



Balittan - Sukarami

P.O. Box 34 Padang

West Sumatra, Indonesia

711-0111-1111
Balai Penelitian Tanaman Pangan Sukarami

Sukarami Research Institute For Food Crops (Sarif)

42685

M I N U T E S O F
SARIF SEMI - ANNUAL MEETING

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S U K A R A M I

MARCH 23-24, 1984

Project No. 497 - 0263

(USAID Loan No. 497-T-048)

SARIF SEMI-ANNUAL MEETING -- SUKARAMI
MARCH 23-24, 1984

Attendance:

1.	Dr B.H. Siwi	....	Fuslitbangtan(CRIFC),Bogor
2.	Mr Anwar Said	....	" " "
3.	Mr Djam'an	....	" " "
4.	Mr Wikarna	....	" " "
5.	Mr D.E. Sianturi	....	" " "
6.	Dr William P. Fuller	....	USAID - Jakarta
7.	Mr K.A. Prussner	....	" "
8.	Mr A.R. Hurdus	....	" "
9.	Mr J. Sperling	....	" "
10.	Mr Suntana	....	TEAM-4, Jakarta
11.	Mr Harry Irwardi	....	" , Padang
12.	Dr A. Syarifuddin K.	....	SARIF - Sukarami
13.	Mr Harmel	....	" "
14.	Mr Azran Tanjung	....	" "
15.	Mr Adly Yusuf	....	" "
16.	Mr Ketut Tastra	....	" "
17.	Mrs. D. Syarifuddin	....	" "
18.	Mr Syahrial Alimin	....	" "
19.	Mr Syafnuddin Ibka	....	" "
20.	Dr K.O. Rachie	SARIF/IADS - Sukarami
21.	Mr J.D. Laywick	" "
22.	Dr A. Jugujinda	" "
23.	Mr P.S. Srinivasan	" "

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MEETING: FRIDAY, MARCH 23, 1984

Introductory Remarks:

First semi-annual meeting for the year 1984 was held at the headquarters of SARIF, Sukaramei, March 23-24, 1984, to review the quarterly reports for the period: July-September and October-December, 1983, and to discuss other related matters of the Project.

Dr Syarifuddin welcomed all the participants attending the semi-annual meeting, particularly the four-member team from USAID-Jakarta led by Dr William Fuller. In view of the two important national-level meetings held here in Sukaramei during February/March, 1984, he regretted that it was not possible to hold this semi-annual meeting much earlier. It is heartening to note that this is the first SARP semi-annual meeting held at the newly-constructed guest house of the SARIF headquarters in Sukaramei.

Dr Siwi, Director-CRIPC chaired the session.

Minutes of the present meeting are summarized below.

1. Approval of Minutes of the Second Semi-Annual Meeting held in Fuslitbanatan, Bogor, August 3-4, 1983.

With the concurrence of all participants, minutes of the second semi-annual meeting for 1983 was approved by the Chairman.

2. The SARIF Third Quarterly Report - 1983.

There was no comment on the SARIF third quarterly report - July-September, 1983.

3. The SARIF Fourth Quarterly Report - 1983.

3.1. Research Highlights. In the absence of Mr Zainal Lamid, who is undergoing English language training in NAR-II, Bogor, Dr Syarifuddin presented the salient features of the experimental results for the second semester, July-December, 1983. His report was augmented by Dr Aroon J. and Mr Istut Tastra which are summarized below.

Dr Syarifuddin stated that the significant results of the activities during the second semester are highlighted in (a) Agro-Economic Studies; (b) Maturing Technologies; and (c) Program Advances. He briefly explained salient features of these three relevant topics.

Agro-Economic Studies: In West Sumatra, the use of small-scale mechanical equipment for farm operations is beginning to increase. With the collaboration of IRRI's agricultural engineering program in West Sumatra, the use of mechanical threshers and small tillers are showing profitable returns, and some farmers are loaning their machines, especially threshers on custom-hiring basis.

Farmers growing corn under upland conditions in ~~North~~ Sumatra are realizing average yields of 3 tons/ha with high levels of fertilizers and other inputs. The availability of seed is the major constraint in increasing the area of production for palawija crops.

