




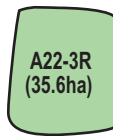

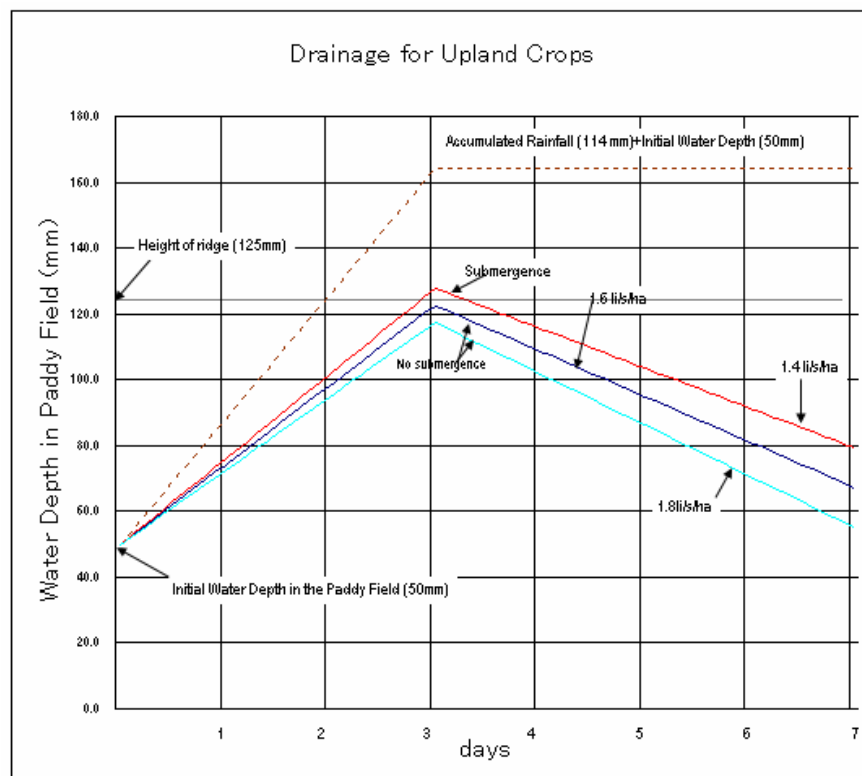
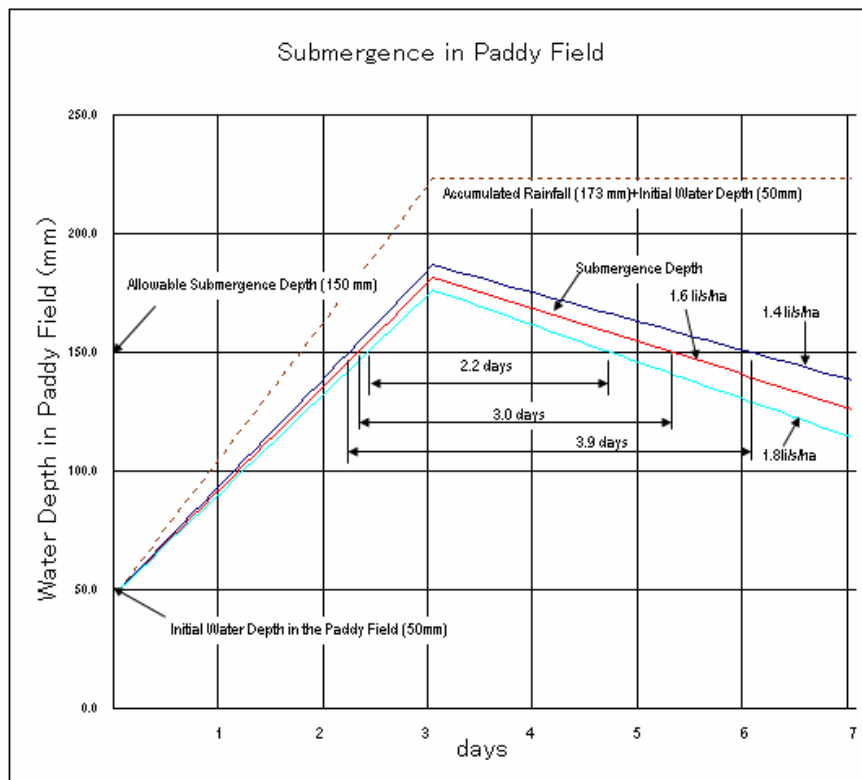


LEGEND

-  Main Canal
-  Secondary Canal
-  Existing Canal
-  Diversion Structure
-  Off-take to Tertiary Block
-  Tertiary Block
Name of Tertiary Block
Irrigation Area of the Block
-  Major Road

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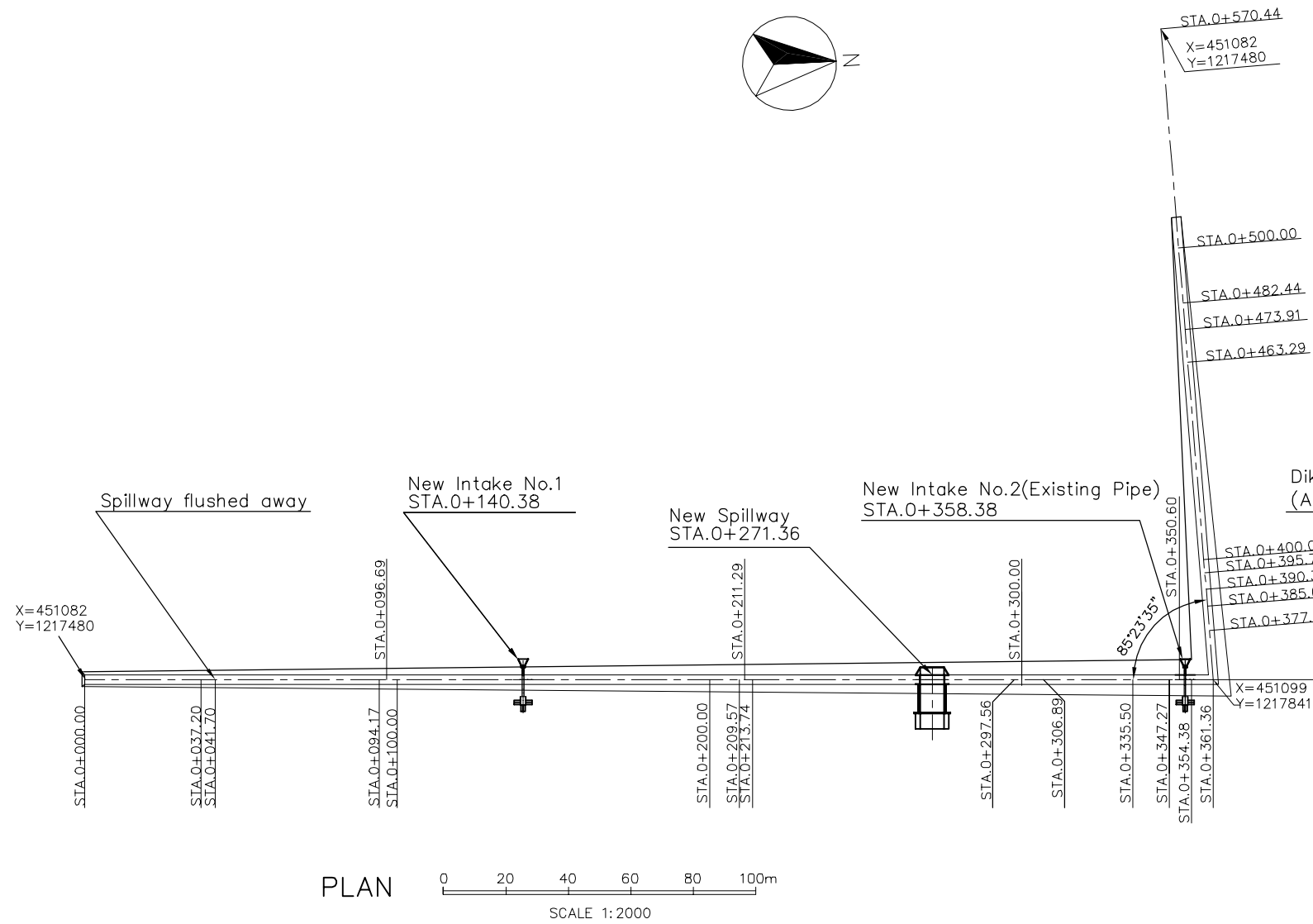
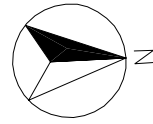
Figure IV-2.3.3
Tertiary Blocks of USP Area



