# PROVINCIAL IMPLEMENTATION SCHEDULE AND ANNUAL FUND REQUIREMENTS

REGION: XII(CENTRAL MINDANAO), PROVINCE: MAGUINDANAO(73)

	•	No. of	Designed Irrigable	sl .		First 5Yes	13		1 :		Second 5Ye	ALIS.		1
	Sub-Projects	Sub-Project	1	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	, Tol
	CISa	į	I	!		1	İ		!	1	i	!	!	!
	"A" Group			i	1	1	I .	i	I I	1 .		i I	! }	1
	-	i I a	l 		<del>- </del>	<del> </del>	<del></del>	네 	1	1	<b>t</b>	! !	1	1
	F/S Design	2 2	630 630	0.95	0.14	j	i	i	i	ì	i	i	ì	0.5
	lost. Activities	2	630	1	0.06	0.06	0.06	0.06	0.06	i ·	i	İ	i	0.1
	Construction	2	630	1	1 0.00	3.63	3.63	1	1 0.00	ŀ	i	l	1	0.3
	Sub-Total (1)	: 2	. 630	0.95	0.20	3.69	3.69	0.06	0.06	1	]	1	I .	8.6
	"B"Group	l I	1	<u> </u>	· 	<u>i</u>	<u>i</u>	<u>i</u>	<u> </u>	<u> </u>	i	į		i
	Re-Study	19	2,845	1.07	1.07	1.07	1.06	i	i	i	i	i	i	1 4.3
	Design	19	2,845	!	0.33	0.33	0.33	0.34	ļ	ŀ	1	l	1	1.3
	inst.Activities	19	2,845	1	0.14	0.29	0.43	0.57	0.57	0.43	0.29	0.13	į.	2.8
	Construction	19	2,845	1 102	1	3.86	7.71	7.71	7.71	3.85		1	!	1 30.
	Sub-Total (2)	19	2,845	i 1.07	i 1.54	l 5.55 l	l 9.53 l	8.62	1 8.28 1	i 4.28	1 0.29 1	0.13 	† 1	1 39. I
L	"C"Group I		[ [	i i	1	I ·	1	l i	<u> </u>	1	<u> </u>	1	İ	i
	F/S	1	410	1	J.	I i	I	0.62	1	1	1	Ī	İ	0.0
	Design	1	410	į.	!	1	I .	ı	0.07	1	1	1	i.	1 0.0
	Inst. Activities   Construction	1	410 410		!	!	!	Į.	0.03	0.03	0.03	0.03	1 0.03	0.1
	Sub-Total (3)	1	410	!	!	1	Į.	1 062	. 010	2.23	2.22	1	1	1 4.4
	*D*Group	•	. 410	! !	1	1	i	0.62 	01.0 1	2.26 1	) 2.25 I	0.03 	I 0.03	1 5.7 1
•	i			<b>!</b> }	! !	}	! !	<u> </u>	l	<u> </u>	<u> </u>	<u> </u>	<u> </u>	j 1
	P/S	10	2,086	İ	İ	i	i	1.03	1.03	1.07	i	, i	i	3.1
	Design	10	2,086	I	t	1	ł	İ	0.23	0.23	0.24		i	0.7
	Instactivities	10	2,086	ı	1	1	1	I ·	1.58	2.94	4.53	4.53	9.05	22.
	Sub-Total (4)	10 10	2,086 2,086	I	1	ı	ı	۱ ,٫٫	1	0.26	0.50	0.50	0.24	1.5
	•			)	ĺ	]	ļ	1.03	2.84	4.50	5.27	5.03	9.29	27.9
-	Total (1)	32	5,971	2.02	1.74	9.24	13.22	10.33	_ 11.28 _	_11.04	7.81	5.19	9.32	81.
	CIPs	i		i	1	:	i i	! 	! !	) 	i Ì	! !	! 	! 
	"A"Group		•	 	<del>                                     </del>	i t	<b>!</b>	! !	l .	 	<b>:</b> 	<b>!</b> 	l I	l .
	Design i	į		l .	!	<b>\$</b>	ļ	Į I	i ·		Į.		į	
	Inst.Activities	2	607	0.24	0.12	0.12	0.12	!		l I	) 1	1		0.6
	Construction	2	607	16.26	16.25					l 1	:	,	1	32.
	Sub-Total (5)	2	607	16.50	16.37	0.12	0.12	i		i	i	i I	, ì	33.1
	"B"Group	1				<del>!</del>		! !	<b>!</b>	l 	! 	 	l   	l '
	Ra-Study	1 !	80	0.12	! !	l ;	!		i !	l	i ,	1	1	0.1
	Design	1 1	80		0.07				] ]		!		1 -	0.0
	Inst.Activities	1 1	80		0.06	0.06	0.06	0.06	0.06		l		I i	0.3
	Construction	1 !	80	_ !	: !	1.76	1.76	i .			!		l ;	3.5
	Sub-Total (6)	1	80 I	0.12	0.13 l	1.82	1.82	0.06	0.06		! 	·	[	4.0
	*C*Group	1			<u> </u>	; <u> </u>			<u> </u>					
	F/S	54	9,632	2.02	2.02	2.02	2.02	2.02	2.17	2.18	i i		, '	14.4
	Design	54	9,632	1	0.53	0.53	0.53		0.53	0.57	0.56	i	l i	3.7
	Inst. Activities	54	9,632 J	. 1	0.49	0.97	1.46		2.27	2.27	2.27	1.78	291	16.2
	Construction   Sub-Total (7)	54 [	9.632	200	3.61	33.90	59.33 J	59.33	59.33		59.33		33.87	423.
	i	54 j	9,632 <sub>[</sub>	2.02	3.04 j	37.42	63.34	63.66	64.30	64.35	62.16	61.11	ן 36.78	458.
I	*D*Group	į	į	į	į		į		į			ļ		
	P/S	i	. ! I	,	1	i	¦	. !				l	! !	
	Design	. i	i	·i	· i	i	i	i	i				, ! 	
	Inst. Activities	i	i	· i	ì	i	· i	i	i	i	,	ľ	, , , ,	
	Construction	J	i i	i	j	i	Ţ	i	i		i	i	j	
	Sub-Total (8)	4 1		ı	. 1	i	i	. 1	. 1	i	i	i	i	
. •														
	Total (2)	57	10,319	18.64	19.54	_39.36 H	65.28	63,72	64.36	64,35	62.16	61.11	36.78	495.
_;	Total (2)	57   89	10,319 16,290	18.64 20.66	19.54 21.28	_39.36 48.60	65.28 78.50	63,72 74.05	64.36 75.64	_64.35 75.39	62.16 69.97	61.11	36.78 46.10	_4 <u>95.</u> 576.

