

## 付 属 資 料

資料 1 ミニッツ

資料 2 アドバイザリーコミッティー出席者一覧

資料 3 サブサイト地図

資料 4 テクノガイド・現地語版（一部）

資料 5 NFA 米の売値切り下げを伝える“ MANILA BULLETIN ”10 / 3 付記事



**MINUTES OF UNDERSTANDING  
BETWEEN THE JAPANESE ADVISORY STUDY TEAM  
AND  
THE AUTHORITIES CONCERNED OF  
THE GOVERNMENT OF THE REPUBLIC OF THE PHILIPPINES  
ON THE JAPANESE TECHNICAL COOPERATION  
FOR  
THE BOHOL INTEGRATED AGRICULTURE PROMOTION PROJECT**

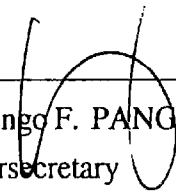
The Japanese Advisory Study Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Nobuyuki Samejima, visited the Republic of the Philippines from September 27 to October 8, 1999 for the purpose of interim evaluation of the Project Type Technical Cooperation for the Bohol Integrated Agriculture Promotion Project (hereinafter referred to as "the Project") as well as discussing the major issues related to the implementation of the Project.

During its stay in the Republic of the Philippines, the Team carried out a field visit, exchanged views and held a series of discussion with the Philippine authorities concerned in respect of the desirable measures to be taken by both Governments for the successful implementation of the Project.

As a result of the discussions, the Team and the Philippine authorities concerned agreed to recommend to their respective Governments the matters referred to in the interim evaluation report attached hereto.

Manila, October 7, 1999

  
\_\_\_\_\_  
Nobuyuki SAMEJIMA  
Leader  
Japanese Advisory Team  
Japan International Cooperation Agency

  
\_\_\_\_\_  
Domingo F. PANGANIBAN  
Undersecretary  
Department of Agriculture  
The Republic of the Philippines

THE ATTACHED DOCUMENT

THE INTERIM EVALUATION REPORT  
OF THE JAPANESE ADVISORY STUDY TEAM  
FOR THE BOHOL INTEGRATED AGRICULTURE PROMOTION PROJECT

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## **1. INTRODUCTION**

### **1-1 BACKGROUND**

The Project started on November 11, 1996 for a five-year term according to the Record of Discussion (hereinafter referred to as "the R/D") signed on October 16, 1996. The Japanese Consultation Team was dispatched from November 18 to 28, 1997 to formulate the detailed Tentative Schedule of Implementation (hereinafter referred to as "the TSI"). The Team consisted of the members listed in ANNEX 1 was assigned to conduct the interim evaluation.

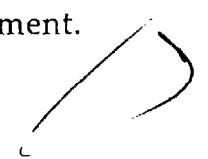
### **1-2 OBJECTIVES OF THE INTERIM EVALUATION**

The intermediate evaluation is performed halfway through the project cycle to correct the schedule and to reflect the results of the evaluation into the on-going stage of the Project. It is conducted to evaluate whether the Project is progressing satisfactorily or not, and to evaluate measures taken or to be taken against the changes in external conditions. In the course of the evaluation, the Project Design Matrix (hereinafter referred to as "the PDM") and the detailed TSI are reviewed. Based on the observation and study on the implementation of the Project, measures will be forwarded to both governments.

### **1-3 EVALUATION METHOD**

This evaluation was conducted by the Team in accordance with the R/D, the TSI and the PDM through report analyses, field visits, interviews and discussions with the personnel involved in the Project based on "Five Basic evaluation Components", that is, efficiency, effectiveness, relevance, impact, and sustainability.

The major evaluation components are efficiency, effectiveness, and relevance. Efficiency examines whether the extent of assistance was adequate and timely, or not. Effectiveness examines the achievement level of the outputs and project purpose. Relevance examines the adequacy and consistency of the project identification, formulation and implement in the given conditions. In addition, impacts and sustainability of the Project are considered to examine the influence of the Project and for further development.



## **2. PROGRESS OF THE PROJECT**

### **2-1 ACCOMPLISHMENT IN TERMS OF INPUTS**

#### **2-1-1 JAPANESE INPUTS**

##### **Dispatch of Experts**

A total of six long term experts were dispatched in accordance with the R/D and the TSI, except that an expert on agricultural mechanization was dispatched with a delay of 5 months, and a succeeding expert on farm management was assigned with a delay of 6 months. Nine short-term experts had been dispatched as scheduled. A list of the dispatched Japanese experts is attached as ANNEX 2.

##### **Training of Philippine Personnel in Japan**

Ten counterparts have visited Japan to participate in technical training. All the training programs have been efficiently conducted. The list of trained personnel is given in ANNEX 3.

##### **Provision of Machinery and Equipment**

Major Machinery and Equipment were provided in order to effectively implement the Project activities as shown in ANNEX 4. All provided machinery and equipment have been utilized properly for the Project activities.

##### **Fund to Cover Local Cost**

The Japanese side spent a part of the project management cost in order to implement the Project activities more effectively within the limited time allocation. The supplementary fund made by the Japanese side is shown in ANNEX 5.

#### **2-1-2 PHILIPPINE INPUT**

##### **Assignment of Counterparts**

Filipino counterparts have been assigned properly in accordance with the R/D. A list of assigned counterparts is attached as ANNEX 6.

##### **Allocation of Budget**

The Philippine side approximately allocated 22.47 million peso (equivalent to 83.79 million yen) in the last three years(1996~1998) as shown in ANNEX 7. In 1998 the budget was cut by 25% and traveling and training were restricted

due to the Asian economy crisis.

### **Provision of Land, Buildings and Facilities**

The Philippine side have provided necessary land, building and facilities for the Project. The land is partially owned by the Tagbilaran city government, though.

## **2-2 PROGRESS OF ACTIVITIES**

In the first year, a baseline survey was conducted to get information, to share findings, and to reach a common understanding on the actual socio-economic and agricultural conditions at the Project sub-site. Based on the results of the baseline survey, various research activities were prioritized and started. The Project faced a serious problem of water shortage due to El Niño phenomenon and the Capayas dam heightening work. The implementation of the Project activities was limited due to the above mentioned unfavorable conditions. However, it was able to accomplish a number of important activities especially to improve location specific technology for a rice-based farming system in the Sub-site as shown in Plan of Operation and Progress report forms in ANNEX 8.

### **Agronomy**

Varietal screening and selection were conducted at the Bohol Agriculture Promotion Center (BAPC) field of Bohol Experiment Station (BES) and the Project research farm from the aspects of grain yield, resistance to pests, disease, drought, and fertilizer response. These also included adaptability of some upland and vegetable crops. Also started was a market survey on rice and other crops. On-farm verification study on rice-based cropping system was started for "Sinaka" (high water percolation area) condition.

### **Water Management**

The basic data were collected in the Sub-site as basis for estimating the water requirements in crop condition. The water levels were measured to identify the volumes distributed to each lateral canal. The existing irrigation facilities were assessed. A participatory system management workshop was conducted to make irrigation scheduling by the Irrigators' Association (IA) members. Monitoring was conducted to further improve the present water distribution schedule.



### **Farm Mechanization**

Data of farm machinery distribution and market availability were collected and interviews were conducted to assess the farm machinery needs in the Sub-site. Some comparative field performance tests were conducted to study the field efficiency and capacity. Trial making of rotary weeder was conducted to improve farm operations. A staff training of farm machinery operation was conducted.

### **Farm Management**

Selection of on-farm demonstration sites were examined and demonstration was started with 10 farmer cooperators. Farm record keeping was started with 8 farmer cooperators and a workshop to feed-back analytical results to the farmers was held. A massive information dissemination on the control against Tungro Rice Virus disease was conducted in the entire Bohol province.

### **Training**

Training needs assessment was conducted for agricultural technicians and key farmers in Bohol. To enhance the capacity of BAPC staff, various staff trainings were executed. For IA members, some group trainings were also conducted.

### **Linkage**

Monthly liaison officers' meetings were regularly conducted. The LGU technicians were included in the Project lateral teams and regularly visited farmers in each lateral.

## **2-3 ACCOMPLISHMENT IN TERMS OF OUTPUTS**

### **2-3-1 BASELINE SURVEY AND MONITORING**

The baseline survey report was published in March 1998 and distributed to the concerned organizations. The detailed implementation schedule was planned according to the baseline survey results. To monitor the progress of the Project achievements and to collect supplementary data, a mid-term survey was conducted in May 1999.

### **2-3-2 IMPROVEMENT OF LOCATION SPECIFIC TECHNOLOGY**

#### **Agronomy**

Two rice varieties were recommended with cultural practices to the farmers

and the cropping calendar was determined according to the water distribution schedule. The rate of farmers who followed recommended rice cropping calendar was increased from 60% to 85 % in 1999 wet season.

#### **Water Management**

The tentative water distribution schedule was established with IA members' participation, and the schedule was revised to attain fair water distribution. IA membership was updated and members' willingness to participate was encouraged.

#### **Farm Mechanization**

Comparative field performance tests on farm equipment were executed and used for economic performance analysis. Ten modified rotary weeders were fabricated and distributed to farmers for trial use and evaluation.

#### **Farm Management**

The capacity of BAPC staff is enhanced through staff training. Two technoguides were printed and distributed to farmers with instructions. Two news letters and three news flashes were printed and posted on the 32 bulletin boards. On-farm demonstration provided practical information to farmers.

### **2-3-3 STRENGTHENING FARMERS IN THE SUB-SITE**

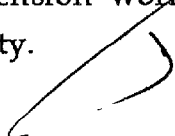
A workshop on the improvement of IA organization for the Board of Directors of IAs in the Sub-site was held and IA officials moved for the re-organization of IA. The Project lateral teams facilitated IA meetings and the rate of meeting participation was increased to more than 60% from 50 %.

### **2-3-4 TRAINING OF EXTENSIONISTS AND KEY FARMERS IN BOHOL**

The training needs were identified through needs assessment workshop. Extension workers and key farmers attended a training with a field trip and attained updated agricultural information.

### **2-3-5 STRENGTHENING LINKAGES WITH RELATED INSTITUTIONS**

The coordination among BAPC, LGU and NIA was strengthened through the periodical liaison officer meeting. However, two casual extension workers were discharged due to financial difficulties of Ubay municipality.



### **3. RESULT OF THE EVALUATION**

#### **3-1 EFFECTIVENESS**

Because of the unpredictable water shortage caused by El Niño and the heightening of the Capayas dam, some of the activities were not implemented as scheduled. In addition, Japanese experts of Farm Management and Farm Mechanization were not dispatched as planned. These incidents forced the Project implementation delay by about one year. Nevertheless, the delay has been recovered significantly by the intensified efforts made by the Project. Although there are difficulties foreseen, the Team expects the Project purpose and outputs will be achieved with continued efforts on priority activities.