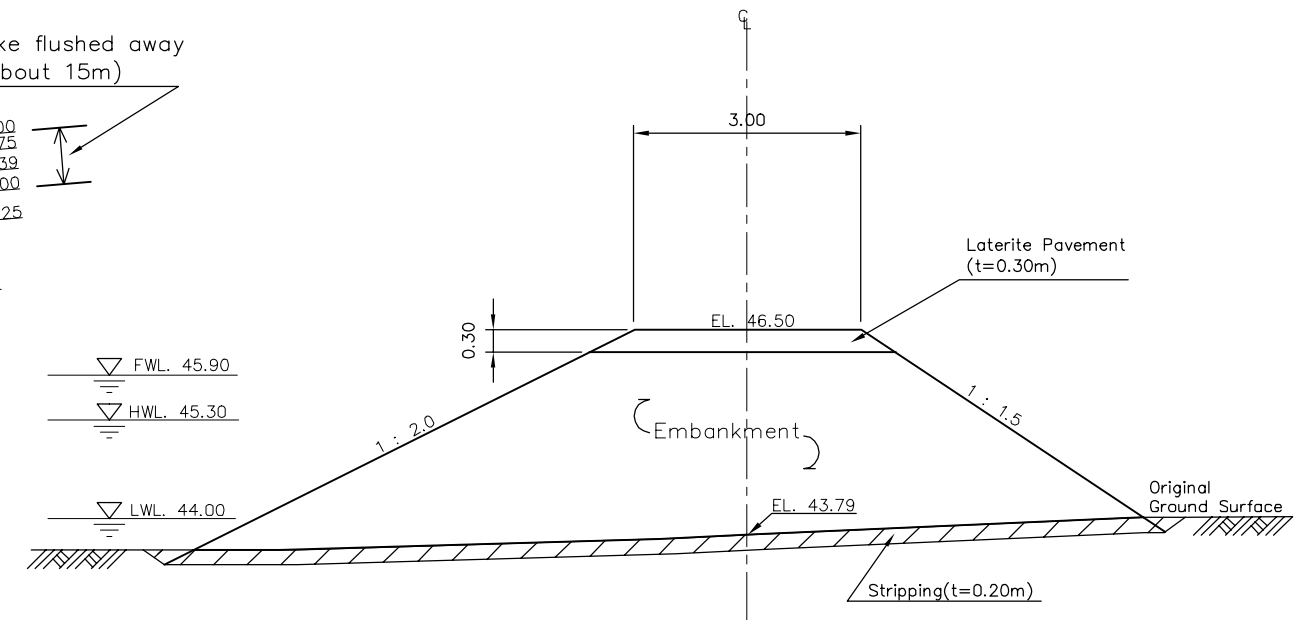
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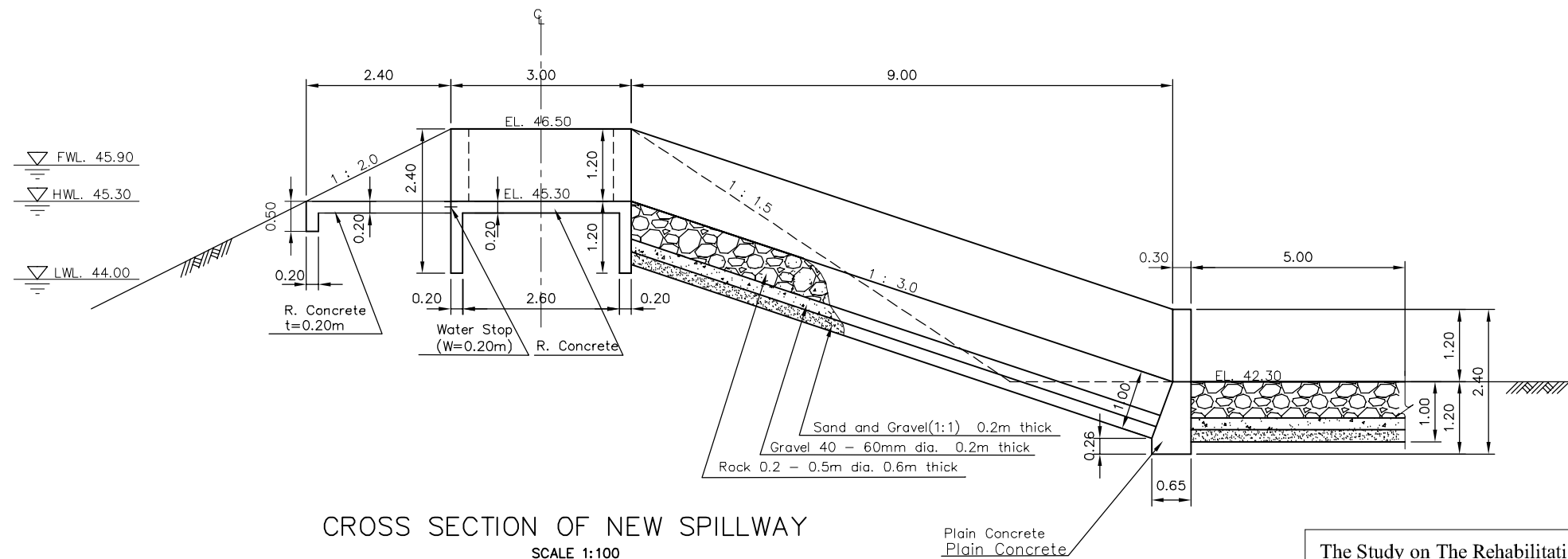
Figure IV-2.3.4
Unit Drainage Requirement