Mr Alan Hurdus wanted to know how palawija seeds are distributed. He pointed out that the flow of seeds from one place to another seems to be working satisfactorily in Jawa (Jabal). Dr Rachie said that the problem is particularly

acute for soybean seeds since they remain viable only 2-3 months under ambient conditions in humid-tropics. Even though the farmers are keen to improve soybean production in Sumatra, their major problem is the availability of quality seeds according to Dr Syarifuddin. Moreover, imported seeds are not of good quality. While replying to a query by Mr Hurdus on the status of corn seeds, Dr Syarifuddin said that the quality problem is not acute as compared with soybean. Mr Hurdus mentioned that the availability of chemicals should not be a problem. From his experience, Dr Syarifuddin stated that farmers in Aceh particularly feel that required inputs are often not readily available when needed.

Maturing Technologies: Blast disease and aluminium toxicity are the major constraints in upland rice production in West Sumatra. In spite of these difficulties, Dr Syarifuddin mentioned that the SARIF has developed several promising breeding lines which are now in final stages of testing. Dr Syarifuddin also stated that upland rice is also attacked by a new disease, brown spot, in some areas, and SARIF will need to work actively on this problem in the future.

In addition to Batang Agam, a cold-tolerant rice variety released last year by SARIF, two more new promising lines are likely to be released during 1984. Dr Syarifuddin feels that these two new cold tolerant rice varieties will prove better than Batang Agam because of their resistance to blast disease. Mr Harmel added that these two new lines are being tested at 15 locations but their performance has not been assessed.

Dr Fuller inquired about the procedures for releasing seeds to the farmers. Dr Syarifuddin informed him that the promising lines are tested in experiment stations and on farmers' fields and then distributed to seed-growers for bulk seed production. With regard to seed production, Dr Siwi explained that seed multiplication centers are established in several provinces under the National Seeds Corporation and the certified seeds are distributed to the farmers. In addition, some progressive farmers are also encouraged to produce seeds for distribution. Dr Syarifuddin pointed out that Aceh will become the major production center for soybeans in view of the suitable soil-climatic conditions prevailing there.

Mr Hurdus asked about the usage of herbicides under zero-tillage cultivation. Dr Syarifuddin replied that SARIF has conducted an experiment with the use of Gramoxone and the yield difference is very low, but it is also toxic. He said that Mr Zainal Lamid is working with different herbicides, and found that Lasso seems to be effective for post-planting and pre-emergence soybeans. Dr Siwi observed that weeds increase rapidly in minimum tillage soybeans, especially after rice. In Aceh, mulching has increased yield levels and reduced weeds, but zero-tillage needs to be studied where there is a problem of weeds.

Even though wheat is not the major concern of SARIF, Dr Syarifuddin stated that one of the SARIF staff doing his Ph.D. at UPLB-Philippines conducted his thesis studies on this crop grown at different elevations in West Sumatra.

Two experimental results at Sukarami seem to be encouraging and better than at the other sites. Mr Prussner inquired whether wheat might be used as palawija crop on a national scale. Dr Syarifuddin replied that it is planted mainly to increase awareness and interest of the nearby farmers. Dr Siwi explained that this study is now in a preliminary stage, and collaboration with CEMMYT is being sought for conducting trials at suitable sites.

Dr Syarifuddin then explained the steps taken by the extension staff to control the brown planthopper in the farmer's fields. Apparently, this pest will need to be controlled on a community basis on account of its high mobility.

Dr Aroon briefly summarized the different agronomic experiments including the INSPFER trials being conducted in collaboration with IRRI.

Dr Rachie mentioned that plastic covering on chillies grown on high ridges appears useful as it prevents the spreading of diseases and other problems. This practice developed at SARIF may allow farmers to grow chillies during off-season.

Mr Ketut Teatra described some important aspects of cropping systems in Sumatra and stressed that the combined use of livestock, fisheries, and tree-crops is the best approach to increasing farmer's productivities and income.

Dr Syarifuddin emphasized that the future goal of cropping system research will be to integrate all aspects of production including the availability of suitable varieties

fertilizers, insecticides, pesticides and other inputs thereby allowing farmers to grow crops throughout the year and increase their incomes to about US\$2500 per family farm.

Dr Siwi urged SARIF to publish it's results in scientific journals within the country and abroad. He also stressed the importance of including these papers as soon as possible, and mentioned that AARD is now seeking articles for publishing in their Crop Science Journal to be printed in June, 1984. Dr Syarifuddin said that SARIF has already published three issues of the SARIF Journal. "Pemberitaan Penelitian Sukarami" containing research articles in both English and bahasa Indonesia. At present he has received more than 20 articles being processed for editing and publishing. He also stated that SARIF would certainly like to utilize the services of the Editor/Information Officer and other senior scientists available at CRIFC-Bogor for their guidance and help in publishing scientific articles.