#### **3-2 EFFICIENCY**

##### **3-2-1 BASELINE SURVEY AND MONITORING**

The baseline survey was conducted by involving most technical staff of BAPC and this contributed to capacitating the staff to conduct surveys. However, it may be more efficient to conduct survey by contracting out the work. It was efficient that the Project had a staff training on qualitative survey method before a mid-term survey.

##### **3-2-2 IMPROVEMENT OF LOCATION SPECIFIC TECHNOLOGY**

###### **Agronomy**

The timing, quality and quantity of inputs for agronomy section may be considered to be highly efficient. The same short term expert on pest and disease control was assigned to the Project so that the said expert executed his task very efficiently and damages caused by Tungro was minimized. The research farm in the Sub-site was very efficient for identifying recommendable rice varieties and potentially desirable secondary crops.

###### **Water Management**

Data were not collected enough to estimate water requirement due to dam heightening construction and severe drought in the first two years. However, intensive field activity by four lateral teams consisted by water management staff with members from the other sections facilitated information dissemination and monitoring to achieve fair water distribution. This massive and intensive field activities were significantly efficient to recover the said delay. Simultaneous implementation of institutional strengthening of

IA and operation and maintenance of irrigation facility was very essential and practical.

#### **Farm Mechanization**

Little delay of activities was observed due to severe drought and delayed equipment procurement, although the delay can be recovered within the cooperation period. Comparative field performance tests of locally procured equipment for land preparation were executed and could be applied for practical use of equipment in the Sub-site. The original rotary weeder made of wood with a concept of farmer-fabricator is efficient because of low cost and simple design.

#### **Farm Management**

The baseline survey was conducted by involving almost all counterparts for a long term, but the outcome was not sufficient to show characteristics of farmers in the Sub-site. The capacity of BAPC staff was built by conducting the baseline study as one of staff training programs. A significant delay of extension activities was observed due to delayed dispatch of expert on farm management and delayed technology improvement caused by abnormal climatic condition. Timely input was critical for smooth implementation of the Project.

#### **3-2-3 STRENGTHENING FARMERS IN THE SUB-SITE**

A workshop on improvement of IA organization for Board of Directors of IAs in the Sub-site was held and IA officials moved for the re-organization of IA. The Project lateral teams facilitated IA meetings and the rate of meeting participation was increased to more than 60% from 50 %.

#### **3-2-4 TRAINING OF EXTENSIONISTS AND KEY FARMERS IN BOHOL**

The training needs were identified through needs assessment workshop. extension workers and key farmers attended a training with a field trip and attained updated agricultural information.

#### **3-2-5 STRENGTHENING LINKAGES WITH RELATED INSTITUTIONS**

The coordination among BAPC, LGU and NIA was strengthened through the periodical liaison officers' meeting. However, two casual extension workers were discharged due to financial difficulties of Ubay municipality.

### **3-3 RELEVANCE**

Overall goal and Project purpose are still consistent with the national policy. Increase in agricultural productivity in order to realize food security and poverty alleviation has been one of the most important issues to be addressed in the Philippines since the inception of the Project. Gintong Ani Program (GAP), which promoted development and extension of the location specific technology, designated the irrigated area as the priority area of the rice. The Maka MASA program, succeeding GAP, aims at economic development through agricultural development. The Agriculture and Fishery Modernization Act (AFMA) enacted in 1997 gives priority to research and development in agriculture and fisheries as a means to achieve the steady production. Modernizing agriculture to raise productivity, attain food security, and increase the incomes of the rural sector where majority of the poor reside is the top priority area of the Estrada Administration, according to Medium-term National Development Plan (1999-2004).

### **3-4 IMPACT**

Activities and outputs of the Project are visible to the farmers in the Sub-site. However, no significant impact on the Project overall goal has been found at this time.

### **3-5 SUSTAINABILITY**

The Philippine counterparts trained in Japan remain at BAPC and are taking important roles in implementing the Project. Equipment and facilities provided by JICA are effectively utilized and well maintained. Sufficient amount of the funds to cover local cost are provided. The above factors are important to contribute to the sustainability of the Project outputs after the cooperation period.

## **4. MEASURES TO BE TAKEN**

### **4-1 MODIFICATION OF THE PDM**

The Team concluded that the overall goal, project purpose, outputs and major activities still have relevance and R/D should remain unchanged. The Team, however, found that some of the OVI (objectively verifiable indicators) need to be replaced so that they can be more easily measured and would have greater

relevance. The Team received a draft revision of PDM proposed by the Joint Committee, which was held on September 7, 1999. After careful examination of the draft and intensive discussions with Japanese experts and the Philippine counterpart personnel, the Team and the project side reached preliminary agreement. In accordance with this agreement, the Team concluded to revise the current PDM as shown in ANNEX 9.

#### **4-2 MODIFICATION OF THE TSI**

The Team also received the draft revision of detailed TSI proposed by the Joint Committee. The Team found that the proposed revision is necessary for streamlining and prioritizing of the activities and endorsed the same as proposed. The revised detailed TSI is attached as ANNEX 10.

#### **4-3 ACTIVITY PLAN AND PROSPECT**

The Project accomplished a number of important activities especially to improve location specific technology for a rice based farming system in the Sub-site with some delay caused by unfavorable external conditions. In principle, the project will be completed by implementing activities as shown in Activity Plan in ANNEX 11. Some specific measures to be taken in each technical area are described below.

##### **Agronomy**

Detailed cropping calendar would be needed for each lateral canal group with selected varieties of appropriate growth duration. Implementable crop protection method against rice diseases should be disseminated to farmers as well as selecting new tolerant/resistant varieties. The identified secondary crops grown in dried paddy fields require specific cultivation technology that is different from that observed in upland field. It may be needed to invite a resource person on cultivation technology for some new crops in Bohol.

##### **Water Management**

For implementation of more efficient water distribution, it is necessary to provide technical assistance in scheduling based on water balance calculations. The increase in meeting attendance of IA members is a good indication that IA members recognized the importance of water distribution schedule. It is necessary to implement activities for further strengthening the IA, especially

in the enhancement of IA management capability towards self-reliance. It may be needed to invite resource persons on IA institutional development and another as an advisor for water management manual.

#### **Farm Mechanization**

The farm operations are not so efficient in the Sub-site including low utilization of farm machinery. It is more important to improve farm operations from the economic aspect rather than improving machine performance. It is crucial to improve the rice quality in order to increase market competitiveness. This could be achieved by improving farm operations at farmer's level including utilization of farm machines as well as by improving rice processing operations that might lead to reduction in postharvest losses. To do so, it may require resource persons on postharvest technology.

#### **Farm Management**

It is necessary to establish a system to conduct farm management analysis together with farm demonstration activities. This may require further staff development in farming business through training and inviting resource persons on statistical analysis and farm management analysis. The Project should give more emphasis on activities to improve cost consciousness of farmers and to improve capability of farm management. In the future, it is advisable to diffuse an established rice-based farming system in combination with livestock production and off-farm work considering farming size and farming capacity.

### **5. RECOMMENDATIONS**

#### **Strengthening Linkages**

Linkage among the concerned organizations are indispensable for achievement of the overall goal of the project. In this context, consultative meetings with concerned organizations should continue on a regular basis beyond the technical cooperation period. Linkage between BAPC and NIA provincial office in Bohol is crucial in particular as they envisage BHIP (Bohol Irrigation Project) Phase II in the near future. The outcomes and experiences of the Project should make a maximum contribution to successful implementation of BHIP Phase II.

### **Restructuring of BAPC**

BAPC restructuring under consideration at DA RFU-7 (Regional Field Unit - 7, Department of Agriculture) in accordance with a new agriculture policy direction based on AFMA should strengthen R/D and E linkages and encourage BAPC activities. The Team favored the envisaged restructuring in this context. The Team, however, was concerned with possible negative effects of the restructuring on timely implementation of the Project. In this connection, the Team hoped that DA RFU-7 would make careful studies and take necessary steps towards the restructuring.

### **Sustainability**

Sustainability of BAPC is an important prerequisite for the successful implementation of the Project and the achievement of the overall goal stated in the PDM. The Team urges DA to reassure its commitment to secure human resources and budgetary allocation, specifically for traveling allowances and training personnel for BAPC sustainability. Security of the land ownership is also needed for the sustainability of BAPC. The Team expresses concern on these issues and requests DA to seek an early solution to these problems.

### **Monitoring and Evaluation**

To improve transparency and to produce more objective results, project related reviews and evaluation should be further undertaken together with DA Central, DA RFU-7, NEDA and State Colleges and Universities.





## ANNEX 1 LIST OF JAPANESE ADVISORY STUDY TEAM MEMBERS

### Leader

Mr. Nobuyuki Samejima

Managing Director, Agricultural Development Cooperation Department,  
Japan International Cooperation Agency (JICA)

### Agronomy

Dr. Chukichi Kaneda

Technical Advisor, Association for International Cooperation of  
Agriculture and Forestry

### Farm management

Dr. Hisataro Horiuchi

Professor, Faculty of Agriculture, School of Agricultural, Biological and  
Environmental Sciences

### Water management

Mr. Toshiaki Ito

Section Chief, The First Prefecture-operated Projects Section, Land  
Improvement Division, Shiga Prefecture Hikone Branch Office

### Farm mechanization

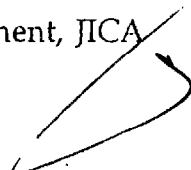
Ms. Chiho Sameshima

Chief, Technical Section, Fertilizer and Machinery Division,  
Agricultural Production Bureau, Ministry of Agriculture, Forestry and  
Fisheries

### Technical cooperation

Ms. Mutsumi Onishi

Staff, Agricultural Technical Cooperation Division,  
Agricultural Development Cooperation Department, JICA



## ANNEX 2. LIST OF JAPANESE EXPERTS DISPATCHED

### 1. Long-term Japanese experts

NAME	ASSIGNMENT	DURATION
Naoki IGUCHI	Team Leader	Nov. 11, 1996 - Feb. 26, 1999
Masaaki NISHIGAKI	Coordinator	Nov. 11, 1996 - Nov. 11, 1998
Toshio SHIBATA	Agronomy Expert	Nov. 11, 1996 - Nov. 10, 1999
Hiroshi TANAKA	Water Management Expert	Nov. 11, 1996 - Nov. 10, 1999
Hiroyuki SATO	Farm Management Expert	Nov. 11, 1996 - Nov. 10, 1998
Takeaki TOMIOKA	Farm Mechanization Expert	April 9, 1997 - Oct. 31, 1999
Ryosuke ITO	Coordinator	Oct. 26, 1998 - Oct. 25, 2000
Kunihiro TOKIDA	Team Leader	Feb. 14, 1999 - Feb. 13, 2001
Takashi NAKAMURA	Farm Management Expert	May 20, 1999 - May 19, 2001

