BEST AVAILABLE DOCUMENT

A/EAA/1
4970236 (4)
PD-AAD-811-D1

Mr. Thomas C. Niblock, DIR
Walter C. Tappan, AGR for

15 March 1976

9p.

Weekly Status Report
8 March - 15 March 1976

I. Brackish Water Fisheries Production

A field trip report by Glenn Walters, covering the brackish water fisheries activities in Aceh and North Sumatra, is attached.

II. Lawu Loan

On 8 March, Messrs. Brooks and Trostle attended a meeting at the Directorate General of Cooperatives for the purpose of developing a mutually acceptable concept for the farm cooperative centers at Kabupaten Lawu. Drs. Tasman Dasaribu and staff have conceptualized the centers as management nuclei with satellite service units. Drs. Dasaribu presented a strong case, justifying the concept, and will submit a draft proposal in the near future. A memorandum of conversation will follow.

III. Citanduy Loan

At the request of Mr. Tappan, Dr. J. F. van Dillewijn, Forestry Officer, UNDP/FAO Upper Solo Watershed Management and Upland Development Project, visited the Agriculture Division on 8 March to review and discuss the status of this project. We are interested in the results of their work over the past three years, in anticipation of participating in a similar activity in the upper watershed component of the Citanduy Loan. Arrangements were made with Dr. van Dillewijn to visit the FAO project in the week of 15-21 March.

IV. Miscellaneous

1. On 9 and 10 March, Messrs. Rohlfs and Brooks traveled to Bogor, Bandung and Jatiluhur to observe

agriculture research activities at Bogor, multicropping practices in the upland areas, and watershed management on the Jatiluhur watershed. One notable occurence was the recognition given by Dr. Dewa Made Tantera of the IRRI team at Bogor to the USAID contribution to an Indonesian success story: According to Dr. Tantera, seven Indonesians on the IRRI team, who have earned Ph.D. degrees, were assisted by USAID in furthering their education. This team has produced a disease-free peanut for Indonesia, and numerous new rice varieties which are specifically bred for disease resistance, taste, and land-use requirements (drouth tolerance, wind resistance, stem length, etc.). When the new disease-free peanut variety is in common usage, disease-free peanut production could increase as much as 90%. In 1973, Indonesia produced 393.5 thousand metric tons of peanuts on 407.2 thousand hectares of land. A 90% increase in peanut production would, alone, pay for hundreds of years of participant training.

2. The Agriculture Division was visited on 10 March by Mr. M. E. Moore, president and Southeast Asia representative of AMCO Asia Corporation, who is interested in establishing a cassava processing factory in Lampung Province, Sumatra, to produce pelletized cassava for export as cattle feed. References were provided for contacts in the Jakarta area for further discussions, including the IRRI Multiple Cropping unit, World Bank, and the Directorate General of Food Crops.

3. Messrs. Argento and Tappan met with Mr. A. G. Nasution, a recently returned participant graduate, now head of a subdirectorate in the Directorate General of Estates, to discuss the proposed USDA course in small farmer credit.

4. Mr. and Mrs. Tappan attended a reception given by the Third Secretary for Aid, in honor of the new British Agricultural Attache, Mr. John Pitman. Opportunity was made to discuss current projects with various ODM personnel.

5. Dr. L. Swindale, Principal Investigator, Benchmark Soils Project, University of Hawaii, telephoned to advise the progress of implementation agreement between UH and the Soils Research Institute, Bogor. UH hopes to have an agronomist posted to Bogor by 1 April 1976. The necessary working agreement and budget to be provided by the two parties appear to be progressing smoothly.

6. At the request of the Program Office, Mr. Tappan drafted a "success story" on the International Rice Research Institute contract.

7. Mr. Rosidal, one of the short-term participant nominees for brackish water fisheries training in the Philippines, has been enrolled in English language class on a full-time basis. Mr. Walters held a telephone conversation with Dr. John Grover of Auburn (Philippines) about the two participant nominees English language capability, and whether or not they may be able to handle the curriculum. The decision was made to go ahead with our present nominees, and Dr. Grover will contact the Dean of Admissions and recommend that both participants be accepted.

8. A letter was written to Dr. Coy Brooks of the University of Hawaii requesting copies of the research notes on the university's salt water mariculture program. It is Mr. Walter's belief that mariculture may have applicability in Indonesia, as the tidal and weather conditions appear favorable.

9. Arrangements were made with DLG to supply an aircraft on 22 March for a low-level overflight of the Lampung project site. This will give the project manager and other cognizant personnel the opportunity to observe, at close hand, the existing water levels, ground cover, and general topography, and should prove most helpful during the forthcoming feasibility study. Photographs will be taken.