Since a total erea of the inventoried sub-projects (A', 'B', 'B', 'C') of CIPs exceeds the target area, "C' sub-projects for implementation are less than the inventoried "C" sub-projects in their total are likely and the inventoried of the company of the inventoried of the company of the inventoried of the company of the company of the company of the inventoried of the company o

#### PROVINCIAL IMPLEMENTATION SCHEDULE AND ANNUAL FUND REQUIREMENTS

REGION: XII(CENTRAL MINDANAO), PROVINCE: SULTAN KUDARAT(74) SSIDP Target Area (1993-2002): 8,071 ha for CISs & 3,369 ha for CIPs (Unit : Million Pesos) No. of | Designed Irrigable Second 5 Years First 5Years Sub Projects 1999 2000 2001 2002 Area (ha) Total Sub-Projects CIS<sub>1</sub> "А" Стопр 1,265 1,265 1,265 1.90 1.90 0.42 0.42 Design Inst. Activities 0.18 0.18 0.18 81.0 0.18 0.90 20.01 Construction 6 6 1.265 10.01 10.00 1 265 1.90 0.60 10.19 0.18 0.18 Sub-Total (1) \*В" Group 1.26 1.25 2.51 1.670 Re-Study Design Inst.Activities 1.670 0.28 0.28 0.24 0.56 1.20 1.670 0.12 0.24 0.24 0.24 4.53 4.77 Construction 1,670 4.53 9.06 18.12 Sub-Total (2) 1,670 1.26 1.65 5.05 9.30 0.24 0.12 22.39 "C"Group 111 622 0.93 0.93 0.14 0.14 622 Design Inst.Activities 622 0.06 0.06 0.06 0.06 0.06 0.30 3.38 3.37 6.75 Construction 2 622 Sub-Total (3) 0.93 0.20 3.44 3.43 0.06 0.06 8.12 "D" Group 1.69 0.37 0.32 6.77 4,514 1.69 1.69 4,514 4,514 0.37 0.16 1.47 3.15 Design 21 21 0.37 0.36 0.47 0.63 Inst. Activities 0.63 0.94 4,514 4,514 Construction 6.12 12.24 12.24 12.24 6.11 48.95 1.69 2.22 8.50 14.78 12.87 7.05 Sub-Total (4) 13.23 60.34 37 Total (1) 8,071 1.20 1.86 1277 17.12 15.14 16.88 15.08 13.41 12.87 7.05 114.08 CIP<sub>3</sub> "A" Group 1,130 1,430 1,430 1,430 0.14 0.54 18.36 Design 0.21 0.21 0.56 0.42 Inst. Activities 0.30 0.54 0.48 0.30 0.12 2.70 3.06 3.57 15.30 6.12 6.60 55.08 Sub-Total (5) 15.84 19.04 0.30 0.12 58.34 \*B\*Group Rc-Study Design Inst. Activities Construction Sub-Total (6) VII "C"Group P/S 1.939 0.47 2.91 1,939 1,939 1,939 Design 0.16 0.16 0.17 0.17 0.17 0.98 14 0.29 6.82 0.42 14.50 0.71 14.50 0,71 14,50 0.55 14.50 4.20 85.31 Inst. Activities 0.13 0.55 0.84 14.50 Construction 5.99 Sub-Total (7) 0.47 0.76 15.58 15.36 15.05 VIII "D" Group Design Inst.Activities Construction Sub-Total (8) Total (2) 23.60 3,369 3.57 13,34 19.80 22.18 16.01 16.00 151.74

32.57 Since a total area of the inventoried sub-projects ("A", "B" & "C") of CIPs exceeds the target area, "C" sub-pr

15.20

5.47

11,440

Grand Total

40.72

37.32

31.08

28.77

27.92

265.82

# ANNEX J

# DATABASE SYSTEM FOR ADMINISTRATION AND MANAGEMENT

# ANNEX J

# DATABASE SYSTEM FOR ADMINISTRATION AND MANAGEMENT

### **Table of Contents**

		<u>Page</u>
1. Database	e System for Administration and Management	J-1
	LIST OF TABLES	
Table J-01	Sample of Computer Printout (Total & Average)	J-5
Table J-02	Sample of Computer Printout (Distribution)	J-6
Table J-03	Sample of Computer Printout (Sorting)	J-7
Table J-04	Sample of Computer Printout (Extraction)	J-8
Table J-05	Implementation Procedure of Database Management System in SSIDP	J-9
Table J-06	List of Data to be Collected	J-10
	LIST OF FIGURES	
Fig. J-01	Flow Chart of Proposed System	J-16
Fig. J-02	Database Management System in SSIDP	J-17

# DATABASE SYSTEM FOR ADMINISTRATION AND MANAGEMENT

#### General

- J.01 NIA intends to utilize the computerized database system prepared by the JICA Study Team for administration and management purposes, and requests the JICA Study Team to transfer the computerized database system to NIA.
- J.02 However, the existing database system is prepared only for formulation of the SSIDP Master Plan. It has not been designed for storing the data required for future administration and management of communal irrigation development. Therefore, the JICA Study Team will modify the database system so that NIA will be able to maintain the database system in future by adding and updating the information. The JICA Study Team will hand over the database system, which consists of all data obtained through the inventory survey and the computer programs for data analysis.