### 2. Short-term Japanese experts

NAME	ASSIGNMENT	DURATION
Yoshito SUZUKI	Plant Protection Specialist	Feb. 5 - 21, 1998
Toyotaka NIWA	Water Balance Analysis Specialist	Feb. 4 - March 6, 1998
Toshihiro SUDA	Farm Management Consultation Specialist	September 9-30, 1998
Yasumasa KOGA	Post-Harvest Tech on Rice	Jan. 11 - Feb. 10, 1999
Ieko KAKUTA	Organization Management of Irrigated Association	Feb. 10 - March 6, 1999
Jun CHINEN	Video Production for Training	March 28 - April 10, 1999
Yoshito SUZUKI	Plant Protection Specialist	July 28 - Aug. 28, 1999
Koji YAMAGUCHI	Farm Machinery and Implement Design	July 28 - Aug. 25, 1999
Masahiro ISOMURA	Design of Irrigation Facilities and Irrigation Planning	Sept. 1 - 29, 1999

ANNEX 3. LIST OF PHILIPPINE COUNTERPART PERSONNEL TRAINED IN JAPAN

NAMES	SUBJECT	DURATION
1. Ms. Efieda B. Castillon	Agricultural Cooperatives (Group Course)	May 12 to July 4, 1997
2. Ms. Rufa O. Doria	Irrigation Water Management (Group Course)	May 19 to Nov. 14, 1997
3. Mr. Edwin D. Palgan	Upland Crops Cultivation (Group Course)	July 22 to Oct. 17, 1997
4. Ms. Roxanna B. Epe	Post Harvest Processing (Group Course)	Aug. 28 to Nov. 18, 1998
5. Mr. Alexander P. Dohig	Agricultural Machinery Management (Group Course)	April 27 to Nov. 1, 1998
6. Mr. Felix N. Tubiano	Pest and Diseases on Rice (Individual Course)	May 25 to Sept. 2, 1998
7. Ms. Edna N. Yu	Irrigation Water Management (Group Course)	May 25 to nov. 20, 1998
8. Mr. Hector Eldred D. Encabo	Video Production (Group Course)	Aug. 20 to Dec. 17, 1998
9. Engr. Eugene C. Cahiles	Institutional Management and Planning on Extension & Research Organization	May 5 - 20, 1999
10. Mr. Florentino M. Evasco Jr.	Soil Analysis and Improvement	May 16 to Aug. 21, 1999

ANNEX 4 LIST OF MAJOR MACHINERY AND EQUIPMENT PROVIDED BY JAPAN (Unit value >=500,000Yen)

JFY	ITEM No.	ITEM	SPEC	MAKER	PROCU RED Nos.	DISPO SAL	EXISTI NG Nos.	FREQUENC Y OF USE	CONDITI ON	REMARKS	VALUE(JY)	SECTION	LOCATIO N	PROC URED PLACE	DATE OF PROCUR EMENT
96	103	COPIER		PANASONIC EP7722	1	0	1	A	A		1,030,000	PM	APC	PHILI	Mar. 1997
96	104	PICK UP TRUCK	4WD,2777CC	MITSUBISHI L200	4	0	4	A	A		5,80,4000	AG,WM, Fmec, FM	APC	JAPAN	Sep. 1997
96	1	VEHICLE	DIESEL 4WD 2,800cc	MITSUBISHI PAJERO	1	0	1	A	A		2,310,000		APC	PHILI	Dec. 1997
96	2	CARGO TRUCK	DIESEL 6,577cc	MITSUBISHI	1	0	1	B	A		2,800,000		APC	JAPAN	Dec. 1997
97	114	GENARATOR		YAMMAR LA 100AE	1	0	1	C	A		997,000	Fmec	UBAY .	PHILI	Mar. 1998
97	118	DRYER	6ton Circulate type	SAKURA SD6000	1	0	1	C	A	During seed production	1,538,000	Fmec	UBAY RICER.B.	PHILI	Mar. 1998
97	132	PROPELLER COMBINED WIND VANE AND ANEMOGRAPH		L405DT	1	0	1	A	A		1,300,000	WM	SWARD	JAPAN	Oct. 1998
97	133	LCD VIDEO PROJECTOR		LC-4300	1	0	1	B	A		856,000	FM	APC	JAPAN	Oct. 1998
98	145	BENDING MACHINE		MAXIMA V-812-8	1	0	1	C	A	During trial making period	848,000	Fmec	APC	PHILI	Mar. 1999
98	146	LATHE MACHINE	Type-16F	EXTRON 4164-690	1	0	1	C	A	During trial making period	1,240,000	Fmec	APC	PHILI	Mar. 1999
98	148	METAL SHEET ROLLER		METALEX FR-86016	1	0	1	C	A	During trial making period	550,000	Fmec	APC	PHILI	Mar. 1999
98	3	MINIBUS	DIESEL	MITSUBISHI ROSA BE637	1	0	1	B	A		5,652,000	SWARD	APC	PHILI	Mar. 1999
98	152	WATER DISTILATION APPARATUS		GS-590	1	0	1	A	A		798,000	AG	APC	JAPAN	Aug. 1999
98	153	TOTAL STATION		SET-2010	2	0	2	A	A		2,058,000	WM	APC	JAPAN	Aug. 1999
98	156	EVAPORATION METER		ERR-101	1	0	1	E	A	To be installed	878,000	WM	SWARD	JAPAN	Aug. 1999
98	158	PRINTING MACHINE		RISOGRAPH GR3750	1	0	1	B	A		1,080,000	FM	APC	JAPAN	Aug. 1999

FREQUENCY OF USE A:DAILY

B:WEEKLY, MONTHLY

C: USE IN SPECIFIC PERIOD

D: 3~11 TIMES USE /YEAR

E: IDLE

CONDITION

A: GOOD CONDITION

B: PRERATIONAL IN USE

C: CONDITION FOR REPAIR

D: UNENABLE TO USE

ANNEX 5 LIST OF SUPPLEMENTARY FUND TO COVER LOCAL COST

Unit : (1,000 Japanese Yen)

Description	Year	1996	1997	1998	Total
Local running cost		3,258	5,403	5,098	13,759
Local running cost(supplementary)				2,603	2,603
Cost for enligment and extention			795	173	968
Cost for security measures				490	490
		3,258	6,198	8,364	17,820

ANNEX 6. LIST OF PHILIPPINE COUNTERPART PERSONNEL ASSIGNED

DIVISION / SECTION	NAMES (age)	POSITION / DESIGNATION		Date of Assignment
		Bohol APC	BIAPP	
Project Head	Engr. Eugene C. Cahiles (41)	Sr. Agriculturist	Project Manager	Feb-99
Asst. Head	Mr. Abdel B. Apalisok (42)	Agriculturist 1	Asst. Head (OIC)	Apr-99
Agronomy	Ms. Mary Jean C. Du (35)	Agriculturist 2	Section Head	Feb-97
	Mr. Edwin D. Palgan (36)	Agriculturist 1	Unit Head	Mar-90
	Ms. Concepcion B. Payapaya (43)	Agriculturist 2	Unit Head	Sep-89
	Ms. Rizalina G. Cahiles (40)	Agriculturist 1	Unit Head	Sep-96
	Ms. Chona E. Maleza (33)	Agr'l. Technologist	Technical Staff	Mar-90
	Ms. Wencisa B. Egama (36)	Agr'l. Technologist	Technical Staff	Feb-94
	Ms. Efieda B. Castillon (40)	Agr'l. Technologist	Technical Staff	Jul-98
	Mr. Felix N. Tubiano (33)	Agr'l. Technologist	Technical Staff	Jul-92
	Mr. Felipe T. Apale (38)	Agr'l. Technologist	Technical Staff	Feb-97
	Ms. Celerina T. Galorio (39)	Agr'l. Technologist	Technical Staff	Apr-86
	Mr. Jose M. Bunachita (45)	Agr'l. Technologist	Technical Staff	Jul-92
	Mr. Florentino M. Evasco Jr. (42)	Agr'l. Technologist	Technical Staff	Sep-86
	Ms. Adoracion T. dela Cruz (35)	Agriculturist 2	Technical Staff	Sep-86
	Ms. Rosenda R. Bucia (40)	Agr'l. Technologist	Technical Staff	Mar-94
Water Management	Mr. Antonio S. Du (38)	Agriculturist 1	Section Head	Feb-97
	Ms. Camila A. Descallar	NIA/IDO	Technical Staff	Jun-97
	Mr. Tito L. Cañas (42)	Agr'l. Technologist	Technical Staff	Feb-97
	Ms. Rufa o. Doria (33)	Agr'l. Technologist	Technical Staff	Feb-97
	Ms. Edna N. Yu (32)	Agr'l. Technologist	Technical Staff	Apr-97
	Mr. Saturnino A. Jamilo (37)	NIA	Technical Staff	Jun-97
Farm Mechanization	Mr. Marcial D. Agad (40)	Agr'l. Technologist	Section Head	1990
	Mr. Sergio M. Sumaoy (44)	Agr'l. Technologist	Technical Staff	Sep-95
	Mr. Rodrigo R. Pechon (29)	Agr'l. Technologist	Technical Staff	Apr-97
	Ms. Roxanna B. Epe (33)	Agr'l. Technologist	Technical Staff	Feb-97
	Mr. Rico Rommel A. Varquez (26)	Agr'l. Technologist	Technical Staff	11/997
	Mr. Alexander P. Dohlg (42)	Mechanic	Agr'l. Farm Technician	Sep-95
Farm Management	Mr. Erlindo L. Samblaceño Jr. (39)	Agriculturist 1	Division Head	Mar-99
	Ms. Grace Len C. Dagala (37)	Agriculturist 1	Technical Staff	Feb-97
	Mr. German M. Makiling (40)	Agriculturist 2	Technical Staff	Jul-90
	Mr. Rolando T. Alaan (40)	Agr'l. Technologist	Technical Staff	Feb-97
	Mr. Medardo B. Aparece (42)	Agr'l. Technologist	Technical Staff	Jul-92
	Ms. Concordia G. Damalerio (43)	Agr'l. Technologist	Technical Staff	Jul-92
	Ms. Wilfreda C. Malayao (30)	Agr'l. Technologist	Technical Staff	Jul-92
	Ms. Barbara O. Pacalang (39)	Agr'l. Technologist	Technical Staff	Jul-98
	Ms. Ma. Corazon A. Patindol (26)	Agr'l. Technologist	Technical Staff	Apr-98
	Mr. Hector Eldred D. Encabo (43)	AO Eqpt. Optr.	AV Eqpt. Technician	Aug-90