10. A meeting was held with the coordinator of the Tangerang Community Development in the office of John Roberts, to discuss possible USAID assistance in the community's brackish water fish ponds. A very conservative program of assistance has been requested, the purpose of which is to increase annual production from the existing 133 kg per ha to 350 kg per ha. Mr. Walters will meet with University faculty members on 17 March to visit the area and explore the possibility of USAID project involvement.

DISTRIBUTION:

DIR	E/CM	E/EA/I
DD	AGATT	A/TD/RD
PRO	IRRI	
C&R-3	Medan	
	Surabaya	

AGR:VCTuppan:DMBrooks:EGWalters:dcl

ATTACHMENT:

Field Trip Report, 23-29 February 1976,
Glenn Walters

AGENCY FOR INTERNATIONAL DEVELOPMENT

JAKARTA, INDONESIA

FIELD TRIP REPORT

TRAVELER AND TRIP INFORMATION

Name : E. G. Walters

Title : Fisheries Advisor

Division : Agriculture

PURPOSE OF TRIP

To visit the Brackish Water Fisheries Project locale in Aceh and Sumatra Utara.

ITINERARY

Place	Date of Arrival	Date of Departure
Medan	23 February, 1976	25 February, 1976
Banda Aceh	25 February, 1976	26 February, 1976
Bireuen	26 February, 1976	27 February, 1976
Lhokseumawe	27 February, 1976	28 February, 1976
Medan	28 February, 1976	29 February, 1976
Jakarta	29 February, 1976	

ACTIVITIES

During the week of February 23-29, 1976, Messrs. Teppan, Wahjono, and Walters visited the provinces of Aceh and North Sumatra for the dual purpose of brackish water pond (tambak) observation and area familiarization. The North Sumatra portion of the itinerary coincided with a familiarization tour by Mr. Niblock and certain members of his staff who have responsibility for rural electrification and road building projects.

DRAFTING OFFICER: EGWalters:su EGW

DATE OF PREPARATION: March 1, 1976

BEST AVAILABLE DOCUMENT

The entire USAID contigent was met at Medan airport at 0830 by Mr. Nilantgick, AmCon, and Ir. Sambang Soeboko, Chief of Fisheries, Sumatra Utara. The party moved quickly to provincial headquarters where local officials were waiting. Mr. Niblock outlined USAID projects and interest in the area; and various provincial officials commented on and/or asked questions about the various projects. In his turn, Ir. Soeboko stressed the following points:

> The fishery stocks are overfished, and there is constant turmoil due to disputes between Indonesian and Malaysian fishermen. It, therefore, seems likely that many Indonesian fishermen would welcome the opportunity to come ashore and become fish farmers.
>
> Three demonstration ponds (dempondsi) will be built as part of the USAID project, and these ponds will be utilized in an ambitious program of training and retraining.

Following the provincial presentations, the USAID contingent split into its various components; and the fisheries party, consisting of Koppan, Walters, and Nahjono from Jakarta, and Martin Batubara and M. Sihotang from Medan, departed for the Tanjungpura-Bandung area to look at three proposed dempond sites, and select one. The site nearest Medan was selected as being the most suitable of the three. All three sites appeared to be nearly identical in ground cover (nipa and mangrove), height above mean low water (estimated ½ meter), tidal range (1½ meter), and infrastructural considerations. The site nearest Medan was chosen primarily because of its closer proximity to population centers.

Funds, in the amount of Rp.60,000,000 are programmed for the construction of three dempondsi in North Sumatra, each dempond to be a standard 5-ha complex consisting of four 1-ha rearing ponds, and one 1-ha pond divided into nursery and transition sections. Messrs. Batubara and Sihotang agreed that the total construction time for the dempondsi would be eight months from groundbreaking to full operation. Construction is programmed to commence in April, 1976.

Comment: On the entire three and one-half-hour trip, not a single brackish water pond was seen, despite the fact that many ideal areas were observed.

On Tuesday, February 24, the original party was joined by Mr. Abdul Mutalib for a trip to the southern part of the provinces. One highlight of the trip was a tour of a 19-ha tambak unit owned by a former "fisherman" who had managed to amass investment capital of Rp.7,000,000

and float a loan of Rp.3,000,000. Hardly a typical Rp.60,000-per-year fisherman. His pond complex cost US $1,200 per ha, exclusive of land costs, on land that appears to be very similar to the Lampung site; so much so that his costs could probably be utilized in our costing estimates for Lampung.

Martin Batubara and other fisheries staff all insist that 5 ha is the smallest acceptable economic unit, an assertion that flies in the face of available evidence. Apparently, DGP has adopted the minimal 5-ha unit as a goal to strive for. As a production unit, the 5-ha minimum is a worthy goal. As a social goal, it is unrealistic.

Chanos-Chanos (milkfish) fry are available in adequate supply at Rp.7 each.

