technical problems before the opening of the Joint Committee, of which schedule was agreed. Subjects for the technical meeting are fixed upon some amendment and addition to JISDECO's idea.

### 3 Time Schedule

JISDECO submitted and explained the amended Time Schedule aiming to start production in October, 1967, taking consideration of the available information about Makariki, and employing such method as to install machines and equipment parallel to construction of buildings.

PN-GULA asked the following questions as to the amended Time Schedule:

- a Sufficient Rupiah must be obtained; which will be discussed deeply with PN-GULA Director of Finance.
- b Whether or not can makers deliver the machines and equipment according to the amended Time Schedule?
- c Although installation period of machines in the milling station and the electric power house is shortened, why does foundation work period become longer?

Concerning b, JISDECO answered that it is possible to deliver the machines and equipment according to either the amended Time Schedule or that of Tretes Meeting, and PN-GULA understood it.

Concerning c, JISDECO explained that foundation work is extended due to piling work and installation work is shortened because it shall be executed in parallel by many groups of labourers, thus, if the labourers can be divided into much more groups, installation work shall be further shortened. Pn-GULA understood it.

#### 4 Piling Work

PN-GULA and JISDECO came to the completely different conclusion concerning inevitability of piling from the geological survey data made by the University of Bandung, JISDECO understood necessity of piling and put it in the amended Time Schedule because the data may be read that as there would be a clay stratum up to ten meters (10 m) depth subsidence by compression of clay may be occurred, and as there would be disproportioned distribution of a sand stratum, subsidence may unevenly occurred.

JISDECO explained that assuming that a piling machine can drive six (6) piles per day, three (3) piling machines should be obtained because seven hundred and seventy-four (774) piles for the main house shall be driven in sixty-five (65) days by two (2) piling machines and by the remaining one machine, ninety (90) piles for the boiler house in fifteen (15) days, thirty (30) piles for the electric power house in five (5) days, and one hundred and forty-eight (148) piles for the milling house in twenty-five (25) days. A pile is average twelve meters (12 m) long and the piling machine has a three tons (3 T) hammer.

JISDECO explained that JISDECO shall send seven hundred (700) piles to Makariki at PN-GULA's expense and the remaining piles shall be made at site in order to follow the amended Time Schedule.

PN-GULA mentioned that there would be no need of piling according to the data and also a consolidation test had already carried out and shown that there would not be any possibility of occurrence of a big

uneven subsidence and if any, it would be about three centimeters (3 cm) at maximum. PN-GULA said that if JISDECO, nevertheless, worries about subsidence, test piling or digging-hole shall be suggested.

PN-GULA would not be glad to have unnecessary piles in the case where PN-GULA should prepare all these piles. Thus, PN-GULA suggested that since location of the factory site and fields may be changed after the test piling, the Time Schedule shall be discussed after the test piling. There are two different conclusions from the geological survey made by the University of Bandung such as:

- a PN-GULA judged that piling is not necessary and if necessary this project should be further delayed;
- b JISDECO judged that piling is necessary, however, JISDECO submitted to PN-GULA the amended Time Schedule which shows the possibility of start of the first crushing season in October, 1967, even if piling shall be executed.

From the afore-mentioned situation, both parties agreed to decide that ten (10) concrete piles shall be sent to Makariki by the fourth (4th) shipment and the test piling at site shall be done by a piling machine with a capacity of 2 ton/ 12m owned by PN-GULA in Makariki.

The foundation of the main factory will be discussed in detail on the next meeting.

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