## ANNEX 7 LIST OF BUDGET ALLOTMENT

Unit : ( 1,000Peso)

Description	Year	1996	1997	1998	Total
Contractual Labor cost		2,234	2,076	2,076	6,386
Travelling Expenses		645	1,117	330	2,092
Communication Services		17	60	22	99
Repair & Maintanance of Gov't Facilities		18	70	22	110
Repair & Maintanance of Gov't Vehicles		270	176	170	616
Transportation Services		45	145	55	245
Supplies & Materials		1,631	1,054	892	3,577
Rents		0	135	110	245
Water, Illumination, & Powar Services		595	700	770	2,065
Training & Seminar Expenses		1,620	730	300	2,650
Gasoline Oil & Lubricants		270	300	330	900
Other Services		540	1,200	1,748	3,488
Total		7,885	7,763	6,825	22,473

# ANNEX 8 PLAN OF OPERATION AND PROGRESS

## Plan of Operation & Progress (Agronomy)

TSI No. 2-1 To improve cultivation technology

TSI No. 2-2 To improve cropping systems

As of September, 1999

Activities	Final Target	Schedule								Progress (%)		Person in charge	Accomplishment	Remarks
		1997	1998	1999				2000	2001	Act <sup>1)</sup>	T.T. <sup>2)</sup>			
				1	2	3	4							
2-1-1 Varietal screening and selection	High yielding varieties with resistance to pests and diseases (3-4 varieties). Determination of special purpose rice varieties (aromatic, glutinous, red)									50 25	75 50	Egama Du Du Egama	1) 2 varieties selected and recommended 2) initial screening and collection of seed materials	PSB Rc-18 PSB Rc-32
2-1-2 Improvement of cultural management practices	Establishment of cultural management practices on lowland rice Formulation of integrated pest/disease management Seasonal rice yield and cultural practices of farmers.  Report on market study results with necessary information.									50 75 50 75	75 75 100 75	Payapaya Evasco, Dela Cruz, Du, Egama, Tubiano, Castillon Maleza Maleza	1) Recommended technology formulated and improvement added 2) Pest & disease management; 85% synchronized planting 3) Yield survey conducted per season Market study conducted & report prepared (Aug 1999)	Techno Guide I & II News Letter, News flash (Varieties, Rice Tungro, Kuhol, synchronous planting) (Provision of technical information)
2-1-3 Technology verification	Verification of recommended technology on rice at farmers' field with emphasis on yield & profitability.									25	50	Castillon Du	Recommended rate of fertilization verified.	1) 1999DS 13sites 1999WS 20sites + 12 sites for PhilRice collaboration
2-2-1 Improvement of rice-based cropping patterns	Selection of suitable secondary crops after rice. Establishment of cultural management practices for selected secondary crops.									50 25	50 25	Palgan Cahiles Galarito Bunachita Busia Apale	1) Potential secondary crops selected	bulb onion, water melon, squash, mung, sweet potato, peanut
2-2-2 On-farm verification of rice-based cropping patterns	Successful adoption of cropping pattern at selected farmers' field.									25	25	Cahiles Busia Palgan Bunachita Galarito	1) Gross income of P3,300 per 0.1ha obtained from watermelon.	Verification of secondary crops to be done in dry season in Sinaka areas.
2-2-3 Integration of technologies for rice-based farming system	Location specific rice-based farming system is formulated and disseminated.									25	25	All	1) Technology development progressed	TSI 2-2-3 FMgt will take the initiative. (move to FMgt)

<sup>1)</sup> Activity <sup>2)</sup> Technology Transfer



2

## PLAN OF OPERATION & PROGRESS ( Water Management Section)

### 2.3 DEVELOPMENT OF APPROPRIATE WATERMANAGEMENT TECHNOLOGY

### 2.4 IMPROVEMENT OF THE OPERATION & MAINTENANCE SYSTEM OF IRRIGATION FACILITIES

As of September 1999

TSI Activities	Final target	97	98	1999				00	01	Progress (%)		Person in charge	Accomplishment
				1	2	3	4			Act	T.T		
TSI 2-3-1 Assessment of present condition of the Project Sub-site	CIP beneficial area is determined.									75	75	All W/M Counter-part	-Updating of lay out Capayas on map -Related water requirement data(75%) -Farmers' consciousness on W/M
TSI 2-3-2 Development of Water Distribution Scheme	Tentative rotation irrigation plan is made.									50	50	All W/M Counter-part	-Water balance calculation program for computer(80%) -Revise of cropping calendar -Formulation of tentative water allocation (30%)
TSI 2-3-3 Development of On-farm Water Management Practices	Rotation irrigation plan and controlled planted rice area is made.									25	25	All W/M Counter-part	-Observation on the effect of water shortage
TSI 2-4-1 Inventory and Assessment of existing Irrigation Facilities	Present condition and problems are identified and improvement plan is made.									75	75	All W/M Counter-part	-Inventory and assessment of existing irrigation facilities(70%) -Temporary modification of the irrigation facilities
TSI 2-4-2 Preparation of Operation and Maintenance System for Capayas Irrigation Project (CIP)	Operation and Maintenance guidelines are made									75	75	All W/M Counter-part	-Cropping calendar and tentative water distribution plan was decided in System Management Workshop
TSI 2-4-3 Testing and Modification of the Operation and Maintenance System	O & M systems is established									25	25	All W/M Counter-part	-Monitor & Modify tentative water distribution plan
TSI 2-4-4 Production of Water Management Manual	Water management manual for technical staff is made.									-	-	All W/M Counter-part	

(Act: Progress of Final Target of the Activity, T.T : Progress of Technology Transfer to the counter part on TSI )

# ANNEX 8 PLAN OF OPERATION AND PROGRESS

## Plan of Operation & Progress (Agronomy)

TSI No. 2-1 To improve cultivation technology

TSI No. 2-2 To improve cropping systems

As of September, 1999

Activities	Final Target	Schedule								Progress (%)		Person in charge	Accomplishment	Remarks
		1997	1998	1999				2000	2001	Act <sup>1)</sup>	T.T. <sup>2)</sup>			
				1	2	3	4							
2-1-1 Varietal screening and selection	High yielding varieties with resistance to pests and diseases (3-4 varieties). Determination of special purpose rice varieties (aromatic, glutinous, red)	—	—	—	—	—	—	—	—	50	75	Egama Du	① 2 varieties selected and recommended	PSB Rc-18 PSB Rc-32
		—	—	—	—	—	—	—	—	25	50	Du Egama	② initial screening and collection of seed materials	
2-1-2 Improvement of cultural management practices	Establishment of cultural management practices on lowland rice Formulation of integrated pest/disease management Seasonal rice yield and cultural practices of farmers.  Report on market study results with necessary information.	—	—	—	—	—	—	—	—	50	75	Payapaya, Evasco, Dela Cruz, Du, Egama, Tubiano, Castillon Maleza Maleza	① Recommended technology formulated and improvement added ② Pest & disease management; 85% synchronized planting ③ Yield survey conducted per season Market study conducted & report prepared (Aug 1999)	Techno Guide I & II News Letter, News flash (Varieties, Rice Tungro, Kuhol, synchronous planting) (Provision of technical information)
		—	—	—	—	—	—	—	—	75	75			
		—	—	—	—	—	—	—	—	50	100			
		—	—	—	—	—	—	—	—	75	75			
2-1-3 Technology verification	Verification of recommended technology on rice at farmers' field with emphasis on yield & profitability.	—	—	—	—	—	—	—	—	25	50	Castillon Du	Recommended rate of fertilization verified.	① 1999DS 13sites 1999WS 20sites + 12 sites for PhilRice collaboration
2-2-1 Improvement of rice-based cropping patterns	Selection of suitable secondary crops after rice. Establishment of cultural management practices for selected secondary crops.	—	—	—	—	—	—	—	—	50	50	Palgan Cahiles Galorio Bunachita Busia Apale	① Potential secondary crops selected	bulb onion, water melon, squash, mung, sweet potato, peanut
		—	—	—	—	—	—	—	—	25	25			
2-2-2 On-farm verification of rice-based cropping patterns	Successful adoption of cropping pattern at selected farmers' field.	—	—	—	—	—	—	—	—	25	25	Cahiles Busia Palgan Bunachita Galorio	① Gross income of P3,300 per 0.1ha obtained from watermelon.	Verification of secondary crops to be done in dry season in Sinaka areas.
2-2-3 Integration of technologies for rice-based farming system	Location specific rice-based farming system is formulated and disseminated.	—	—	—	—	—	—	—	—	25	25	All	① Technology development progressed	TSI 2-2-3 FMgt will take the initiative. (move to FMgt)

<sup>1)</sup> Activity <sup>2)</sup> Technology Transfer

## PLAN OF OPERATION & PROGRESS ( Water Management Section)

### 2.3 DEVELOPMENT OF APPROPRIATE WATERMANAGEMENT TECHNOLOGY

### 2.4 IMPROVEMENT OF THE OPERATION & MAINTENANCE SYSTEM OF IRRIGATION FACILITIES

As of September 1999

TSI Activities	Final target	97	98	1999				00	01	Progress (%)		Person in charge	Accomplishment
				1	2	3	4			Act	T.T		
TSI 2-3-1 Assessment of present condition of the Project Sub-site	CIP beneficial area is determined.									75	75	All W/M Counter-part	-Updating of lay out Capayas on map -Related water requirement data(75%) -Farmers' consciousness on W/M
TSI 2-3-2 Development of Water Distribution Scheme	Tentative rotation irrigation plan is made.									50	50	All W/M Counter-part	-Water balance calculation program for computer(80%) -Revise of cropping calendar -Formulation of tentative water allocation (30%)
TSI 2-3-3 Development of On-farm Water Management Practices	Rotation irrigation plan and controlled planted rice area is made.									25	25	All W/M Counter-part	-Observation on the effect of water shortage
TSI 2-4-1 Inventory and Assessment of existing Irrigation Facilities	Present condition and problems are identified and improvement plan is made.									75	75	All W/M Counter-part	-Inventory and assessment of existing irrigation facilities(70%) -Temporary modification of the irrigation facilities
TSI 2-4-2 Preparation of Operation and Maintenance System for Capayas Irrigation Project (CIP)	Operation and Maintenance guidelines are made									75	75	All W/M Counter-part	-Cropping calendar and tentative water distribution plan was decided in System Management Workshop
TSI 2-4-3 Testing and Modification of the Operation and Maintenance System	O & M systems is established									25	25	All W/M Counter-part	-Monitor & Modify tentative water distribution plan
TSI 2-4-4 Production of Water Management Manual	Water management manual for technical staff is made.									-	-	All W/M Counter-part	