Dr Fuller was anxious to know how experimental results are being communicated to extension workers and farmers. Dr Syarifuddin replied that packages of practices based on experimental results are periodically discussed at regional meetings arranged by the Department of Agriculture and Extension Directorates and that farmers are being informed regularly of latest developments through field-day demonstrations and radio broadcasts.

3.2 Manpower Resources and Staff Development.

Mr Srinivasan presented the report on manpower resources and staff development. SARIF's total staff as of December 31, 1983 is 475 which includes 218 regular and 257 temporary staff. Seventeen SARIF staff are continuing their studies for the M.Sc. (12 in Indonesia, 3 at UPLB-Philippines, and 2 in the USA); and 7 are working on their Ph.D.s (4 in Indonesia; and 3 at UPLB). Eleven SARIF staff have completed short-term training (non-degree research and in-service training) at different international agricultural research centers. A detailed list of all training courses offered to SARIF staff from the beginning of the project is summarized in Appendix III of the 1983 second semester report presented to the present meeting. Dr Syarifuddin announced that one of the Ph.D. candidates in UPLB, Mr Rasyidin Aswar, has successfully completed his doctorate degree requirements and will return to Sukarani the end of April, 1984.

Dr Kachic mentioned that the three-long term trainees under USAID-Loan Fund's in UPLB-Philippines presently doing their Master's degree will be transferred to MAR-II AARD effective from April 1, 1984. In addition, two more Master's candidates were processed by SARF for admittance to Sam Houston State University (Texas, USA), and then transferred to the MAR-II project (Fall Semester, 1983).

Dr Syarifuddin mentioned that Mr Made Oka, MS candidate at UPLB has been accepted for the Ph.D. program at the same university during this year. He also informed the meeting that Andalus University is initiating a new program of graduate

courses beginning in September, 1984. He had also discussed with the concerned officials on the Committee of Manpower Development (LITBANG and MAR-II) about the possibility of getting slots for Master's degree training at Andalas University for SARIF staff.

Replying to a query from Dr Fuller concerning the future plan for staff training, Dr Syarifuddin mentioned that the present target is greater than originally planned. The present plan is to develop at least 16 Ph.D.s and 50 M.Sc.s or somewhat more than initially proposed in the project paper.

Dr Fuller then asked about training offered at SARIF, especially for those candidates returning from overseas long-term training. Dr Syarifuddin replied that there are two types of training -- one is short-term training in international research centers like IRRI, ICRISAT, AVRDC and IITA. This short-term training focusses both on research planning and execution. There is also special overall research management training offered to middle and senior level staff at LITBANG that provides exposure to in-country situations. In addition, SARIF conducts a series of research planning meetings on relevant topics at periodical intervals, such as planning of experiments on different crops, presentation of results, conducting seminars, and participation in budgetary/administrative matters. These brain-storming sessions provide opportunities for all researchers to improve their independent decision making abilities.

In addition to the above kinds of orientation/training, Dr Syarifuddin mentioned that the expatriate staff also work closely with their respective counterparts. Furthermore, SARIF is interacting closely with the University Professors at Andalas University in Padang and with the national commodity coordinators like Dr Harahap on rice and Dr Sujadi on soils.

Finally, Dr Fuller stressed the importance of the involvement and interaction of social scientists in the Project.

3.3 Facilities Development.

Mr Traywick briefly reviewed the situation at the end of 1983. The original schedule of the construction was to be completed by the end of 1983. However, the changes in GOI regulations, rupiah devaluation, sharp escalation of construction costs and building materials, budget curtailment, and other problems have combined to delay considerably. It is hoped that the original goals of the project will be achieved within the two-year extension period of the Project.

Station Development.

1. Pasar Miring. About 90% of construction and other facilities have been completed.
2. Sukarami. Phase IIA - Office/Laboratory buildings will be ready for occupation by the end of April, 1984.
Phase III - Guest House/Cafeteria complex has almost been completed, and final inspection is scheduled by end of April, 1984.
3. Sitiung. Phase I - Roads, houses, etc., are behind schedule. Completion and final inspection are anticipated in the near future.

Mr Traywick also mentioned that the SARIF headquarters was moved to Sukerami last October, and water and electrical seem to be functioning satisfactorily. Most of the first order -- tractors, generators, field equipment, workshop tools, and other items have all been received. Then, on February 23 to March 8, 1984, a training course on the assembly, maintenance and field operation of tractors and farm machinery was organized at Sukerami for 18 operators/mechanics from all SARIF stations. Service facilities for the equipment will be completed fairly soon. A short-term consultant on agricultural engineering and a VSO mechanic are expected during May/June at Sukerami to assist with station development and maintenance/operation of tractors and field machinery.