#### Database system

- J.03 Generally, computerized database system for project management will have following five functions:
  - (1) Data input/output for each project,
  - (2) Data analysis,
  - (3) Preparation of yearly/long-term development program,
  - (4) Monitoring & Evaluation (under construction), and
  - (5) Monitoring & Evaluation (after construction).

The computer program for each function is outlined hereinafter (schematic flow chart of each computer program is shown in Fig J-01):

J.04 Data input/output

When the particular project is planned and its reports is submitted to the Central Office, the data and information of the project are to be stored and compiled in proper manner according to the specified format. And stored data and information are to be retrieved quickly and correctly whenever they are required. This program consists of data encoding and data storage, and printing out.

J.05 <u>Data analysis</u>

Based on the data and information compiled in program (1), the following analysis can be made by this program;

- Calculation of total and average,
- Distribution.
- Sorting, and
- Extraction.

<u>Total</u> sums the numeric values of the database file on a key item. <u>Average</u> computes the average of a numeric value. The result of the calculation will be stored to another file and tabulated by use of this program. Table J-01 presents the summary of designed irrigable area of CIS in wet season per Provinces and Region, calculating its total and average.

<u>Distribution</u> calculates frequency distribution of the values in a range. A frequency distribution counts how many of the values in a range fall within specified numeric intervals. The range is fixed by the program. Data to specify the range are designed irrigable area, length of irrigation canals, crop yield, construction cost, EIRR and so on. For example, in Table J-02, computer output is obtained to determine how many of the designed irrigable area in wet season for CIS are more than or equal to 50 ha and less than or equal to 150 ha, greater than 150 ha and less than or equal to 300 ha, or greater than 300 ha and less than or equal to 500 ha.

Sort program arranges records in a database file in the order specified. The key data to sort can be specified in a menu of the program, and the order in descent or in ascent also will be selected. In Table J-03, data of the designed irrigable area in wet season of CIS in Ifugao Province is sorted in descent order and printed out.

Extraction program can select records in a database specifying a condition or range. The computer will search the records in a database file to meet the specified condition, copy them to another database file and print out the file. Table J-04 shows the result of extraction of CIS in Northern Leyte Province under the condition that the designed irrigable area in wet season is more than 200 ha and less than 300 ha The selection of extraction condition can be also made by menu of the computer program.

J.06 Preparation of implementation program

This program will assist NIA to prepare such implementation programs as the long-term development program, annual development program, annual budget to each PIO, and so on. The following information will be necessary to proceed the program in addition to those compiled in program (1);

- Total potential irrigable area,
- Actually irrigated area,
- Total budget,
- Budget allocation formula, and
- Existing criteria and guidelines for selection and prioritization.

#### J.07 (4) Monitoring & Evaluation (during construction stage)

Once the construction works is commenced, its work progress is to be carefully monitored in both physical and financial aspects. Following computer output can be obtained by use of the program (4);

- Progress of each construction works for each project,
- Expenditure statement for each project,
- Progress of construction works in each PIO, and
- Budget-expenditure statement of each project and each PIO.

To prepare them, the additional data and information will be required, in addition to those encoded in programs (1) and (3), such as information of contract agreement, and record of physical work progress and payment.

#### J.08 Monitoring & Evaluation (after construction)

The monitoring and evaluation will be continuously carried out even after completion of works to proceed proper operation and maintenance and verify the necessity of the rehabilitation. Following data will be collected and encoded for each project every year;

- Actual irrigated area,
- Crop yield,

- Amortization amount, and
- Numbers of IA members.

The program (5) will analyze these data and give useful information for evaluation of the present development programs.

#### Proposed database system

- J.09 The computerized database system can comprise various kinds of function as mentioned in preceding section. But considering data availability at present, the Team proposes that the system will deal with only item (1): input/output program and item (2):data analysis program. The proposed system will not include the programs for (3) Preparation of implementation programs, and (4) and (5) monitoring & evaluation except data encoding.
- J.10 Answering the importance of data collection after completion of the works, the computer program for data encoding in item (5) will be provided in the proposed system.

### Purpose of the system

J.11 The proposed database system will be prepared mainly for NIA officials working for CDD of NIA Central Office. The proposed system will provide them with basic data and information so quickly at any time when they are required so that they can prepare the development programs easily and make monitoring and evaluation in correct and efficient manner.

#### Data to be collected

- J.12 In connection with the data to be stored into the proposed database system, there are two kinds of data items: (1) fixed data item and (2) variable data item.
- J.13 The proposed database system will be based upon the important data and information which will be extracted from the original database files for master plan study, and will be updated regularly in the future from the data to be gathered through the following phases;
  - Identification, Investigation Phase
  - Pre-construction Phase
  - Construction Phase, and
  - O/M stage.
- J.14 The fixed data items are those which are almost fixed or will not change so often, and include the items of location, name of sub-project, name of IA, service area, existing facilities and likes. The items will be determined considering the format of NIA's Final Feasibility Study Report and the agreed minimum selection criteria.
- J.15 The variable data items are defined as those which will change almost every year, and include the items such as amortization fee collection, irrigation area, O/M fee collected, crop yield, minor repair and rehabilitation. Those data and information are to be collected annually or in every crop season and updated/added into the system since they are essential to monitor and evaluate the project effect and formulate the rehabilitation programs.

J.16 The data to be collected for the proposed system are summarized in Table J-05 and the details are shown in Table J-06.