(Act: Progress of Final Target of the Activity, T.T : Progress of Technology Transfer to the counter part on TSI )

**Plan of Operation and Progress (Farm Mechanization Section)**

TSI No.2-5 Improvement of farm machinery operations and postharvest technology

TSI No.2-6 Improvement of farm machinery utilization and management

As of September 1999

TSI Activities	Final target	Schedule									Progress (%)		C/P in charge	Accomplishment
		97	98	1999				0	1	Act	T.T.			
				1	2	3	4							
2-5-1. Needs Assessment and Data Base for Farm Mechanization	Key farmer selection									75	50	R. EPE	Need assessment I report (98/07), Survey design proposal (99/04)	
	Price survey of machinery									50	50	R. PECHON, R. R. Varquez	Machine selling price Report each crop season ('97~'99)	
	Data base dissemination									0	25	R. PECHON, R. R. Varquez		
2-5-2. Performance Test and Improvement of Farm Machinery operations	Performance test of local Machinery									50	50	All Staff	6 performance test report on the several farm machinery ('98~'99)	
	Selection and Improvement of Farm Machinery									50	75	R. PECHON, R. R. Varquez	The lathe machine operation training (99/06), Manual rotary weeder development(99/08)	
2-5-3. Improvement of farm level postharvest technology	Appropriate drying method finding									0	25	M. AGAD,		
	Dissemination of the above method									0	25	M. AGAD, R. EPE		
2-5-4. Improvement of rice processing system	Appropriate processing system finding									25	25	All staff	Rice miller seminar I (98/12), Rice miller seminar II (99/01)	
	Dissemination of the above system									0	50	S. SUMAOY R. EPE		
2-6-1. Economic analysis of farming operations	On farm survey of several farm operation									25	50	All Staff	Economic analysis of Land Preparation(98~99)	
	Dissemination of the above result by News Letter on Farm Management									0	0	S. SUMAOY		
2-6-2. Improvement of farm machinery management system	Improvement of farm machinery operators									25	75	M. AGAD, A. DOHIG	Farm machinery operation training I (99/06)	
	Farm machinery monitoring on farm									25	25	All Staff		
2-6-3. Produce and utilization of farm machinery management manual	Collection of useful Farm Mechanization Information									25	50	All Staff	Revise performance test result with in one paper format (60% )	
	Manual production & information dissemination									25	25	All Staff	Manuscript making of News letter and Tecno Guide on post harvest(99/05)	

Plan of Operation & Progress (Farm Management) September 1999

Activities	Final Target	Schedule					Progress		In-charge(s)	Accomplishment	Remarks	
		1997	1998	1999	2000	2001	Act	TT				
1. Formulation of detailed workplan based on the baseline survey and conduct of the monitoring of the Project achievement												
1-1 To conduct a baseline survey												
1-1-1 Planning and implementation	Conduct total farm-household baseline survey at CIP							100	75	Apalisok	Conducted to a total of 497 farm-household	
1-1-2 Data Analysis	Come up with a comprehensive report							100	75	Dagala	Published baseline survey report	
1-2 To prepare the project activity plan and prioritize research subjects												
1-2-1 Preparation of participatory project planning	Development of guidelines and several formats on project planning							100	75	Apalisok	Finalized guidelines & format for participatory planning	
1-2-2 Participatory project planning workshop 1 & 2	Draft Tentative Schedule of Implementation							100	75	Apalisok	Finalized BIAPP TSI	
1-3 To conduct monitoring of the project												
1-3-1 Preparation of monitoring and evaluation method	Development and introduction of the M&E concept within all divisions and sections of BIAPP							50	25	Cubero, Patindol	Conducted evaluation to training activities within Farm Mgt. Div.	Concept was only adopted within Farm Mgt. Div.
1-3-2 Monitoring and Evaluation	Adoption and conduct of monitoring and evaluation to all BIAPP activities							50	25	Cubero, Patindol		
2. Improvement and dissemination of location specific technologies for a Rice based Farming system in the Project sub-site												
2-7 To improve Farm Mgt. Efficiency												
2-7-1 On-Farm Demonstration	Introduction of improved farming system and improvement of crop productivity							25	25	Samblaceno Alaan Damalerio Aparece	Established (10) sites & introduced improved crop technology	Just started
2-7-2 Seed Self Sufficiency Promotion	Establishment of efficient & sustainable seed distribution scheme							25	25	Samblaceno Alaan, Damalerio, Aparece	Availability of Certified seeds	Yield reduction by 50% due to tungro and stemborer

Activities	Final Target	Schedule					Progress		In-charge(s)	Accomplishment	Remarks
		1997	1998	1999	2000	2001	Act	TT			
2-7-3 Information Services	Sufficient Documents on Info and Training instructional materials on BIAPP						50	50	Pacatang, Dagala	Distributed print materials & established info system at CIP	
2-8 To enhance extension activity in order to disseminate appropriate technology											
2-8-1 Staff Development Training	Enhancement of capabilities of BIAPP staff						50	50	GL Dagala C Patindol	Conducted (9) trainings	
2-8-2 Training and Information Materials production	Sufficient Documents on Info and Training instructional materials on BIAPP						50	50	GL Dagala Ecabo Pacatang	Produced (8) Info video titles and 5 titles/batches print materials	
3. Improvement of management capability of farmers in the project sub-site											
3-1 To enhance farmers organization (IA's etc.) in the project sub-site towards self reliance											
3-1-2 Training for IA members	Increased capabilities of IA members to be self reliant						50	25	Malayao Patindol Makiling	Conducted workshops & training needs assessment	
3-2 Improve practical mangement skills											
3-2-2 Consultation on farm management skills	Adoption of daily farm-household activities recording						50	25	Alaan Samblaceno Damalerio Aparece	introduced daily recording of farming activities to 8 cooperators	
4 Enhancement of training for irrigated agro-ecosystem											
4-1 To train agricultural extension workers of LGU	Strengthen extension system of LGU						25	25	GL Dagala Patindol Makiling	Conducted workshops & TNA	
4-2 To train key farmers in Bohol	Introduction /adoption of developed BIAPP technologies						25	25	GL Dagala Patindol Makiling	Conducted workshops & TNA	

# **ANNEX 9 PROJECT DESIGN MATRIX (PDM) FOR BOHOL INTEGRATED AGRICULTURE PROMOTION PROJECT (BIAPP) IN THE REPUBLIC OF THE PHILIPPINES Ver. 3.2 (Oct. 7, 1999)**

Drafted by the Advisory Study team and the BIAPP team

Cooperation term: November 11, 1996 - November 10, 2001 (5 years)

Project Sub-site (Target area): Land Cultivated by Irrigator's Association (IA) members in Capayas Irrigation Project (CIP)

Implementing Organization: Department of Agriculture

Target group: IA members (farmer beneficiaries) in CIP

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS (OVI)	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<b>OVER ALL GOAL</b> Agricultural production and income of farmers in Bohol are increased.	* Total rough rice production in Bohol is increased to 250,000 tons by 2005. * Poverty incidence is decreased by 20% by 2005 in Bohol.	* Information from Bureau of Agriculture Statistics * Information from Provincial Development Office	a. Bohol remains as Central Visayas' primary agriculture area. b. National policy on provision of physical facility for agriculture sector stays. c. National policy on rice price remains stable.
<b>PROJECT PURPOSE</b> Agricultural productivity is increased by improving management of farming activities in the project sub-site.	* Average rice yield in irrigated lowland in the Project sub-site is increase from 2.8t/ha. (1996) to 4.0t/ha. by 2001.	* Survey by APC	a. Provincial government maintains higher priority for food security and poverty alleviation b. APC remains technology promotion center for rice-based farming system. c. Bohol Irrigation Project is implemented without any delay.
<b>OUTPUTS</b> (1) Baseline survey and monitoring can be conducted by APC staff. (2) Improved location specific technologies for a Rice-based farming system are adopted in the Project sub-site. (3) Effective management of IA activities carried out in the project sub-site. (4) Technical capabilities of extension workers and key farmers in Bohol are enhanced. (5) Agricultural promotion system is improved by enhanced collaborative linkages of APC with local Government Unit (hereinafter referred to as LGU) and concerned organizations.	1. One (1) Baseline report and 3 monitoring reports are published. 2-1 95% of IA members adopted the synchronous rice production farming system in 2001. 2-2 90% of IA members plant recommended rice varieties in irrigated area of the sub-site in 2001. 2-3 50% of IA members increase agricultural income by applying BIAPP techno-guide in 2001. 3-1 80% of IA members attend the meetings. 3-2 Irrigation Service Fee collection is over 80%. 4. 80% of extension workers on rice-based farming system are trained. 5. 90% of involved government organization, non-governmental organization and concerned agencies participate in consultative workshop/meeting conducted.	1. APC publications and reports 2-1 Survey by APC 2-2 Record by APC 2-3 Survey by APC 3-1 Record of APC and NIA 3-2 Record of APC and NIA 4. APC record and report 5. Attendance list of workshop/meeting	a. APC retains the function of research, training and extension on rice-based farming system. b. Trained APC staff continues their work at APC c. NIA continues to efficiently operate the Capayas Irrigation System. d. Economic condition is stable in Bohol.
<b>ACTIVITIES</b> (1) Formulation of detailed workplan based on the baseline survey and conduct of the monitoring of Project achievement. 1) Execution of baseline survey 2) Preparation of to Project activity plan and prioritize research subjects 3) Monitoring of the Project. (2) Improvement and dissemination of location specific technologies for a Rice-base Farming system in the Project Sub-site 1) Improvement of cultivation technology 2) Improvement of cropping systems 3) Development of appropriate water management technology 4) Improvement of the operation and maintenance system of irrigation facilities 5) Improvement of farm machinery operations and postharvest technology 6) Improvement of farm machinery utilization and management 7) Improvement of farm management efficiency 8) Enhancement of extension activity in order to disseminate appropriate technology (3) Improvement of management capability of IA in the Project Sub-site 1) Facilitation of IA organization improvement and IA meeting 2) Facilitation of reviewing policies and making rules 3) Improvement of accounting system and financial management (4) Enhancement of training 1) Training of agricultural extension workers of LGU 2) Training of key farmers in Bohol (5) Enhancement of collaborative linkage to APC with LGU and concerned organizations in carrying out of the Project activities of (1) to (4) above 1) Enhancement of collaborative linkage of APC with line agencies and national institutions 2) Enhancement of collaborative linkage of APC with LGU and the concerned local organizations	<b>INPUTS</b> (Japanese Side) 1. Long Term Experts 1.1 Team Leader 1.2 Coordinator 1.3 Agronomy 1.4 Water Management 1.5 Farm Mechanization 1.6 Farm Management 2. Short-term experts (when necessity arises) 3. Equipment and machinery 3.1 Agricultural machinery, equipment and spare parts. 3.2 Vehicles necessary for TCP activities 3.3 Teaching materials and communication equipment including audio-visual equipment 3.4 Technical instruments & equipment 3.5 Other equipment necessary for TCP activities 4. Counterpart training Training of Philippine personnel in Japan (Philippine side) 1. Counterpart personnel 1.1 Project Manager 1.2 Deputy Project Manager 1.3 Counterpart Personnel for the Expert (at least 2 each) 1.4 Administrative and other staff to support the Project activities 2. Physical facilities 2.1 Buildings, facilities, office space for the Project 2.2 Space for machinery and equipment 2.3 Electricity, water and communication facilities 2.4 Other land, buildings and facilities necessary for the Projects 3. Running expenses All running expenses necessary for the implementation of the Projects 4. Others Establishment and management of committees necessary for project implementation	a. There is no social obstruction (land ownership etc.) to farmers participation to the Project. b. LGU and NIA actively participate and support the Project. c. No severe drought affects dam water reservation. d. Budget is available to implement the Project. e. APC staff (both permanent and casual) is fully assigned. f. No excessive incidence of major pests and diseases.  <b>PRE-CONDITIONS</b> a. Farmers in the CP are cooperative in the Project activities. b. Counterpart personnel is assigned for each Japanese Experts. c. GOP counterpart fund is available. d. APC maintains its key role in rice-based farming system. e. DA retains physical location of APC.	