PLAN
SCALE 1:2000



CROSS SECTION (STA. 0+390.39)
SCALE 1:100

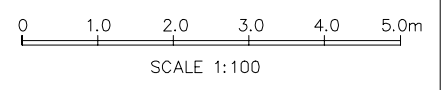
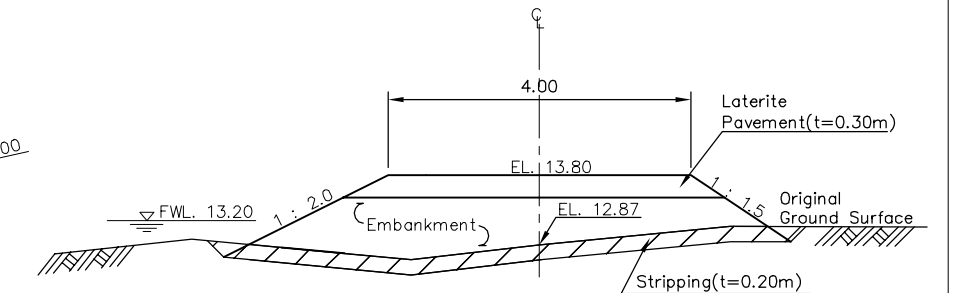
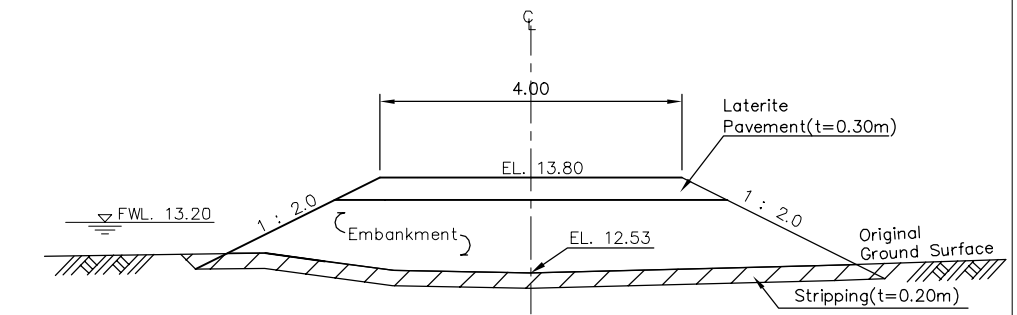
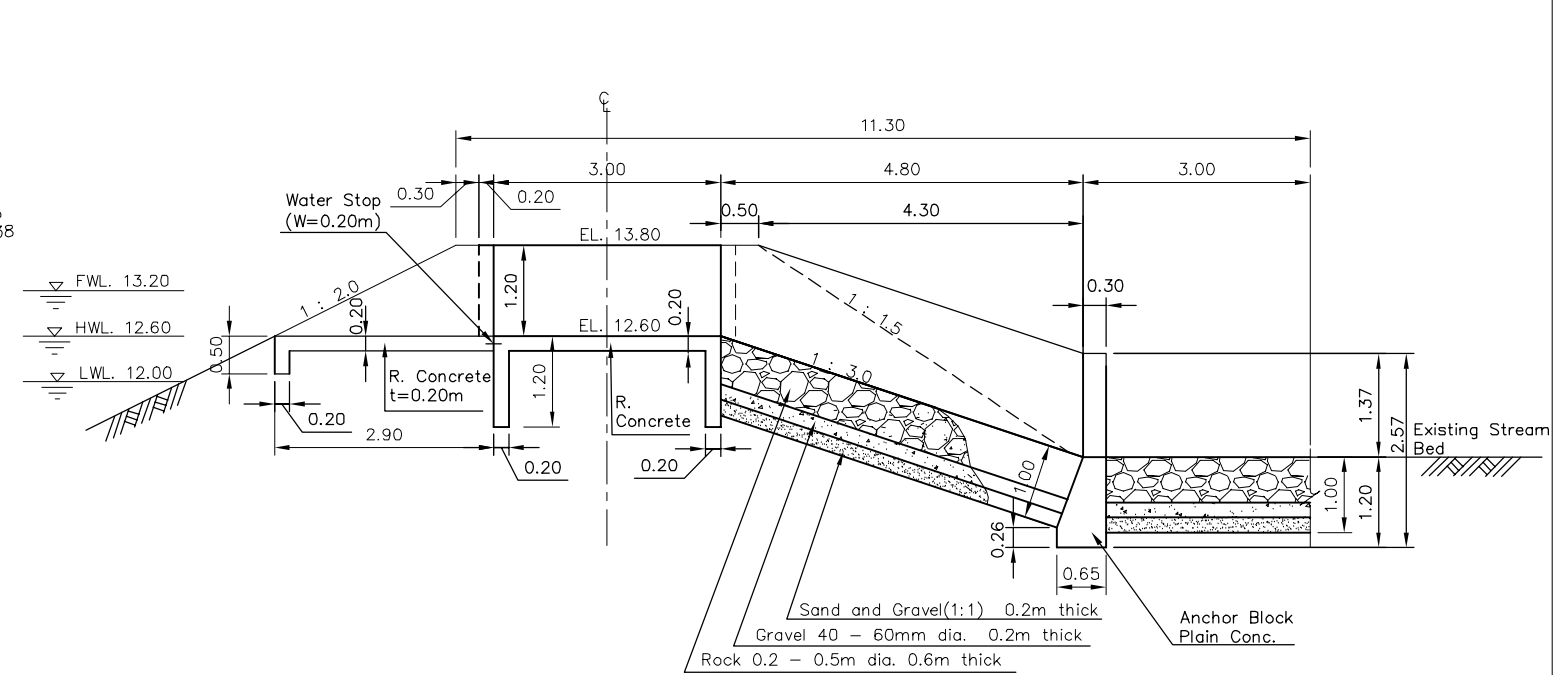
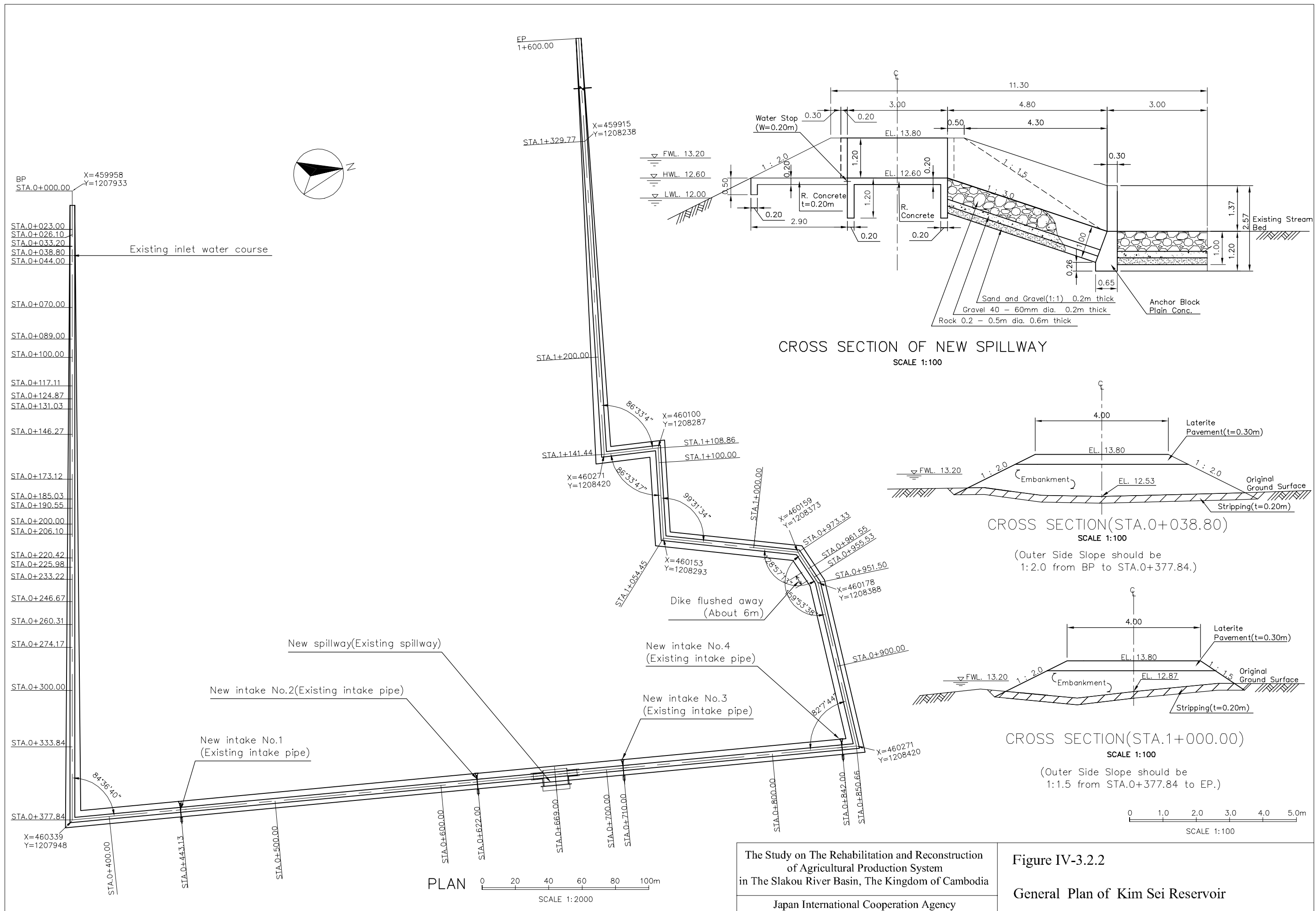