# Structure of system

J.17 Structure of the proposed system is presented in Fig. J-02. In the system, all the instructions required for database operation will be given on the computer display so that users can operate the system easily even without the knowledge of the computer language.

FORK NO. : AEO2

EXISTING PROJECTS, TOTAL NET IRRIGABLE AREA IN THE WET SEASON PROVINCE NAME TOTAL NO. TOTAL REGION PROVINCE AVERAGE ILOCOS KORTE 114.54 ABRA 37
TLOCOS SUR 70 142.32 5,266.00 - 02 
 ILOCOS SUR
 70
 116.90

 MOUNTAIN PROVINCE
 8
 114.25

 LA UNION
 39
 130.03

 BERGUET
 9
 68.56
 116.90 8,183.00 114.25 914.00 130.03 5,071.00 03 Ĭ . 1 04 1 . 05 96 68.56 617.00 PANGASINAN 178 153.98 27,409.00 07 0.00 08 BATAHES 0 H 0.00 
 BATARES
 0

 CAGAYAH
 105

 KALINGA APAYAD
 64

 ISABELA
 47

 IFUGAD
 35
 09 10 138.20 14,511.00 11 87.53 5,602.00 207.98 9,775.00 93.69 3,279.00 138.31 18,118.00 H П 11 11 12 NUEVA VISCAYA 131 QUIRINO 29 18,118.00 П 13 119.31 3,460.00 11 133.20 SUB-TOTAL NUEVA ECIJA 43 7,746.00 111 180.14 36 16 17 221.53 III TARLAC 7,975.00 10 73 18 30 156.30 ZANBALES 1,563.00 Ш PANPANGA 11,521.00 Ш 157.82 18 2,568.00 3,932.00 BULACAN 142.67 Ш . 19 Ш 20 BÁTAAN 131.07 35,305.00 210 168.12 SUB-TOTAL 39 6.190.00 AURORA 
 AURORA
 39
 158.72
 6,190.00

 QUEZOR
 38
 101.97
 3,875.00

 RIZAL
 19
 93.11
 1,769.00

 CAYITE
 5
 119.20
 596.00

 LAGUNA
 25
 98.96
 2,474.00

 BATANGAS
 22
 92.36
 2,032.00

 MARIHDUQUE
 5
 109.00
 545.00

 MINDORO ORIENTAL
 48
 172.71
 8,290.00

 MINDORO OCCIDENTAL
 54
 191.26
 10,328.00

 ROMBLOH
 2
 72.50
 145.00

 PALAWAN
 41
 176.15
 7,222.00
 158.72 23 24 IV. 19 25 14 26 IV 27 14 28 I¥ 79 I٧ 30 ΙŸ CANARINES NORTE 18 1,469.00 32 81.61 96 9 33 13,012.00 CAMARINES SUR 135.54 34 CATAHOUAHES 116.56 1,049.00 35 36 151.73 11,835.00 ALBAY 78 4,404.00 SORSOGON 34 129:53 36 37

MASBATE

19

97:58

1,854.00

# SAMPLE OF COMPUTER PRINTOUT (DISTRIBUTION)

FORM NO. : DE36

EXISTING PROJECTS, DESIGNED NET IRRGABLE AREA IN THE WET SEASON (HA)