In view of the budgetary curtailment, Dr Fuller wanted to know whether the GOI contribution for construction will be reduced. Dr Syarifuddin indicated that the budgetary proposal has already been submitted to MITRANG, but no definite information is available regarding the DIP allocation. However, sufficient funds are already earmarked for completion of existing construction work and for furnishing the new buildings. Additional top-level meetings are planned in an effort to clarify commitments on GOI contributions.

It was decided to discuss 'Procurement' again and in greater detail at the end of the meeting, since Mr Suntana of TEAM-IV wanted to present his report before leaving Sukerami same day (Friday, March 23, 1984).

3.4 Linkages/Extension.

Dr Syarifuddin presented the report on the Linkages/Extension activities of SARIF. He pointed out that the Director and staff of SARIF are regularly participating in monthly technical meetings with officials in North Sumatra, Riau, Jambi; and they plan to meet again next month in South Sumatra.

Dr Syarifuddin summarized the activities regarding the wheat field day, special visit of the Secretary-General of Food Crops to Jituang, and the major technical advances made by SARIF during the second semester.

Dr Syarifuddin also agreed to the suggestion made by Dr Sivi for training extension workers in Sukar mi, but he felt that the budgetary constraint may be the limiting factor.

Dr Fuller inquired whether the private sector is involved in the distribution of seeds for palawija crops. Dr Syarifuddin replied that so far no representatives of private sector are involved in seed production and distribution excepting an EEC group in Jambi and the tapioca factories which depend on the continuous supply of cassava from the nearby farmers.

Dr Fuller inquired whether farmers are encouraged to produce seeds, and Dr Sivi suggested that concerned agencies should contact the farmers and teach them how to produce good quality seeds. State seed certification agencies should also monitor production and certify the seeds produced by farmers before distribution. Moreover, a special incentive in the form of a bonus should be paid to farmers for producing quality seeds, according to Dr Sivi.

3.5 Technical Assistance.

Dr Rachie reported briefly on the activities of the five resident specialists (also summarized in the report).

Dr Rachie also used the opportunity to inform the group that he will complete his two-year assignment in early June, 1984; but stressed that steps are being taken to identify a suitable replacement. In the meantime, Mr Traywick will act as Project Specialist.

Dr Syarifuddin added that the replacement for the Project Specialist should be made immediately. He is fully satisfied with the biodata of Dr Pierre Antoine submitted by IADS; however, he would like to have him visit JARIF/CRISC before confirming his appointment. Mr Hurdus pointed out that the interview trips are no longer allowed since USAID auditors have already objected to this type of travel.

Dr Fuller concurred on the importance of the full team of technical assistance to the project. Therefore, he would also like to have the replacement for the Project Specialist as quickly as possible. He suggested that Dr Antoine could visit Indonesia (CRISC/JARIF) as an IADS HQ staff on an inspection supervisory visit, since there is a provision in the contract for this type of visit to the project. Mr John Sperling also endorsed this suggestion.

Dr Divil mentioned that both Drs McLung and Athwal discussed the replacement for the Project Specialist with him and he would take up the matter with Mr Sadikin as soon as possible.

Dr Rachie observed that the Agricultural Economist, Dr Perry, is also planning to terminate his assignment this year. He would like to plan on home leave during July/August to settle his family in the US, and then return to post to complete his assignment by early November. Since the contract does not permit termination within 3-months after returning from home-leave, USAID (Sperling, Hurdus, and others) suggested that Perry should consider accompanying his family on vacation at his personal expense or extend his stay (without home leave) until September or October. However, these options will need to be discussed with Perry later.

3.6 Finance.

Mr Srinivasan briefly presented the financial report for the second semester. There were no comments on the report.

6. Status of Construction.

Mr Suntana of TEAM-IV summarized activities regarding construction work underway, and gave copies of a newly-revised proposed schedule for completing all remaining projects. New schedule was approved.

Sukarami II-A. Almost completed. There will be a two-months maintenance period upon completion of all construction work, and USAID could then inspect all the jobs completed.

Sitiung I. According to last report, it has already been finished, and a final inspection will be made next week.

Sukarami III. Since the building has been used several times, it is very difficult to complete construction work. Hopefully, the contractor could undertake all repair jobs to complete the guest house by the end of March, 1984.