CROSS SECTION OF NEW SPILLWAY
SCALE 1:100

SCALE 1:100

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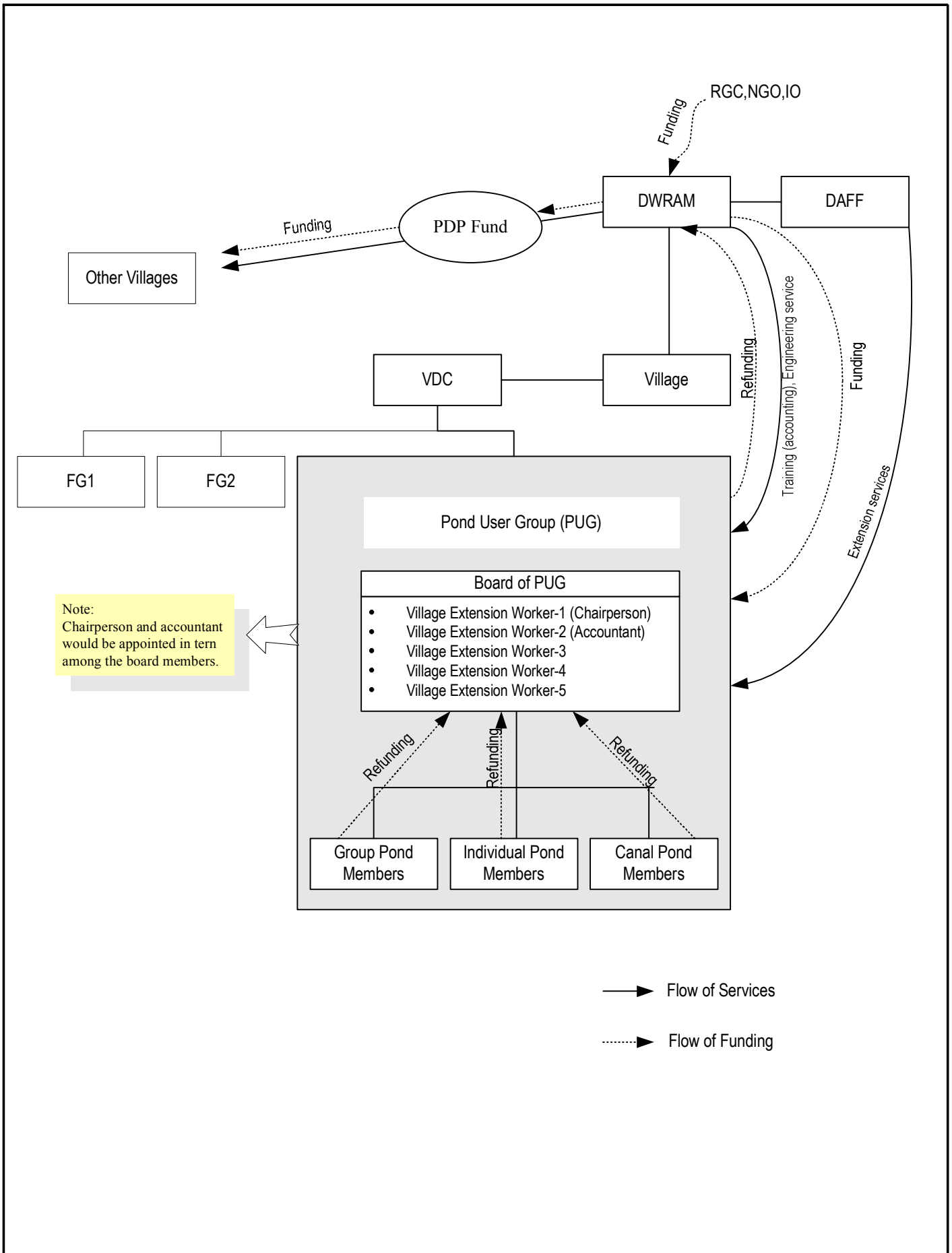
Figure IV-3.2.1
General Plan of Ang 160 Reservoir



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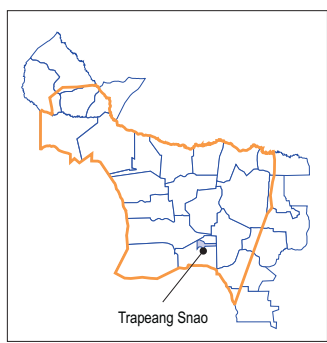
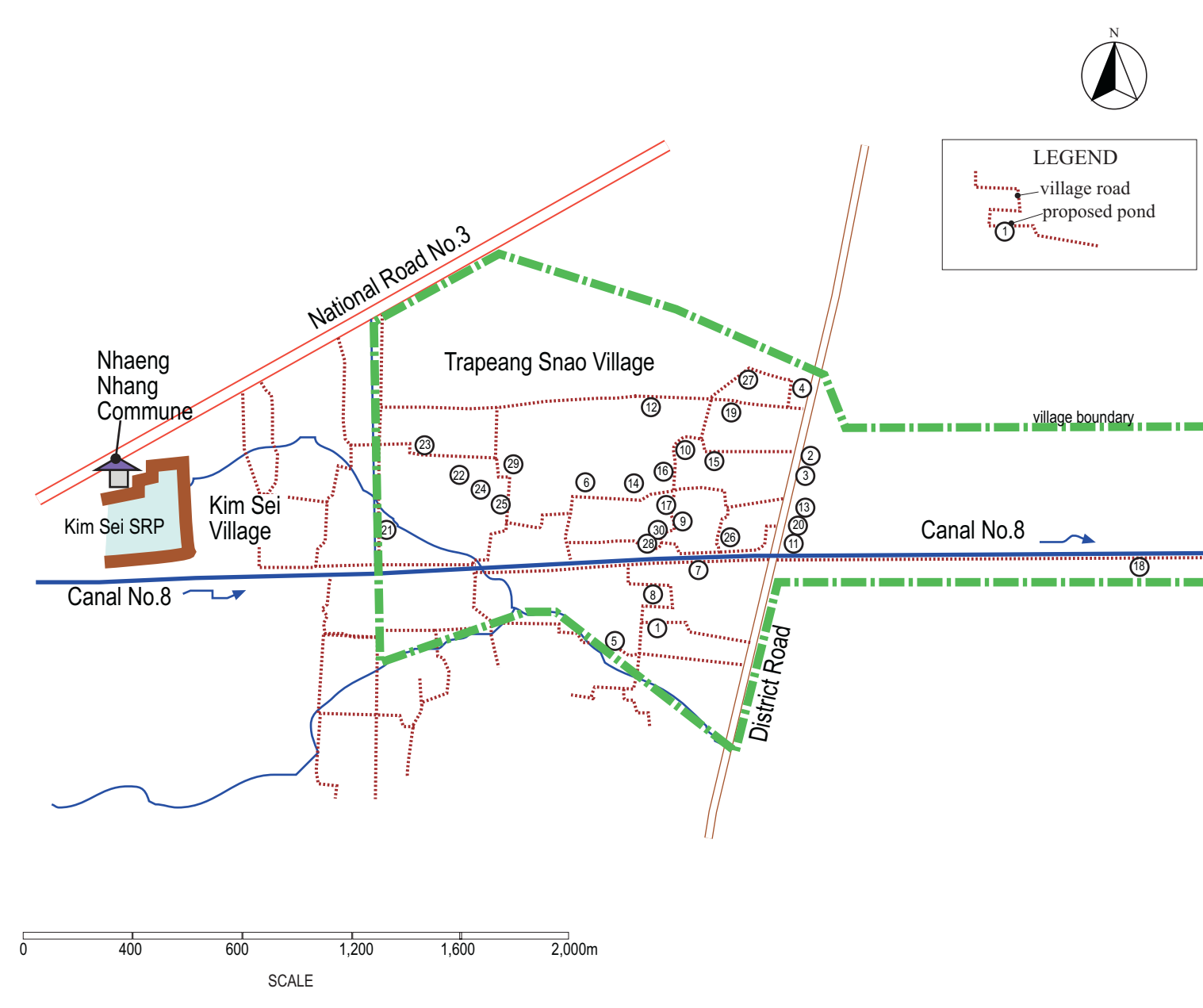
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Figure IV-3.2.2
General Plan of Kim Sei Reservoir



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Fig.IV-4.1.1
 Development Approach of PDP