NO.   NO.   STORTE   119   93   22   4   0	AVERAGE	Ħ	UNKROWA	0	300		150	50	NO.	PROVINCE MAKE	PROVINCE	
1			. •	0	500		300				NO.	NO.
1	114.5		. 0	4 4			22	93	119	ILOCOS HORTE	01	 ]
1	142.3		: 0	6	6		-6					
1	116.9		400									_
1	114.2	• •	0			•				the second secon		_
1	130.0		· Č		_		1					-
1 07	68.5		-	_	_		0			and the second s		i
11	153.9		_									i
11	132.8		0	6	36		89	335	460		SUB-TOTAL	
11			. 0	0	0	***	0	0	0	BATAHES	08	 []
11	138.2		0	5	5							
11	87.5		Ç									
11	207.9											
11	93.6											
11	138.3		0	-	_							
111	119.3		Ů									
TIT	133.2		0	0	30		78	303	411		SUB-TOTAL	
III	180.1		Ö.	6	6		11	26	43	NUEVA ECIJA	15	111
III	221.5		0	9	. 9		16		36		16	
	156.3		0	1	1							
111	157.8		. 0	5	5							
SUB-TOTAL   210	142.6		0 .	1	1							
1V         21         AURORA         39         27         10         2         0           1V         22         QUEZON         38         34         3         1         0           IV         23         RIZAL         19         17         2         0         0           IV         24         CAYITE         5         4         1         0         0           IV         25         LAGUNA         25         23         2         0         0           IV         26         BATANGAS         22         21         1         0         0           IV         26         BATANGAS         22         21         1         0         0           IV         27         MARIHOUQUE         5         4         1         0         0           IV         28         HINDORO ORIENTAL         48         25         19         4         0           IV         30         ROHBLON         2         2         0         0         0           IV         30         ROHBLON         2         2         0         0         0           IV         31	131.0		. 0,				6					
IV       22       QUEZON       38       34       3       1       0         IV       23       RIZAL       19       17       2       0       0         IV       24       CAYITE       5       4       1       0       0         IV       25       LAGUNA       25       23       2       0       0         IV       26       BATANGAS       22       21       1       0       0         IV       27       MARINOQUE       5       4       1       0       0         IV       28       HINDORO ORIENTAL       48       25       19       4       0         IV       29       NIHDORO OCCIDENTAL       54       31       12       11       0         IV       30       ROHBLON       2       2       0       0       0         IV       31       PALAWAN       41       19       18       4       0         SUB-TOTAL       298       207       69       22       0         V       32       CAMARINES NORIE       18       18       0       0       0         V       33       CAMARIN	168.1		. 0	5	25		71	. 114	210	n, ip ip, ip ip ip ip ip ip ip ip ip ip ip ip ip	SU8-TOTAL	
IV       23       RIZAL       19       17       2       0       0         IV       24       CAYITE       5       4       1       0       0         IV       25       LAGUHA       25       23       2       0       0         IV       26       BATANGAS       22       21       1       0       0         IV       27       MARINDUQUE       5       4       1       0       0         IV       28       MINDORO ORIENTAL       48       25       19       4       0         IV       29       NIBDORO OCCIDENTAL       54       31       12       11       0         IV       30       ROHBLON       2       2       0       0       0         IV       30       ROHBLON       2       2       0       0       0         IV       31       PALAWAH       41       19       18       4       0         V       32       CAMARINES NORIE       18       18       0       0       0         V       33       CAMARINES SUR       96       77       12       7       0 </td <td>158.7</td> <td></td> <td>0</td> <td>?</td> <td>2</td> <td></td> <td>10</td> <td>27</td> <td>39</td> <td>AURORA</td> <td>21</td> <td>14</td>	158.7		0	?	2		10	27	39	AURORA	21	14
IV       24       CAVITE       5       4       1       0       0         IV       25       LAGUNA       25       23       2       0       0         IV       26       BATANGAS       22       21       1       0       0         IV       27       MARIHOUQUE       5       4       1       0       0         IV       28       MIHDORO ORIENTAL       48       25       19       4       0         IV       29       MIHDORO OCCIDENTAL       54       31       12       11       0         IV       30       ROMBLON       2       2       0       0       0         IV       31       PALAWAN       41       19       18       4       0         SUB-TOTAL       298       207       69       22       0         V       32       CAMARINES NORTE       18       18       0       0       0         V       33       CAMARINES SUR       96       77       12       7       0	101.9		. 0	l	1		3	34	38	<b>GNETON</b>	27	IV
IV       25       LAGUNA       25       23       2       0       0         IV       26       BATAKGAS       22       21       1       0       0         IV       27       MARIHOUQUE       5       4       1       0       0         IV       28       MINDORO OCCIDENTAL       48       25       19       4       0         IV       30       ROHBLON       2       2       0       0       0         IV       30       ROHBLON       2       2       0       0       0         IV       31       PALAWAN       41       19       18       4       0         SUB-TOTAL         298       207       69       22       0         V       32       CAMARINES NORTE       18       18       0       0       0         V       33       CAMARINES SUR       96       77       12       7       0	93.1		. 0	0	0		2	17	19	RIZAL	23	IV
IV       25       LAGUNA       25       23       2       0       0         IV       26       BATAKGAS       22       21       1       0       0         IV       27       MARIHOUQUE       5       4       1       0       0         IV       28       MINDORO OCCIDENTAL       48       25       19       4       0         IV       30       ROHBLON       2       2       0       0       0         IV       30       ROHBLON       2       2       0       0       0         IV       31       PALAWAN       41       19       18       4       0         SUB-TOTAL         298       207       69       22       0         V       32       CAMARINES NORTE       18       18       0       0       0         V       33       CAMARINES SUR       96       77       12       7       0	119.2		0	)	0		i	4	5	CAYITE	24	IV
IV       26       BATANGAS       22       21       1       0       0         IV       27       MARIHOUQUE       5       4       1       0       0         IV       28       MINDORO ORIENTAL       48       25       19       4       0         IV       29       MINDORO OCCIDENTAL       54       31       12       11       0         IV       30       ROHBLON       2       2       0       0       0         IV       31       PALAWAN       41       19       18       4       0         SUB-TOTAL       298       207       69       22       0         V       32       CAMARINES NORTE       18       18       0       0       0         V       33       CAMARINES SUR       96       77       12       7       0	98.9		0									
IV     27     MARINDUQUE     5     4     1     0     0       IV     28     MINBORO ORIENTAL     48     25     19     4     0       IV     29     MINBORO OCCIDENTAL     54     31     12     11     0       IV     30     ROMBLON     2     2     0     0     0       IV     31     PALAWAN     41     19     18     4     0       SUB-TOTAL       298     207     69     22     0       V     32     CAMARINES NORTE     18     18     0     0     0       V     33     CAMARINES SUR     96     77     12     7     0	92.3		0	3	0							14
IV     28     MINDORO ORIENTAL     48     25     19     4     0       IV     29     MINDORO OCCIDENTAL     54     31     12     11     0       IV     30     ROMBLON     2     2     0     0     0       IV     31     PALAWAN     41     19     18     4     0       SUB-TOTAL     298     207     69     22     0       Y     32     CAMARINES NORTE     18     18     0     0     0       Y     33     CAMARINES SUR     96     77     12     7     0	109.0		0	)	. 0						27	
3Y     29     NINDORO OCCIDENTAL     54     31     12     11     0       1V     30     ROMBLOM     2     2     0     0     0       1V     31     PALAWAM     41     19     18     4     0       SUB-TOTAL     298     207     69     22     0       Y     32     CAMARINES NORTE     18     18     0     0     0       Y     33     CAMARINES SUR     96     77     12     7     0	172.7		· 0	ļ	4			25				
IV     30     ROHBLON     2     2     0     0     0       IV     31     PALAWAH     41     19     18     4     0       SUB-TOTAL     298     207     69     22     0       V     32     CAMARINES NORTE     18     18     0     0     0       V     33     CAMARINES SUR     96     77     12     7     0	191.2		0	į	-11	٠.						
IV         31         PALAWAH         41         19         18         4         0           SUB-TOTAL         298         207         69         22         0           V         32         CAMARINES MORTE         18         18         0         0         0           V         33         CAMARINES SUR         96         77         12         7         0	72.5		0									
Y 32 CAMARINES HORTE 18 18 0 0 0 0 V 33 CAMARINES SUR 96 77 12 7 0	176.1		0	í	4		18	19	11			
V 33 CAMARINES SUR 96 77 12 7 0	145.8	:	0	?	22		69	207	298	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SUB-TOTAL	
V 33 CAMARINES SUR 96 77 12 7 0	81.6		0	)	0		0	18	18	CAMARINES NORTE		
V 34 CATANOVANES 9 7 1 1 0	135.5	. *	0	1	. 7		12	11	96	CAMARINES SUR		¥
	116.5		0	l	1	:	1	7	9			
Y 35 ALBAY 78 50 21 7 0	151.7		0 ;	ì	- 7	٠	21	50	78	ALBAY	35	
V 36 SORSOGON 34 23 10 1 0	129.5		Ó		1			23	34			
Y 37 MASBATE 19 17 1 1 1 0	97.5		0	l :	1		-			A A CONTRACTOR OF THE CONTRACT		Y