Kayu Agung Phase I. Contracting and construction work will begin during the next few months and will be completed by May/June, 1985.

Mr Alan Hurdus indicated that GOI has reduced its contribution on station development to 200 million rupiahs towards fees for supervision, designing, and other services for fiscal year 1984/85. However, he pointed out that the USAID would still like to help supervise the construction work as well as help select the official inspector/supervisor company.

Dr Syarifuddin also urged the USAID to arrange for intensive supervision of the construction work, since no other competent person excepting Mr Traywick is available in the Project.

Mr Traywick stressed the urgency of strict adherence to all aspects of schedules as it will not be possible to meet the completion deadlines without close cooperation of all concerned. Dr Syarifuddin therefore suggested that an early coordinating meeting be held to resolve problems and bottlenecks. Mr Suatana proposed that these meetings could be held in Bogor or Jakarta and strongly stressed the necessity of making key decisions. He also urged that the cost estimates for 1984/85 projects need to be approved in advance by USAID before initiating any discussions in the coordinating meetings. Mr Hurdus agreed to assist on the approval of cost estimates sometime during the following week. Mr Suatana also proposed that plans and tendering documents could be completed for all remaining projects, presented to USAID for checking and approval.

With regard to farm development, land clearing, and fencing at all locations, Mr Suntana wanted to include the architect's fees in the tendering document and the same amount could then be paid to TEAM-IV by the successful bidder. Pak Djam'an explained that resolving this issue was difficult as he has discussed it with the officials in BAPPANAS, Public Works, Ministry of Finance in Jakarta and Padang, and the interpretations vary from one to another. Dr Syarifuddin suggested that the design fee should be included in the future DIP budget. Both Mr Hurlus and Mr Sperling stressed that the availability of GOI funds should be spelt out specifically for construction, station development and other line items.

Dr Fuller suggested the following three alternatives on allocating funds for construction and station development:

- (i) Adjust the DIP as per the targets of the Project;
- (ii) Continue to negotiate with the officials concerned in BAPPANAS and other high-level officials to reallocate the funds required to the Project;
- (iii) Reallocate dollar funds within the existing budget.

Dr Fuller readily agreed to help in discussing this matter with senior level officials at any time and to strongly support the project requirements.

Dr Richie requested clarification on what changes in the extension proposal and contract amendment would be required if budgetary schedules are to be changed. At this juncture, the status of AARD extension was discussed. Pak Djam'an pointed out that the official response from USAID to AARD regarding extension of the project is still

awaited, and Mr Hurdus informed that the relevant letter is being sent to AARD.

Dr Fuller did not see any reason to delay in communicating USAID's concurrence to AARD on the extension of the project for two years, and asked his colleague Mr Sperling to arrange for issuing the necessary PIL (Project Implementation Letter). However, the reduced DIP budget for construction is unacceptable to USAID. Until the GOI shortfall in Rupiah funds is restored to the Project, the USAID will have no choice except to modify its own commitment through an appropriate communication to the GOI, according to Dr Fuller.

Meeting adjourned for the day at 6:00 PM.

SATURDAY, MARCH 24, 1984

Status of procurement

Mr Traywick reported on the status of procurement. So far three different equipment orders have been prepared:

First Order. A shipment including all items in the order such as tractors, field equipment, workshop equipment and electrical generators have all arrived and are being inventoried. The 13 large 4-wheel and 20 2-wheel tractors have all been assembled at Sukerami, and a short-term training course for 19 operators/mechanics from eight stations was completed (February 13 to March 3, 1984).

Many problems were encountered in obtaining shipping documents and clearing through Customs. Transshipment of the items through Singapore has also caused considerable inconvenience, some damage and pilferage. Nearly Rp.800,000 has been spent on the purchase of bolts and nuts and other items for assembling tractors and other field equipment. It was therefore decided to request Trans-Century to pack all future shipments in special wooden crates, attach packing lists (both inside and outside the box), and consign the shipment directly to Padang via Singapore.

Second Order. Considerable time was required to obtain the LC (Letter of Credit) Number. In the meantime, some items from the Philippines have already arrived at the Padang dock, and should be cleared as soon as possible.

Most of the second order consists of laboratory equipment, some field machinery, and other items for the cafeteria.

Third Order. This order was prepared several months ago for processing through Trans-Century with whom a contract was also signed. Most of the items in the third order relate to seed storage, office and laboratory equipment.