ANNEX 10 TENTATIVE SCHEDULE OF IMPLEMENTATION (TSI) FOR BOHOL INTEGRATED AGRICULTURE PROJECT (BIAP)

Modified for the revision during Joint Committee meeting on Sept. 7, 1999

Year	96	1997				1998				1999				2000				2001			
Quarter	11-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-11
Activity																					
1 Formulation of detailed work plan based on the baseline survey and conduct of the monitoring of Project achievement.																					
1-1 Execution of a baseline survey																					
1-2 Preparation the Project activity plan and prioritize research subjects																					
1-3 Monitoring of the Project																					
2 Improvement and dissemination of location specific technologies for a rice-based farming system in the Project sub-site.																					
2-1 Improvement of cultivation technology																					
2-1-1 Varietal screening and selection																					
2-1-2 Cultural management practices																					
2-1-3 Technology verification																					
2-2 Improvement of cropping systems																					
2-2-1 Improvement of rice-based cropping patterns																					
2-2-2 On-farm verification of rice-based cropping patterns																					
2-3 Development of appropriate water management technology																					
2-3-1 Assessment of the present condition of the Project sub-site																					
2-3-2 Development of appropriate water distribution system																					
2-4 Improvement of the operation and maintenance system of irrigation facilities																					
2-4-1 Inventory and assessment of existing irrigation facilities																					
2-4-2 Making and improvement of operation and maintenance guidelines																					
2-4-3 Produce and utilization of water management manual																					
2-5 Improvement of farm machinery operations and postharvest technology																					
2-5-1 Needs assessment and data base for farm mechanization																					
2-5-2 Performance test and improvement of farm machinery operations																					
2-5-3 Improvement of farm level postharvest technology																					
2-5-4 Improvement of rice processing system																					
2-6 Improvement of farm machinery utilization and management																					
2-6-1 Economic analysis of farming operations																					
2-6-2 Improvement of farm machinery management system																					
2-6-3 Produce and utilization of farm machinery management manual																					
2-7 Improvement of farm management efficiency																					
2-7-1 Analysis of farming business and management																					
2-7-2 On-farm demonstration																					
2-7-3 Improvement of seed production system																					
2-7-4 Integration of technologies for rice-based farming system																					
2-7-5 Improvement of practical management skills																					
2-8 Enhancement of extension activity in order to disseminate appropriate technology																					
2-8-1 Staff Development Training																					
2-8-2 Training and Information material production																					
3 Improvement of management capability of IA in the Project sub-site																					
3-1 Facilitation of IA organization improvement and IA meetings																					
3-2 Facilitation of reviewing policies and making rules																					
3-3 Improvement accounting system and financial management																					
4 Enhancement of training																					
4-1 Training of agricultural extension workers of LGU																					
4-2 Training of key farmers in Bohol																					
5 Enhancement of collaborative linkage of APC with LGU and concerned organizations in carrying out the Project activities of (1) to (4) above.																					
5-1 Enhancement of collaborative linkage of APC with the line agencies and national institutions																					
5-2 Enhancement of collaborative linkage of APC with LGU and the concerned local organizations																					
Quarter	11-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-11
Year	96	1997				1998				1999				2000				2001			



26 ANNEX 11 ACTIVITY PLAN

WORKPLAN OF AGRONOMY SECTION (BIAPP)

Activities based on TSI	1999		2000				2001				Cross Section	Remarks
	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th		
TSI No. 2 Improvement & dissemination of location specific technologies for a rice-based farming system in the Project sub-site												
2.1 Improvement of cultivation technology												
2.1.1 Varietal screening and selection												
(1) Screening of PSB Lowland Rice Varieties											WM	
(2) Screening of Special Purpose rice varieties/elite lines											FMech	aromatic, red, glutinous
2.1.2 Improvement of cultural management practices												
(1) Fertilizer & cultural management practices											WM/FMgt	
(2) Integrated pest & disease management												
2.1.3 Technology verification												
(1) On-farm verification of technologies on irrigated lowland rice											FMgt	
(2) Field evaluation and adaptation test (Collaboration with PhilRice included)											FMgt	PhilRice*
2.2 Improvement of cropping systems												
2.2.1 Improvement of rice-based cropping patterns												
(1) Selection of suitable secondary crops												
(2) Improvement of cultural management practices of selected secondary crops												
2.2.2 On-farm verification of rice-based cropping patterns												
(1) On-farm verification of selected secondary crops											FMgt	
(2) On-farm adaptation test of cropping patterns (Collaboration with PhilRice included)											FMgt	Philrice*

\*Collaboration with PhilRice will continue even after BIAPP.

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### Section Activity Plan of Water Management (1999-2001)

Activities	1999						2000				2001				Cross section
	Jul	Aug	Sep	Oct	Nov	Dec	1	2	3	4	1	2	3	4	
TSI 2.3 DEVELOPMENT OF APPROPRIATE WATERMANAGEMENT TECHNOLOGY															
TSI 2-3-1 Assessment of the present condition of Capayas irrigation Project															
-Modification of CIP area map(1/4,000)															
-Water requirement data															
-Meteorological data															
-Soil data															Agro.
TSI 2-3-2 Development of Water Distribution Scheme															
-Water balance numerical analysis															
-Formulation of water allocation and distribution plan															
TSI 2.4 IMPROVEMENT OF THE OPERATION & MAINTENANCE SYSTEM OF IRRIGATION FACILITIES															
TSI 2-4-1 Inventory and Assessment of Existing Irrigation Facilities															
-Facility improvement plan															
-Modification of the facilities															
TSI 2-4-2 Making and Improvement of Operation and Maintenance guidelines															
-Formulation of appropriate operation and maintenance guidelines															
-Testing and modification of the guidelines															
TSI 2-4-3 Produce and Utilization of Water Management Manual															F/M
-Produce of water management manual															
-Utilization of water management manual															
TSI 3 IMPROVEMENT OF MANAGEMENT CAPABILITY OF IA IN THE PROJECT SUB-SITE															
TSI 3 -1 Facilitation of IA Organization Improvement and IA Meetings															F/M(Team)
-Conduct work shop for BOD															
-Improved organization structure															
TSI 3-2 Facilitation of Reviewing Policies and Making Rules															F/M(Team)
-Making roles and functions															
-Implementation and monitor of the rules															
TSI 3-3 Improvement Accounting System and Financial Management															F/M(Team)
-Improvement on ISF collection scheme															

## Section Activity Plan of Farm Mechanization

1999/9/6

TSI Activities	1999		2000				2001				Cross Section
	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	
<b>2-5-1 Needs assessment and data base for farm mechanization</b> •Key farmer selection •Price survey of machinery •Data base dissemination											F/M (Team)
<b>2-5-2 Performance test and improvement of farm machinery operations</b> •Performance test of Local Machinery •Selection and Modification of appropriate machinery and tool •Trial making of Appropriate machinery and tool •Performance test of trial making machinery and tool											
<b>2-5-3. Improvement of farm level postharvest technology</b> •Appropriate drying method finding •Dissemination of the above method											F/M (Team)
<b>2-5-4. Improvement of rice processing system</b> •Appropriate processing system finding •Dissemination of the above system by seminar											F/M (Team)
<b>2-6-1. Economic analysis of farming operations</b> •On farm survey of several farm operations •Dissemination of the above result by News letter on Farm Management											F/M
<b>2-6-2. Improvement of farm machinery management system</b> •Operator training •Farmers Training •Farm Machinery Monitoring on farm											F/M F/M F/M (Team)
<b>2-6-3. Produce and utilization of farm machinery management manual</b> •Manuscript making of a part of News Letter on Farm Management •Farm Machinery Management Manual Making •Farm Machinery Management Manual Distribution											F/M F/M (Team)