# SAMPLE OF COMPUTER PRINTOUT (SORTING)

Printed on August 12,1991

NATIONAL IRRIGATION ADMINISTRATION

Small Scale Irrigation Development Project (SSIDP)

Project List of CIS per Province Sorted by : DESIGNED IRRIGABLE AREA IN WET SEASON

REGION NO. : II. PROVINCE : IFUGAO

PAGE

NO.	ID. NO.	NAME OF CIS	NAME OF MUNICIPALITY	DESIGNED IRRIGABLE AREA IN WET SEASON (ha)
1	E0212038A	LAHUT CIS	LANUT	500
		NAVAGUAGA ATA	KIANGAN	280
3	E0212010A	LANIG CIS	LAKUT	150
4	E0212002A	LAWIG CIS PAN OPDOPAN CIS BAYHIKAN CIS CABA CIS KIBUHUHGAN CIS CUDOG CIS LUOTAN BAYUNGON CIS	LAKUT	140
5	E0212001A	BAYNINAN CIS	BAHAUE	125
6	E0212004A	CABA CIS	LAGANE	110
7	E0212042A	KIBUHUHGAN CIS	HUKGOVAN	110
8	E0212005A	CUDOS CIS	LAGAVE	107
9	E0212006A	LUOTAN BAYUNGON CIS	BANAUE	105
10	E0212031A	INDOTHOG CIS Nonbongog-Haggox CIS	KIANGAN	100
11	E0212015A	HONBONGOS-HAGGON CIS	HUKGOVAK	ł 85
12	E0212025A	BALANGBANG CIS	HAYOYAO	<b>;</b> 80
13	E02120198	UBUAS CIS	HINGYON	1 10
14	E0212026A	BALANGBANG CIS UBUAG CIS BANGAR CIS	OAYOYAH	10
15	E0212013A	INLINOG-WARGWANG CIS	HUKGOVAN	¦ 70
14	FACIONOTA	GONACHAN-RANNAL CIS	: KAYOYAO	67
17	E0212009A	HAH LONG-LUGA CIS BOXIAMAN CALADING CIS BONGBOKGNA CIS DAWPAY-ANOEG CIS BOCOS CIS	BANAUE	65
18	E0212012A	BOXIAWAN CALADING CIS	KIANGAN	65
19	E0212021H	BONGBONSHA CIS	HURGOVAN	65
20	E0212028A	DAWPAY-ANOEG CIS	KIANGAN	65
21	E0212024A	BOCOS CIS	BANAUE	60
45	*	I WILWANIAN ABABTA ATC	I HITHCORIAN	60
23	E0212016A	DILAN CIS ANTIPOLO CIS	LAGAVE	60
71	F0212008A	ANTIPOLO CIS	KIANGAN	60
25	E02120224	KONTABIONG CIS	KIANGAN LAGAKE	60
				60
27	E0217007A	LOWER ANDUNTONG CIS	KIANGAN	60
28	E02120324	ANDAULO-HUTUADH CIS LOWER ANDUNTONG CIS GUIKEGGEN-CAMANDAG CIS HUNPOY-OC-LUGAB CIS	KIANGAN	. 60
29	E0212020H	MUMPOY-OC-LUGAB CIS	HUNGDUAN	60
30	E0212041A	INVALOY-GUININON CIS	HAYOYAO	60
31	E0212037A	GULTTE CIS	BANAUE	į so
32	E0212035A	UNGOL-PULA CIS	KIANGAH	50
33	E0212039A	CARAGASAN CIS	ALFONSO LISTA	50
34	E0212040A	TOSTOROB CIS	ALFONSO LISTA	50
34	E0212011A	PULITANG-TANG-TE CTS	HUNGDUAN MAYOYAO BANAUE KIANGAN ALFONSO LISTA ALFONSO LISTA KIANGAN	50

\*\* PROVINCE AVERAGE \*\*

# SAMPLE OF COMPUTER PRINTOUT (EXTRACTION)

Printed on August 12,1991

NATIONAL IRRIGATION ADMINISTRATION

Small Scale Irrigation Development Project (SSIDP)

Project List of CIS per Province

Search by : DESIGNED IRRIGABLE AREA IN WET SEASON

Condition : Greater than :

100 (ha) AND

Less than :

00 (ha)