As a consequence of GOI regulations on procurement which must normally be channelled through SEKNEK, formal approval for all items included in the third order has not yet been obtained. SEKNEK insists on procuring those items that are locally available or manufactured. This poses a serious problem since the procedure deviates from US government regulations.

After series of meetings with officials concerned in BAPPANAS/SEKNEK, Mr Murdus suggested the following:

- (a) Finalize the list of items to be procured from abroad and locally.
- (b) Tendering should be arranged for all goods from the US and those to be procured locally.
- (c) The LC number should be obtained for all items to be procured from abroad.
- (d) Trans-Century will evaluate competitive bids -- partly from Indonesia and partly from the US.
- (e) PT Dharma Niaga will continue to work on the Third Order.
- (f) The local representative of Trans-Century will coordinate with their headquarters in the US for expediting documents required.

Pak Djem'an explained the situation on procurement. The surveyor's report on losses and damage for the first shipment is expected to be submitted shortly, and an insurance claim for Rp.300,000 will be made by PT Dharma Niaga for direct reimbursement to MRRP.

He also mentioned that the LC has already been opened for the second order, and Trans-Century has been so informed. After collecting all necessary materials, Trans-Century should send the original copies of the Bill of Lading, packing lists, invoices, and other documents directly to their representative in Jakarta who in turn should hand-deliver them to PT Dharma Niaga for completing Customs formalities. Also, Trans-Century has been specifically

informed that all items included in the second order should be packed in export boxes and sent directly to Padang and not to Singapore, according to Pak Djam'an.

In order to expedite shipment documents, customs clearance and transportation, Pak Djam'an proposed that all concerned should meet at least once a month in Jakarta/Bogor to resolve the problems.

With regard to the problem on the finalization of the Third Order, Pak Djam'an said that it needs to be discussed with the officials concerned in BAPPANAS/SEANEK. Dr Syarifuddin also agreed to this suggestion.

A query was raised by Mr Sperling on the difference between items procured from the local distributor and direct purchase since the CIF cost needs to be added to direct procurement from the US. Dr Syarifuddin replied that it will still be cheaper to buy from the US in view of tax exemption.

Dr Richie suggested that the entire Third Order be reviewed to determine which items could not be obtained locally so that these could be procured immediately from the US.

Dr Syarifuddin indicated that the services of a PJA were found superior to using international tendering which requires more than two years for processing. Mr Murdus said that senior officials in SEANEK/BAPPANAS also concur with the use of PJA since there are considerable savings in time and money.

After some discussion, it was decided to meet (ASK, JDT, Djam'an, ARH, et.al.) with the officials in SEKNEK on APRIL 9, 1984 to resolve problems on the Third Order procurement.

Next Meeting: It was decided to hold the next semi-annual meeting on SEPTEMBER 11-12, 1984 either at Gurgur (North Sumatra) or at a site near Bogor.

Other Matters:

Dr Syarifuddin reported that the communication facilities at SARIF headquarters in Sukarami will be established within two months. Funds allocated (Rp. 60 million) for telephone connexions will also cover a telex installation (both national and international).

Mr Hurdus mentioned that reimbursement for micro-computer/word processor purchased by IADS/SARP will be arranged fairly soon - "within two weeks".

Mr Hurdus inquired about the possibility of loaning one of the large Ford tractors for use in Kalimantan to allow Mr Harwood to initiate some station development there. Mr Traywick said that it may not be possible to use SARIF's tractors as they are not large enough for the purpose intended. Moreover, transport to Kalimantan would involve unimaginable problems.

At the conclusion of the semi-annual meeting, Dr Fuller expressed his satisfaction and sincere appreciation for the rapid progress made in all aspects of the project. He was particularly impressed by the dynamic

leadership and active participation of all concerned. He was very happy to see the SAR Project is receiving excellent support from Dr Siwi and has a strong technical assistance component.

Dr Siwi acknowledged Dr Fuller's sentiments and expressed appreciation for USAID's active support and cooperation on the SAR Project.

On behalf of IADS/SARP group, Dr Rachie conveyed his appreciation for the excellent cooperation and support received throughout his period of association with the SARIF. He was very pleased with the highly capable leadership in the Project; the excellent cooperation and dedicated efforts of SARP colleagues; and the impressive progress made during the past two years.

Meeting adjourned at 9:30 AM.

A brief tour of the newly-constructed office-laboratory complex and new equipment was arranged by Dr Syarifuddin to all participants attending the semi-annual meeting.

Minutes recorded by: P.S. Srinivasan