■ : Intensive

■ : Preparation & Follow up

# ACTIVITY PLAN OF FARM MANAGEMENT

TSI ACTIVITIES		1999		2000				2001				Cross Section	Remarks
		3	4	1	2	3	4	1	2	3	4		
2	Improvement and dissemination of location specific technologies for a Rice-based Farming System in the Project sub-site												
2-7	Improvement of farm management efficiency												
2-7-1	Analysis of farming business and management												
1	Market study on rice, field and vegetable crops (Study2)												
2	Study on the involvement of women in farming												
3	Survey on other farming potentials at CIP												
2-7-2	On-farm Demonstration												
1	Rice demonstration											all sections	
2-7-3	Improvement of seed production system											Agro/FM/FMech	rice crop
1	On station Registered seed production												
2	Supervision of Registered seed growers at CIP												
3	Seed utilization survey												rice crop
4	Formulation of CIP seed production and distribution scheme												
2-7-4	Integration of rice based farming system											FM/Agro/Fmech	
1	Assessment of developed rice-based technologies												
2	Introduction of backyard vegetable production, upland cultivation & livestock production												
2-7-5	Improvement of practical management skills												Cooperators on
1	Introduction of daily farm record keeping												On-Farm demo &
2	Formulate annual farmers' farm plan												verification trials on rice
2-8	Enhancement of extension activity in order to disseminate appropriate technology												
2-8-1	Staff Development Training												
1	Develop annual training plan and design											All BIAPP Sections	
2	Develop training materials											Concerned Sections	
3	Conduct trainings including evaluation and post-training activity											Concerned Sections	
2-8-2	Training and Information Materials Production												
1	Develop annual plan of training programs on rice-based farming system technologies											All BIAPP Sections	
2	Develop training design / manuals and conduct training including evaluation and post-training activity											Concerned Sections	
3	Produce information and instructional print / video materials											Concerned Sections	
4	Conduct forums / technobriefings											Concerned Sections	
4	Enhancement of training												
4-1	Training of Agricultural extension workers of LGU												
1	Develop annual training plan and design											All BIAPP Sections	
2	Develop training materials											Concerned Sections	
3	Conduct trainings including evaluation and post-training activity											Concerned Sections	
4-2	Training of key farmers in Bohol												
1	Develop annual training plan and design											All BIAPP Sections	In collaboration with ATI and LGU
2	Develop training materials											Concerned Section	
3	Conduct trainings including evaluation and post-training activity											Concerned Section	

資料2 アドバイザリーコミッティー出席者一覧

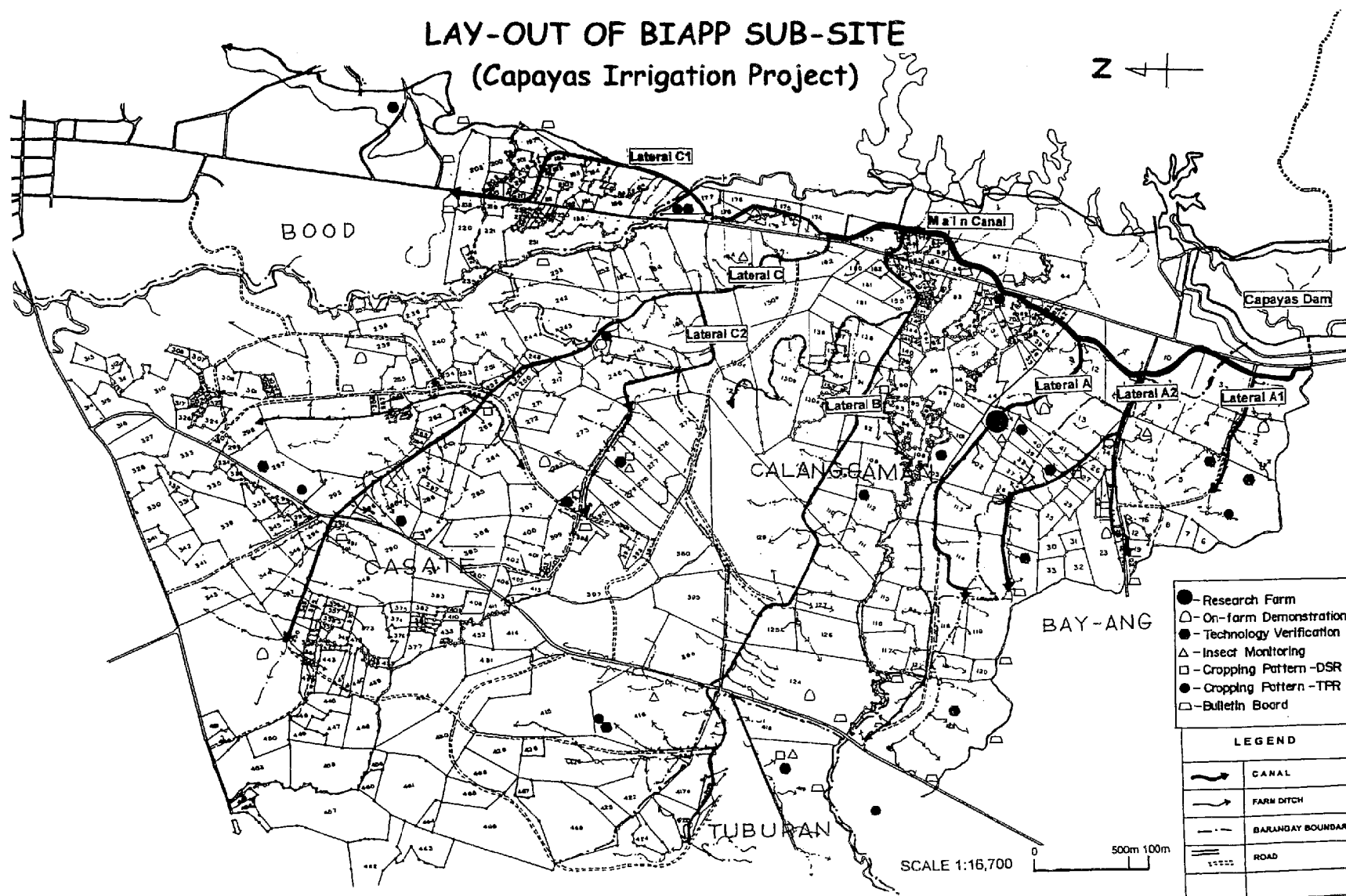
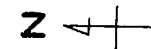
**ATTENDANTS OF THE ADVISORY COMMITTEE MEETING**

Venue: ITCAF, Director's Conference Room, DA

October 7, 1999, 10:00am -12:00pm

Cecilia Q. Astilla	Officer-In-Charge, Office of the Secretary, Project Development Service (PDS), Office of the Service Director, DA
Adamar A. Estrada	Project Development Officer III, Special Projects Coordination and Management Assistance Division, DA
Marilyn T. Maestrado	- ditto --
Cristy P. Polido	Senior Agriculturist, DA-PDS
L. Bondoc	DMO III, DA
Susana V. de Guzman	Project Development Officer II, Project Packaging and Resource Mobilization Division, PDS, DA
Ricardo D. Oblena	Asst. Regional Director, DA-Regional Office No.7
Eddie A. Digaz	Officer-In-Charge/Project Manager, NIA-BHIP-II
Santiago P. Gorospe, Jr.	Department Manager, NIA-PDI
Leonardo E. Baute	Division Manager, NIA-SMD-CO
Florentino R. David	Manager, Operation Div., NIA-Region 7 & 8
Joy A. Castro	Economic Development Specialist, NEDA
Aureliano B. Cahiles	Provincial Agriculturist, LGU, Bohol
Eugene C. Cahiles	Project Manager, BIAPP, BAPC
Kunihiro Tokida	Chief Advisor, JICA Expert, BIAPP
Kazuo Subo	Deputy Resident Representative, JICA
Tetsuji Iida	Assistant Resident Representative, JICA
Osel Enriquez	Program Liaison Officer, JICA
Takashi Fujimori	JICA Expert, DA
Nobuyuki Samejima	Managing Director, Agricultural Development Dept., JICA-HQ
Chukichi Kaneda	Technical Advisor, AICAF
Hisataro Horiuchi	Professor, Tottori University
Toshiaki Ito	Section Chief, Shiga Prefecture Office
Chiho Sameshima	Section Chief, MAFF
Mutsumi Onishi	Staff, Agricultural Development Dept., JICA-HQ

# LAY-OUT OF BIAPP SUB-SITE (Capayas Irrigation Project)



**PASIUNANG  
TEKNOLOHIYA NGA  
GIREKOMENDAR  
PARA SA PROJECT  
SUB-SITE**

**BAHIN SA  
PAGTANUM UG  
HUMAY**

*Version 2*



**Bohol Integrated Agriculture  
Promotion Project  
B-APC, Dao District, Tagbilaran  
City, Bohol**

***July 1999***

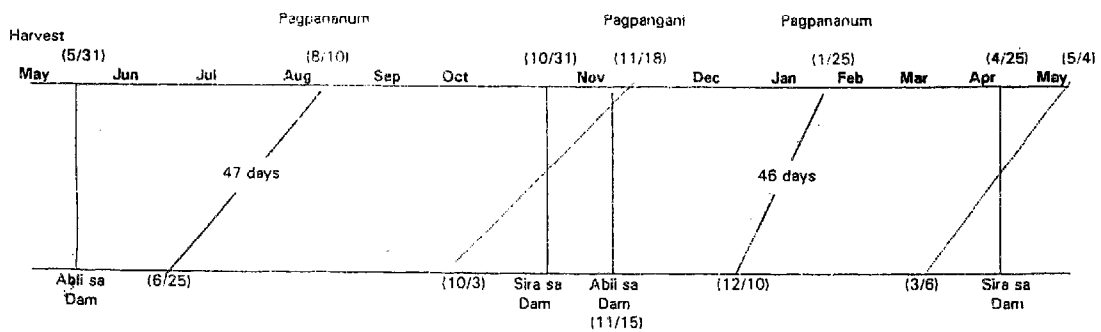
## 1999 CROPPING CALENDAR

### Schedule

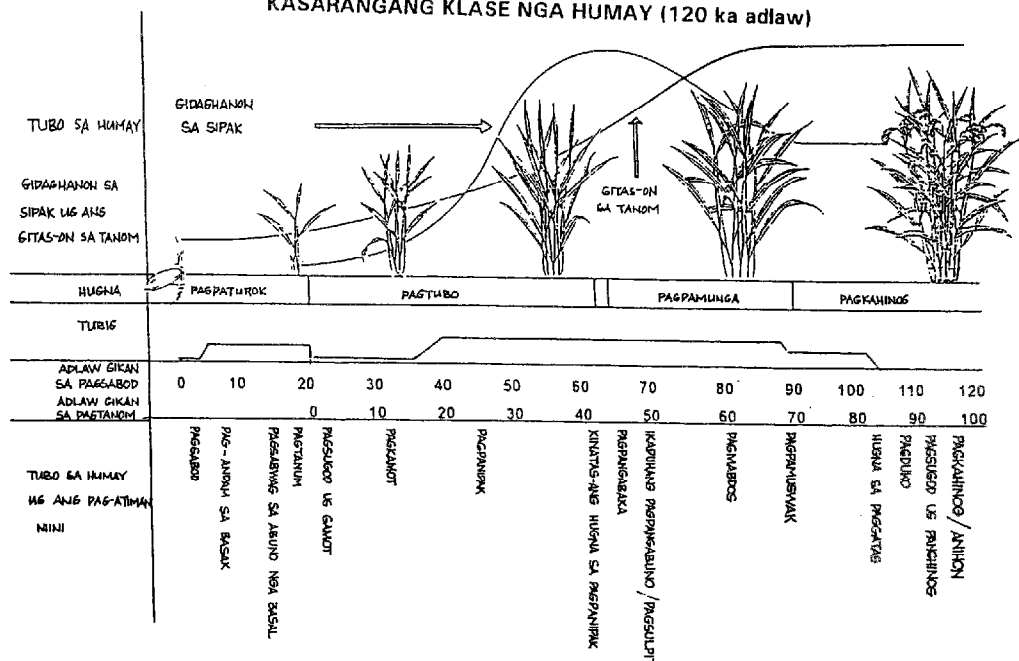
LOKASYON	TINGTANOM	PATUBIG SA BASAK	PAGTANOM	PAGPAHUBAS SA TUBIG SA BASAK
1. Downstream				
Lateral Canal C	Panuig	Mayo 31 – Hunyo 30	Hunyo 25 – Hulyo 25	Oktubre 24
Lateral Canal C1	Pangamihan	Nobyembre 15 – Disyembre 15	Disyembre 10 – Enero 10	Abril 11
Lateral Canal C2				
2. Upstream				
Lateral Canal A	Panuig	Hunyo 14-- Hulyo 15	Hulyo 10 – Agosto 10	Nobyembre 7
Lateral Canal A1	Pangamihan	Disyembre 1 – Disyembre 30	Disyembre 25 – Enero 25	Abril 25
Lateral Canal A2				
Lateral Canal B				