REGION NO. : VIII

PROVINCE : MORTHERN LEYTE

PAGE 1

. KO.	ID. KO.	NAME OF CIS	NAME OF I		DESIGHED IRRIGABLE AREA IN WET SEASON (ha)
1	E0851023A	AGBANGA CIS	PALOKPOH		105
-2	E0851077H	AGAY-AYAN CIS	KAHANGA	٠	105
3	E0851022A	BALAGTAS CIS	HATAG-OB	* !	106
4	E0851030H	HÌRAAN CIS	CARIGARA		120
¦ \$ ¦	E0851037N	HALJO CIS	INOPACAN		120
6	E0851040A	LUBI-LUBI CI\$	LAPAZ		120
	E0851051H		KAVAYAR		120
8	E0851057H	IYOSAN CIS	ALKERTA		120
9 1	E0851074H	INANGATAN CIS	TABANGO	•	120
	E0851075H		STA. FE	•	120
		PAGSULHOGON CIS	BARATHGON		120
12	E0851121U	CANHOLE CIS	HERIDA		} 120
		SAMPAO CIS	HAVAL	•	120
14	E0851129A	ESPERANZA CIS	HATALOH		120
		CARAYCARAY CIS	SAN NIGUEL		124
		CAGHALO CIS	CARIGARA		} 125
17	E0851099P	GABAS CIS	BAYBAY		125
18	E0851010A	CATRON CIS	HAVAL		127
19	E0851106P	PAKGASUGAN CIS	BAYBAY		127
20	E0851012A	CASTAVAN CIS	CABUCGAYAK		130
		CARAY-CARAY CIS	KAYAL		130
		HITUHHOG EIS	DAGANI		132
23	E0851006A	HATAG-06 CIS	HATAG-08		l 150
24	E0851013A	HAKBABALUD CIS	JARO		150
25	E0851059N	SAN VICENTE CIS	ALANGALANG		150
		SAPA-COTAY-GUIN-WALOHAN CIS	JARO		150
27	E0851130A	LIHAO CIS	ÍNÓPACÁN	•	150
28	E0851045N	BUNGA CIS	ABUYOG		160
		HACANIP CIS	JARO		160
		HIBULANGAN CIS	HATAG-08		162
			STA. FE	•	162
		JANORANON CIS	ALHERIA	•	180
33	E0851042H	ITUK CIS	HATALON		194
	** PROVING	E TOTAL **		****	4,424
	** PROVIN	CE AVERAGE **			134

# IMPLEMENTATION PROCEDURE OF DATABASE MANAGEMENT SYSTEM IN SSIDP

Project Phase	NIA's Activity	Items to be Compiled into Database System	
Identification, Investigation and Selection Phase	Feasibility Study	Information from F/S Report - General information - Engineering - Agriculture - Agro-economy - Project Cost - Project Economy.etc	
	Evaluation by Selection Criteria	Result of Evaluation	
Pre-Construction Phase	Detailed Design	Completion Date of D/D	
	Organization of IA	Information of IA - Name - Date of Organization - Number of IA Members etc.	
	Agreement For Construction	Information of Agreement - Contractor's Name - Agreement Amount - Construction Period etc.	
	Construction		
Construction Phase	Turnover of Facilities	Information of Turnover Agreement - Date of Turnover - Amount of IA Loan - Annual amortization etc.	
O/M Phase	Monitoring & Evaluation	Annual Data Collection - Cultivated Area - Crop Yield - Amortization - Nos. of IA Member etc.	

#### I. NEW DEVELOPMENT PROJECT

#### I-1. INFORMATION FROM FIS REPORT

```
ID. No
Name of Sub-Project
GENERAL
    Location
        Region
        Province
        Municipality
        Barangay
    Project History
        Date when Final Project Feasibility study Report was submitted
    Designed irrigable area in the wet season
    Designed irrigable area in the dry season
ENGINEERING
    Physiography, Soils & Land Use
        Topography
            Alluvial plain
            Flat area in valley
            Тептасе
            Hilly
        Soil Condition
            Heavy clay
            Silty Clay/Light Clay/Sandy Clay
            Silty Clay Loam/Clay Loam/Sandy Clay Loam
            Silty Loam/Loam/Sandy Loam/Loamy Sand
            Sand
    Water Source
        Name of River
            Main source
            Supplementary source
        River Discharge in Dry Season
            Average low flow
                Main source
                Supplementary source
        Catchment Area at Intake Site
        Average Annual Rainfall
    Irrigation & Drainage Plan
        Proposed Diversion Water Requirement at Intake
        Proposed Farm Water Requirement
        Drainage Water Requirement
    Proposed Irrigation Facilities
        Proposed Intake Structure
            Will intake be accompanied with diversion weir? (Yes/No)
                Material of weir
                Height of weir
                Length of weir
        Proposed Irrigation Canals & Structures
            Length of proposed earth canals
                Main canals
                Lateral canals
                Sub-lateral canals
                Farm ditches
            Length of proposed lined canals
                Main canals
                Lateral canals
                Sub-lateral canals
           Nos. of Irrigation canal structures
```

Canal structures

Proposed Service/Access Roads

Service roads

Length

Access roads

Length

Land Reclamation Area

Proposed O/M Fee per ha per Crop

Wet season paddy

Dry season paddy

#### AGRICULTURE AND AGRO-ECONOMY

Socio-Economic Background

Population in the Proposed Project Area

Nos. of Households in the Project Area

Farming household

Non-farming household

Nos. of Potential Farmer Beneficieries

Inside the project area

Outside the project area

Average Farm Size of Beneficieries

Progress of agrarian Reform in the Area

Area Eligible for Distribution under CARP

Status of Issuance of Emancipation Patents

**Cultivation Area** 

Present Cultivated Area

Wet season paddy

Dry season paddy

Proposed Cultivated Area

Wet season paddy

Dry season paddy

Crop Production

Present Average Crop Yield

Wet season paddy

Dry season paddy

Anticipated Average Crop Yield

Wet season paddy

Dry season paddy

Present Total Crop Production

Wet season paddy

Dry season paddy

Anticipated Total Crop Production Wet season paddy

Dry season paddy

Farm Budget

Average Farm Gate Price Wet season paddy

Dry season paddy

Present Average Production Cost

Wet season paddy

Dry season paddy

Proposed Crop Production Cost

Wet season paddy

Dry season paddy

#### PROJECT ECONOMY AT THE TIME OF F/S

Project Cost

Direct cost

Diversion weir including afflux dike

Main canals/laterals/sub-laterals with structures

Farm ditches with structures

Project drains/farm drains with structures

Drainage ditches with structures

Service roads

Land reclamations

Project facilities

Indirect Cost

Access road

Flood protection dike

Overheads

#### LIST OF DATA TO BE COLLECTED

Benefit Build-up Period Project Life Span Internal Rate of Return

#### I-2. Data to be collected when D/D is completed

Date when D/D Report was submitted

#### 1-3, INFORMATION OF IA

Name of IA Date Organized Date Registered to SEC Number of IA menbers

### 1-4, INFORMATION OF CONTRACT AGREEMENT

Agreement Code No.
Contractor's Name and Address
Agreement Amount
Construction Period