LEGEND

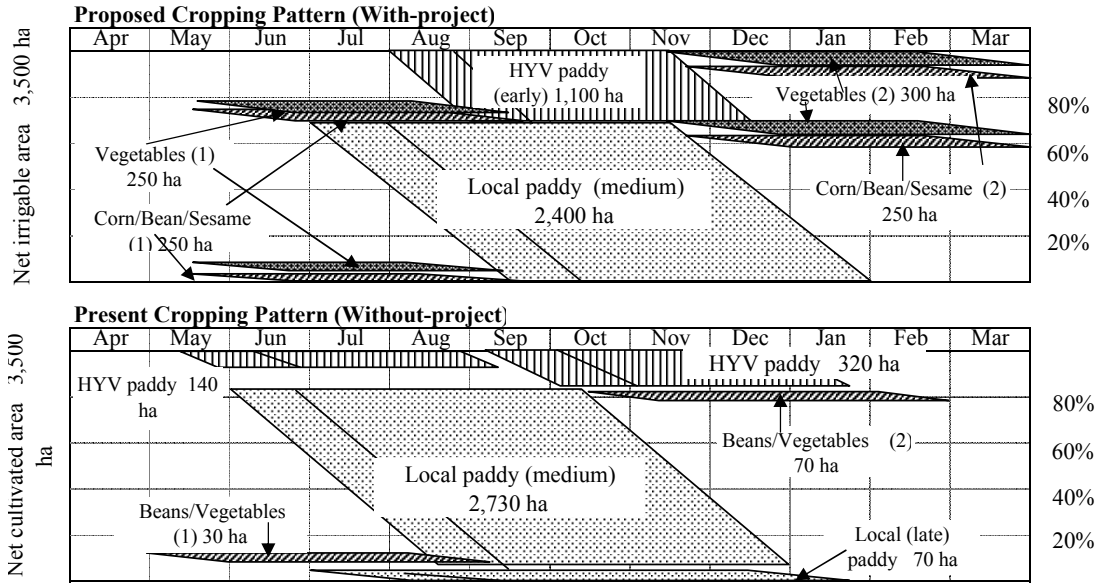
- village road
- proposed pond

List of Pond

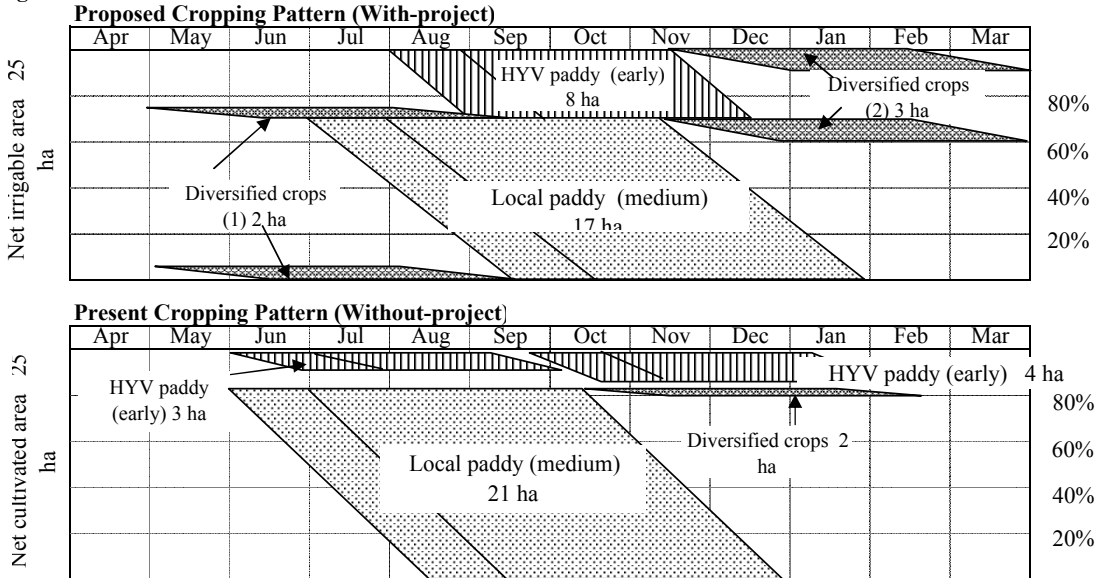
No.	Type	Status	Sub-Village	Leader
1	G	R	1	Chheam Chann
2	I	R	1	Chheam Horn
3	I	R	1	Pill Toch
4	I	R	1	Khonn Bros
5	G	N	2	Ngoun Duk
6	G	N	2	Minh Hom
7	Gc	N	2	Chhum Choum
8	G	N	2	Minh Sarim
9	G	R	3	Tob Bunhem
10	G	N	3	Soun Seun
11	Gc	R	3	Nat Sorheap
12	G	R	4	San Sarim
13	I	N	7	Nop Nat
14	I	R	4	Prak Yom
15	G	R	4	Chey Sakhom
16	G	N	4	Leuk Beun
17	I	N	4	Ouk Nhen
18	Gc	N	4	Soun Pral
19	I	R	5	Chey Khott
20	I	R	5	Ehann Thol
21	G	R	6	Oul Som Ol
22	I	N	6	Khenn Phei
23	I	N	6	Ou Hom
24	I	N	6	Vann Phat
25	G	N	6	Sar Por
26	G	R	3	Chab Nean
27	G	N	7	Mean Kom
28	G	N	3	Yi Bunhan
29	I	N	6	Ou Pach
30	I	R	3	Pa Wuthy

Note: G; Group pond N; New
 Gc; Canal pond R; Existing
 I; Individual pond

1 USP



2 Ang160 SRP



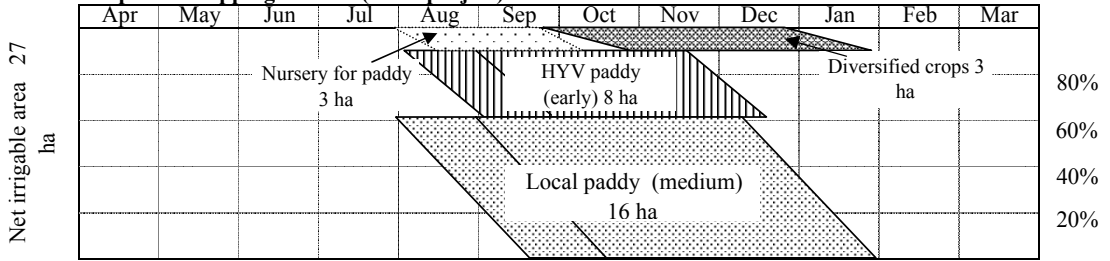
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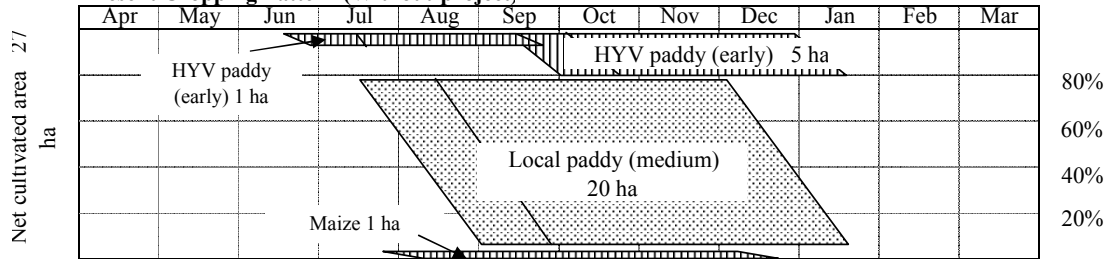
Figure IV-5.1.1
Cropping Patterns of With-project and
Without-project Conditions (1/2)

3 Kim Sei SRP

Proposed Cropping Pattern (With-project)

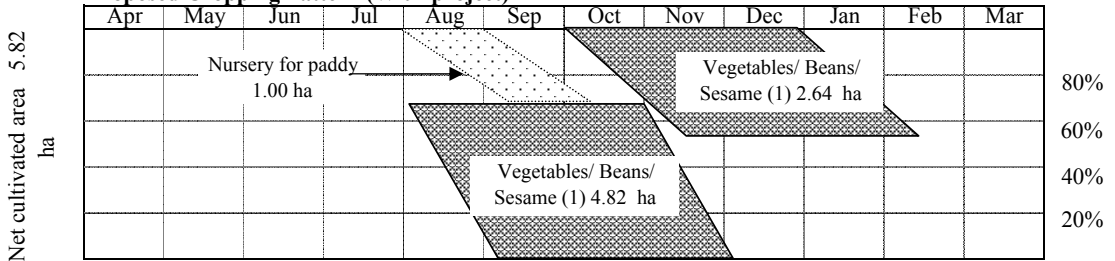


Present Cropping Pattern (Without-project)