A new DGP shrimp hatchery near Tanjung Tiram was visited. They will supply penaied fry (Penaeus Merguiensis), and possibly, some metapenaeus fry, to the local shrimp farmers. Some communication difficulty, at this point, but I have the impression that fry will be collected at sea for the most part; but some gravid females will also be captured and spawning will be induced.

Throughout both days in Sumatra Utara, Mr. Batubara voiced concern about the dempond design, the problem being one of rearing pond depth. Local tradition decrees that a shallow "grazing platform" shall be left in the center of the pond. Auburn researchers contend that since milkfish are algae feeders and that algae occurs throughout the water column, the ponds should be deeper to provide a greater volume of water. Of course, if the ponds are dug deeper, the additional labor costs will considerably increase the cost of the ponds. Unfortunately, no statistics exist to provide cost-benefit data to planners. It was suggested that one rearing pond of the four, at each of the three demponds, be designed to Auburn specs, with the other three rearing ponds utilizing grazing, or feeding, platforms. This will allow the gathering of comparative statistics in a scientifically controlled environment, and we can then prepare our own cost-benefit analysis.

A visit was made to Kecamatan L. Pulah, Talavi, Tamah, and Tanjung Tiram where a 4,000-ha complex is planned. About 160 ha is presently in production; another 360 ha, soon to enter production. Farmers showed interest in the USAID project and were particularly interested in the loan provisions. Farm unit sizes are 3.5 ha, and Bank Rakyat Indonesia (BRI) will provide loans of Rp.350,000 per ha (Rp.875,000 per unit) to the farmers. The project manager contends that one ha of tambak can be constructed and brought into production with 15 man-months of labor. I am skeptical about that figure, but have no concrete evidence to the contrary.

Dempond sites were observed and approved. Ground cover, elevations, and tidal ranges were quite similar to the dempond site north of Medan. On 25 February Messrs. Tappan, Wahjono, and Walters departed Medan for Banda Aceh, arriving at 0820. The party was met by Fisheries Chief, Mr. Abdullah bin Peukan, who escorted us to the offices of the Governor, Mr. Muzakkir Walad. The USAID project was outlined to the Governor, who showed a great deal of interest and prior knowledge, and promised his full support. The rest of the day was devoted to a whirlwind tour of dempondo, tambaks, and fishfarmer's associations in the area around Banda Aceh. Tambak development in the area is considerable more sophisticated than the tambak areas of Sumatra Utara. Apparently, the fishfarmer's association works successfully, and the dempond is certainly a textbook model. Fry is available in abundance, at low cost; the fisheries staff is knowledgeable and energetic; and the farmers we met were anxious to institute innovative technology, as evidenced by the changes that they had made as a result of Dr. Schmitton's suggestions more than a year ago.

One farmer stated that he raises three crops of shrimp per year (mixed species) from fingerlings caught in the estuary, with yields of about one ton per ha per year. Species observed were primarily penaied, with some metapeneous.

Thursday, 26 February, Walters departed the group to return to Jakarta. The remainder of the group proceeded southward from Banda Aceh to observe the remaining four dempond sites. Major observations:

Project technicians will probably be housed, one in Medan and the other in Lhokseumawe. Mr. Kilpatrick will check this out and advise.

Pond construction and rehabilitation costs appear to be uniform throughout the area, but land costs vary from Rp.400,000 to Rp.3,000,000 per ha.

Fish farmers associations are numerous and seem to be effective.

The Japanese seem to have a monopoly on shrimp purchases. All export shrimp are sized to the Japanese eight-grade system rather than the more versatile (and profitable) international 15-grade system used elsewhere in this part of the world.

An unknown but growing number of farmers are converting rice lands to fish farms. A growing number of fish farmers are changing from fish production to shrimp production.

Milkfish culture in Aceh is considerably more sophisticated than in Java, and many farmers are getting yields that rival the Philippine and Taiwanese yields. There will be a great deal of

cross-fertilization of ideas between the Aceh/North Sumatra and Lampung projects.

Predator (egret) control is a problem in Aceh, and many innovative systems of control have evolved. More work needs to be done in this area.

Messrs. Tappan and Wahjono returned to Jakarta on Sunday, February 20.

CONCLUSIONS AND RECOMMENDATIONS

The Brackish Water Fisheries Project should be very successful if the contract technicians are both knowledgeable and diplomatic.

Fisheries personnel (DGF) and fish farmers in both provinces made it quite clear that they are prepared to cooperate.

There will be subtle differences in primary thrusts of the project in each province. Aceh is ready to accept state-of-the-art technology right now; Sumatra Utara will probably have growing pains for three or four years.

ACTION REQUIRED OR RECOMMENDED

None.

DISTRIBUTION: AID AmCon Medan
DD DCM
PRD POL
AGR-S B/GM
CGA-3

MICROFILMED FROM BEST
AVAILABLE COPY