### 1-5. INFORMATION OF TURNOVER AGREEMENT

Date of turnover Chargeable cost Date of Loan Agreement Repayment Period Amount of IA Loan Annual Repayment Fully paid of 30 % of equity? (Yes/No)

#### 1-6. INFORMATION OF PROJECT COMPLETION REPORT

Date when Project Completion Report is submitted

#### II. REHABILITATION PROJECT

#### **II-1. INFORMATION FROM F/S REPORT**

Project History

Date when Final Project Feasibility study Report was submitted

Present Irrigated Area

Wet season

Dry season

Irrigation Area Restored/Generated

Wet season

Dry season

Present Crop Yield

Wet season paddy
Dry season paddy

Proposed Crop Yield

Wet season paddy

Dry season paddy

#### Rehabilitation/Improvement of Irrigation & Drainage Facilities

Intake Facilities

**Estimated Rehabilitation cost** 

Irrigation Facilities

Length of earth canal to be rehabilitated

Main canals

Lateral canals

Sub-lateral canals

Field ditches

Length of lined canal to be rehabilitated

Main canals

Lateral canals

Sub-lateral canals

Nos. of irigation structures to be rehabilitated

Estimated rehabilitation cost for irrigation facilities

**Drainage Structures** 

Length of drainage canal to be rehabilitated

Project drain

Farm drains

Drainage ditches

Nos. of drainage facilities to be rehabilitated

Estimated rehabilitation cost for drainage facilities

Roads

Length of Service Road to be Rehabilitated

Length of Access Road to be Rehabilitated

Estimated Rehabilitation Cost for Service Roads

Estimated Rehabilitation Cost for Access Roads

#### PROJECT ECONOMY AT THE TIME OF F/S

Project Cost

Direct cost

Diversion weir including afflux dike

Intake

Main canals/laterals/sub-laterals with structures

Farm ditches with structures

Project drains/farm drains with structures

Drainage ditches with structures

Service roads

Land reclamations

Project facilities

Indirect Cost

Access road

Flood protection dike

Overheads

Internal Rate of Return

#### II-2, Data to be collected when D/D is completed

Date when D/D Report was submitted

#### **II-3. INFORMATION OF IA**

Name of IA Date Organized Date Registered to SEC Number of IA menbers

### II-4, INFORMATION OF CONTRACT AGREEMENT

Agreement Code No. Contractor's Name and Address Agreement Amount Construction Period

#### **11-5. INFORMATION OF TURNOVER AGREEMENT**

Date of turnover
Chargeable cost
Date of Loan Agreement
Repayment Period
Amount of IA Loan
Annual Repayment
Fully paid of 30 % of equity? (Yes/No)

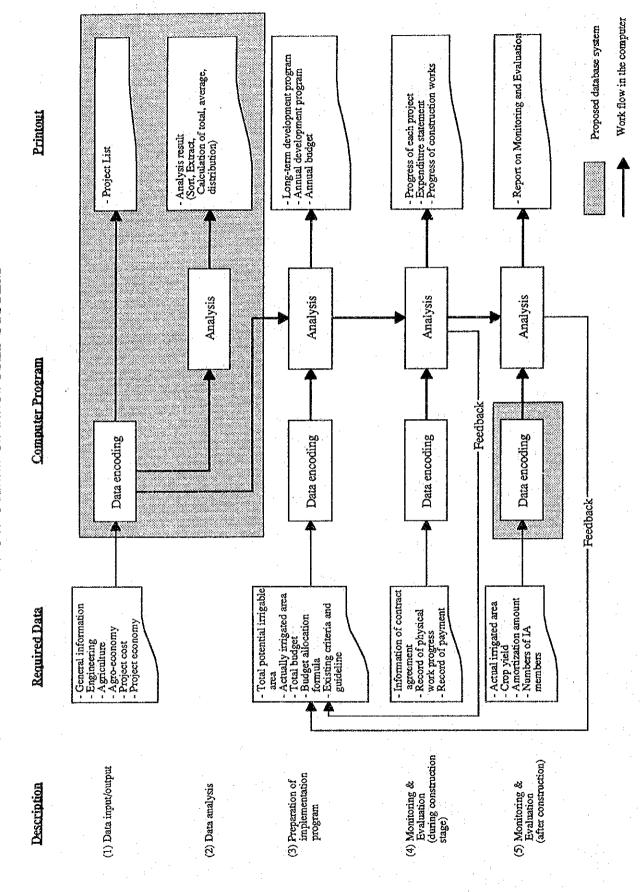
#### II-6, INFORMATION OF PROJECT COMPLETION REPORT

Date when Project Completion Report is submitted

#### III. ANNUAL DATA COLLECTION AFTER COMPLETION

Cultivated Area
Wet season paddy
Dry season paddy
Production
Wet season paddy
Dry season paddy
Annual O/M Cost
Annual Amortization amount
Numbers of IA Members

# FLOW CHART OF PROPOSED SYSTEM



DATABASE MANAGEMENT SYSTEM IN SSIDP