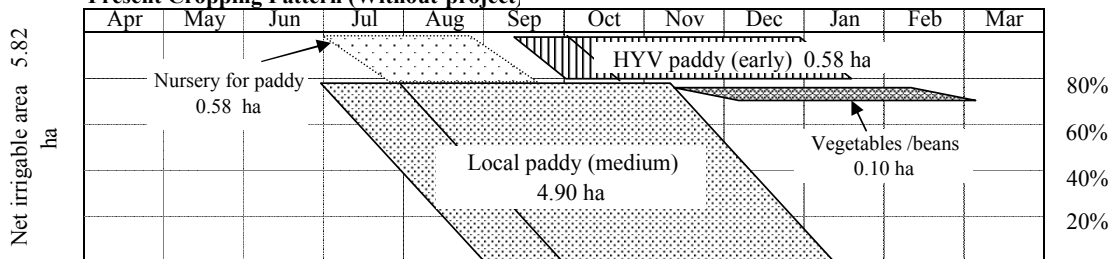


4 Trapeang Snao PDP

Proposed Cropping Pattern (With-project)



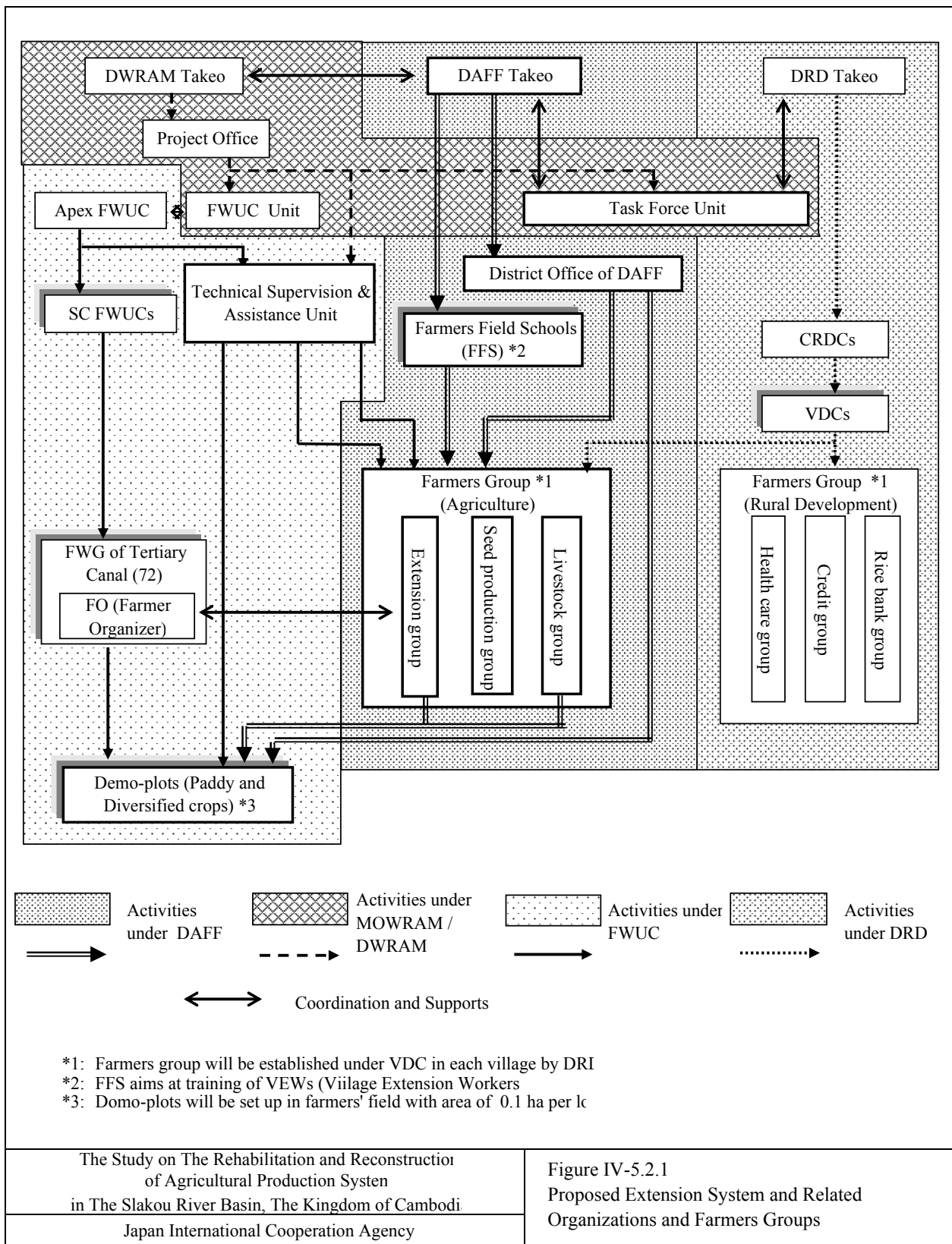
Present Cropping Pattern (Without-project)

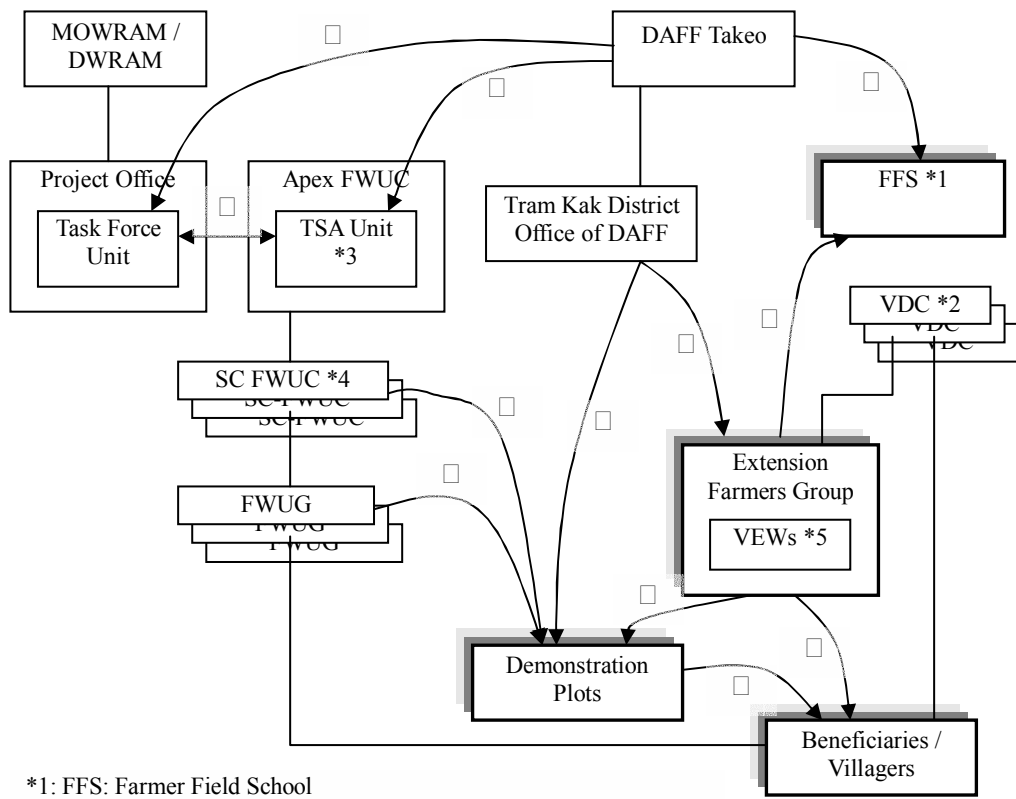


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Figure IV-5.1.1
Cropping Patterns of With-project and Without-project Conditions (2/2)