### Panuig 1999

### Pangamihan 2000



### HUGNA UG PAMAAGI SA PAG-ATIMAN SA MGA KASARANGANG KLASA NGA HUMAY (120 ka adlaw)





### **Pasiuna**

Ang epekto sa El Niño phenomenon ug ang problema karon sa mga dangan ug sakit sa humay (sama sa ulod sa ubod, mata-mata, piangaw ug tungro) nakapakunhod sa ani didto sa BIAPP sub-site. Ang pagdagsang sa mga dangan ug sakit nahitabo kay wala magkadungan ang pagpananom sa mga mag-uuma didto sa sub-site. Bisan dili panahon sa ting-tanum, sila mitanum gayod' ug humay aron mahulipan ang ilang alkanse sa mi-aging ting-ani.

Kining maong edisyon para sa mga rekomendadong teknolohiya gimugna aron kahatagan ang mga mag-uuma sa BIAPP sub-site ug mga bag-ong impormasyon mahitungod sa tukmang pama-agi sa pagtanum ug humay apil na niini ang pagsugyot sa mga rekomendadong klase sa humay, pagmaneho sa patubig nga may kalabutan sa cropping calendar, pagmaneho sa midagsang nga mga dangan ug sakit ug ang pagmaneho sa mga gimbuhaton human sa pag-ani sama sa pagtipig/hipos sa tipasi.

### **Mga Rekomendado nga Klase sa Humay**

Base sa mga resulta sa gihimong pagtoon sa nagkalain-laing klase sa humay, inubanan sa pagpaniid sa ilang tinubu-an o barog sa basakan sa atong mga mag-uuma, duha lamang ka klase sa humay ang nagpakita nga dunay maayo ug malungtaron nga abot sukad pa sa mi-aging mga tingtanum. Ang maong mga matang makasugakod usab sa ataki sa mga dangan ug sakit sa humay :

#### **ALA (PSB Rc 18)**

#### **Kasagaran nga Abot**

1995 Pangamihan	4,895 kilos kada ektarya 122 ka sako kada ektarya
1996 Panuig	4,930 kilos kada ektarya 123 ka sako kada ektarya
1997 Pangamihan	4,812 kilos kada ektarya 120 ka sako kada ektarya

1999 Pangamihan 4,700 kilos kada ektarya  
118 ka sako kada ektarya

### Kinaiya sa Tanom

Gitas-on : 102 sentimetros  
Gidaghanon sa uhay matag  
puno-an : 13  
Gidaghanon sa tipasi matag  
uhay : 74  
Timbang matag 1,000 nga  
tipasi : 26.5 ka gramos  
Himsog nga tipasi matag  
uhay : 78 porsyento  
Kagulangan : 120 ka adlaw  
gikan sa  
pagpugas

### Reaksyon ngadto sa Sakit

Mata-mata Makasukol  
Tungro Kasarangan nga  
makasukol  
Bakteryang Mopalaya sa  
Dahon Makasukol

### Reaksyon ngadto sa Dangan

Ulod sa Ubod Igo-igo nga  
makasukol  
Lipis-lipis Makasukol  
Berdeng bunhok Igo-igo nga  
makasukol

JARO (PSB Rc 32)

### Kasagarang Abot

1996 Panuig 5,015 kilos kada ektarya  
125 ka sako kada ektarya

1997 Pangamihan 3,573 kilos kada ektarya  
89 ka sako kada ektarya

1999 Pangamihan 4,132 kilos kada ektarya  
103 ka sako kada ektarya

THE EXPONENT OF PHILIPPINE PROGRESS  
SINCE 1900

# MANILA BULLETIN

IN THE NATION'S LEADING NEWSPAPER

VOL. 322 No. 3 ★ SUNDAY MORNING, OCTOBER 3, 1999 140 PAGES W/PANORAMA—P15.00 IN METRO MANILA • <http://www.mb.com.ph>

## NFA told to cut rice price by ₱2 a kilo

*To cushion impact  
of oil, fare hikes*

By BRENDA PIQUERO TUAZON

President Estrada ordered yesterday that the price of rice sold by the National Food Authority (NFA) be reduced by as much as ₱2 per kilo to help cushion the impact of the recent oil price increases and the impending transport fare hike.

This means that the current selling price of NFA rice pegged at ₱14.60 per kilo will now be sold at ₱12.60.

The Chief Executive issued the order following consultations with

his economic advisers, Secretary Edgardo Angara of the Department of Agriculture (DA), and NFA Administrator Eduardo Nonato Joson.

Mr. Estrada stressed that the NFA buying price for palay will remain the same despite the cut in the agency's selling price for rice, to ensure that farmers continue to get the best rates for their produce.

Earlier yesterday on his program JEEP ni Erap: Ang Pasada

(Turn to Page 8, col. 1)

ng Pangulo, the President said the proposal to bring down the price of NFA rice were among the measures discussed by his Cabinet to cushion the impact of the rise in oil prices on poor consumers. The President immediately approved the proposal after the program.

*"Dahil sa marami tayong aning bigas ngayon, para naman di masyadong maapektuhan ang ating masang kababayan, kung maari ay ibaba ang presyo ng bigas hanggang dalawang piso per sa isang kilo (Because of our bumper harvests, we can bring down the price of NFA rice by ₱2 a kilo so that the masses will not be heavily burdened by the oil price increases),"* the President said on the program aired nationwide by the People's Television Network Inc. (PTV-4), and Bureau of Broadcast Services-Radyo ng Bayan.

JEEP ni Erap is also aired over dzMM and the ABS-CBN Cable News Network.

Angara noted that rice consumption eats up a substantial portion of the price index used to determine the inflation rate.

On the same program, Angara said the country's agricultural modernization program continues to yield positive results, with bumper harvests expected in rice and corn this year.

He reported that the country's buffer stock for rice is good for 120 days, and corn for 30 days.

The Philippines, Angara, said, is expected to produce its highest rice yield — 12 million metric tons — this year.

*"Next year konti na lang ang ating imports (Next year we will significantly reduce our imports of these food staples),"* he said.

Angara also assured the public that the country's sugar supply remains stable.

These positive developments, according to the President, is expected to help minimize the impact of the recent round of oil price increases and impending fare hikes on poor consumers.

Mr. Estrada noted that he has also ordered wage and productivity boards nationwide to speed up their study on proposed pay adjustments.

Secretary Bienvenido Laguesma of the Department of Labor and Employment, who also guested on JEEP ni Erap, said the wage boards in the Cordillera Administrative Region and Southern Mindanao have already completed their evaluation on proposed wage increases.

He added wage boards in three more regions, including Metro Manila will finish its work by mid-October.

On the same program, Secretary Mario Tiaoqui of the Department of Energy said the recent round of oil price adjustments is a global phenomenon that affects not only the Philippines but

nearby countries as well because of the production cutback imposed by the Organization of Petroleum Exporting Countries (OPEC).

He noted, however, that compared to other Southeast Asian countries such as Thailand and Singapore, prices of petroleum products here remain relatively lower.

Tiaoqui pointed out for, instance, that Manila raised diesel prices last month by 21 centavos per liter, compared to Bangkok, which increased the price of the same product by 98 centavos.

Premium gasoline, on the other hand, increased by an average of only 65 centavos per liter, compared with Bangkok at a rate equivalent to ₱1.20 and Singapore, ₱1.42.

Tiaoqui said the comparatively low oil price increases in the Philippines is one of the positive results of deregulating the oil industry.

Angara, a former Senate President, noted that the oil price adjustments would have been higher if the old automatic pricing scheme was employed instead of the existing practice under a deregulated industry.

Tiaoqui noted that because of competition and as a result of government appeals to oil companies, the prices of socially sensitive products such as diesel and liquefied petroleum prices have been cut.

## Low-cost homes

President Estrada, renewing his commitment to provide affordable homes to low-income families, disclosed yesterday that he had asked the Monetary Board (MB) and private banks to widen sources in home financing and overhaul the financing system to bring down interest rates for socialized housing.

President Estrada said he would push for the construction of 150,000 low-cost housing units next year as part of his program to build a total of one million socialized housing units during his term which ends in 2004.

The President envisions a socialized housing program where units will sell for as low as ₱145,000. Low-cost homes will be sold from between ₱225,000 to ₱325,000.

Chairman Karina David of the Housing and Urban Development Coordinating Council (HUDCC) assured the President that funds for the 150,000 low-cost housing units have been included in the proposed budget for the next fiscal year.

President Estrada said the construction of these socialized housing units would not have any government guarantee. Private developers will shoulder any losses they incur, he added.

In the past, he said, some developers would build houses registered to

fictional tenants, and then charge the costs to the government.

As part of his pump-priming program for building socialized housing units, the President said private banks would be involved. The program will have better terms of payment, including provisions for restructuring loans and an overhaul of the financing system so long-time tenants can have a better chance to pay their obligations.

He said that banks have cooperated with him in this program, scaling down housing interest rates from a high of 24 to 29 percent to just 13 percent.

As part of his poor plans, the President said he would provide housing units to all police personnel before the end of his term in 2004. "I am confident we can do this," he said.

Despite limited resources in the past year, the President said that the government managed to build housing units to serve 90,000 families.

"With our budget for fiscal year 2000," the President said, "we can build a minimum of 150,000 houses."

David appeared with the President in the weekly "JEEP ni Erap: Ang Pasada ng Pangulo."