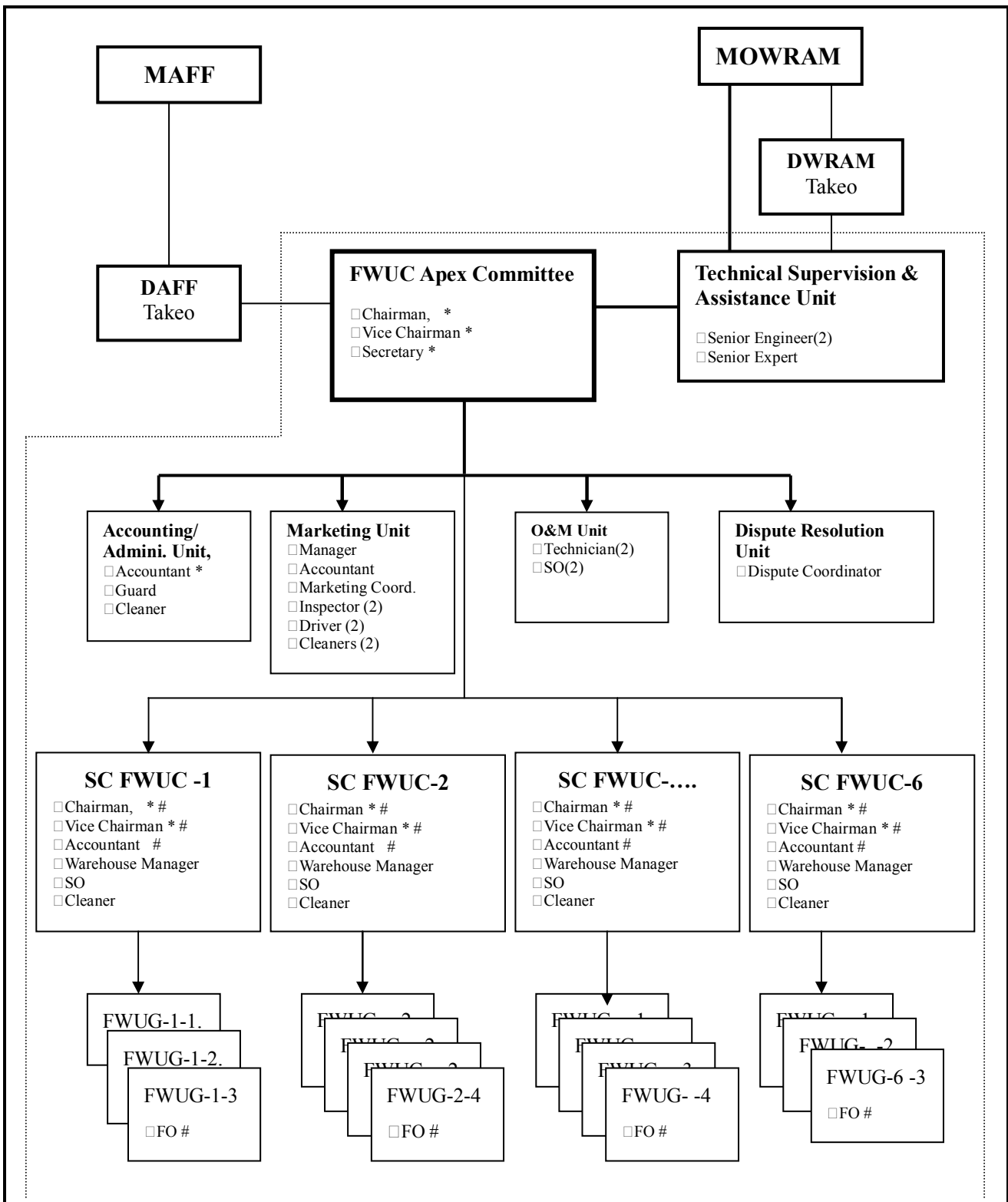


- *1: FFS: Farmer Field School
- *2: VDC: Village Development Committee
- *3: TSA Unit: Technical Supervision & Assistance Unit
- *4: SC FWUC: Secondary Canal FWUC
- *5: VEW: Village Extension Worker

Task force Unit in Project Office will be transferred to TAS Unit of Apex FWUC in the production stage

- DAFF Takeo supports agronomy and extension aspects of the project according to the task with MOWRAM/DWRAM through Task Force Unit of the Project Office during the design/construction stage. And DAFF Takeo transfers technology to TSA Unit during first four (4) years of the production stage.
- DAFF Takeo trains leader farmers (VEWs) through FFS. The leader farmers participate in FFS from Extension FG of VDC.
- VEWs of Extension FG disseminate improved farming techniques in their village. They also set up and manage demonstration plots to demonstrate and verify improved farming technology and improved varieties under the support and monitoring of District Office of DAFF Takeo.
- Tram Kak District Office of DAFF supports the activities of Extension FG and operation of demo-plots with technical guidance.
- Demonstration plots are set up in each SC FWUC area under the coordination of VDCs and SC FWUC. The plots are set up with the area of about 0.1 ha per lot in the farmers' field, and operated by VEWs of Extension FG.

<p>The Study on The Rehabilitation and Reconstruction of Agricultural Production System in The Slakou River Basin, The Kingdom of Cambodia</p>	<p>Figure IV -5.2.2</p>
<p>Japan International Cooperation Agency</p>	<p>Proposed Extension Plan and Activities</p>

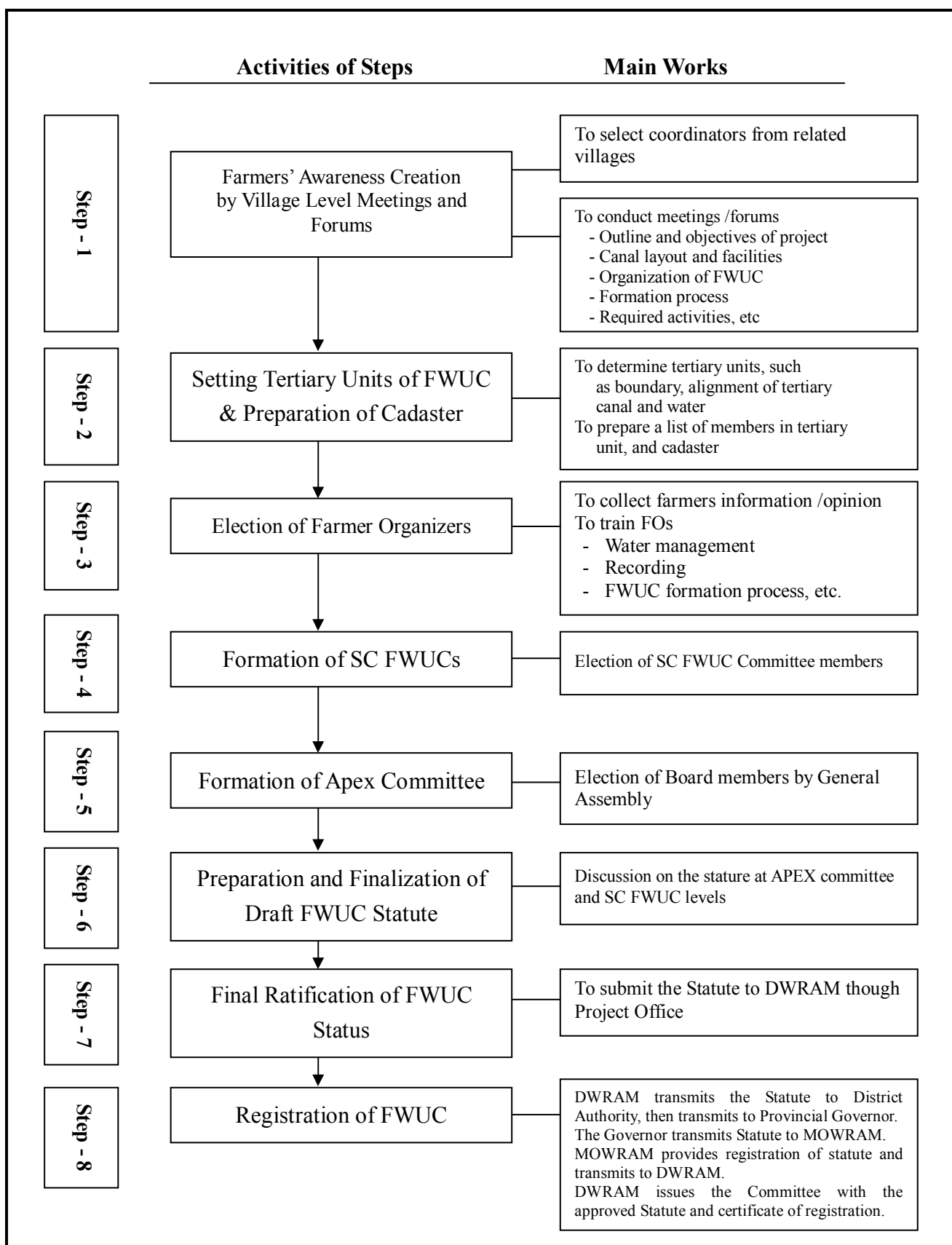


Note: * shows the Apex Board members.
 # shows the SC FWUC Committee members.
 Drivers in Marketing Unit will be assigned from the 5th year.

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Figure IV-5.4.1
 Organization Chart of FWUC
 (O & M Stage)



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Figure IV-5.4.2

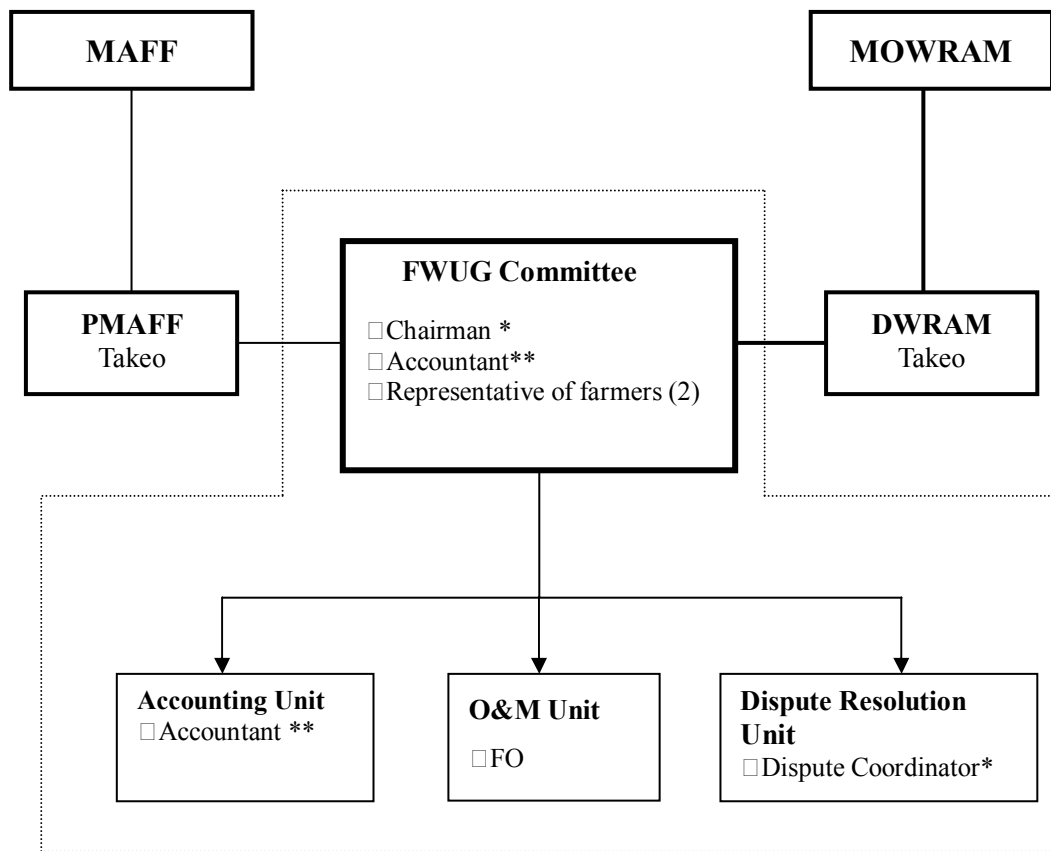
Steps for Formation of FWUC

Step	Item	1st Year									2nd Year									3rd Year									Remarks						
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27		28	29	30	31	32	33
1	Farmers' Awareness Creation	████████████████████																											72 tertiary/3 tertiary/week=6 months, election of project coordinators : 2						
2	Setting Tertiary Units of FWUC & Preparation of Cadaster										████████████████████ (Preparation of Cadaster)																		10 tertiary canals/month						
3	Election of Farmers Oranizer																			████████████████████									20 tertiary canals/month						
4	Formation of SC FWUCs																			████████████████████									2 SC FWUCs/month						
5	Formation of Apex Committee																			████████████████████															
6	Preparation and Finalization of Draft FWUC Statute																			████████████████████															
7	Final Ratification of FWUC Status																			████████████████████															
8	Registration of FWUC																			████████████████████															
	Technical Approval by DWRAM																			████████████████████															
	Transmit to District Authority																			████████████████████															
	Transmit to Governor of Takeo																			████████████████████															
	Transmit to MOWRAM & Registration																			████████████████████															

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Figure IV-5.4.3
Schedule of Formation of FWUC of USP

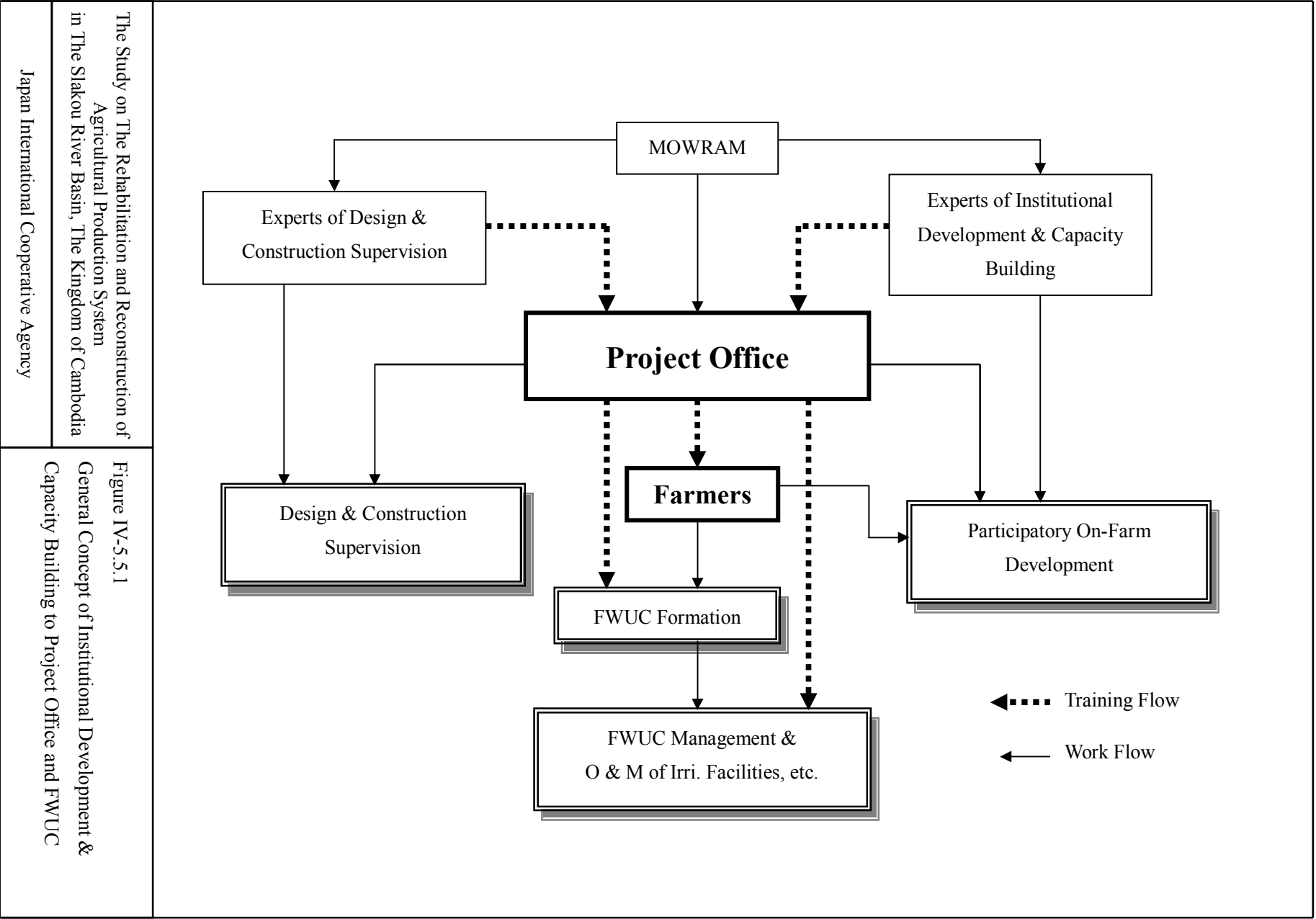


Note : Representative of farmers will be elected depending on subjects of committee.
 * : Chairman cum Dispute Coordinator.
 ** : Accountant responsible for FWUC committee and Accounting Unit.

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Figure IV-5.4.4
 Organization Chart of FWUG (SRP)



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Figure IV-5.5.1

General Concept of Institutional Development & Capacity Building to Project Office and FWUC

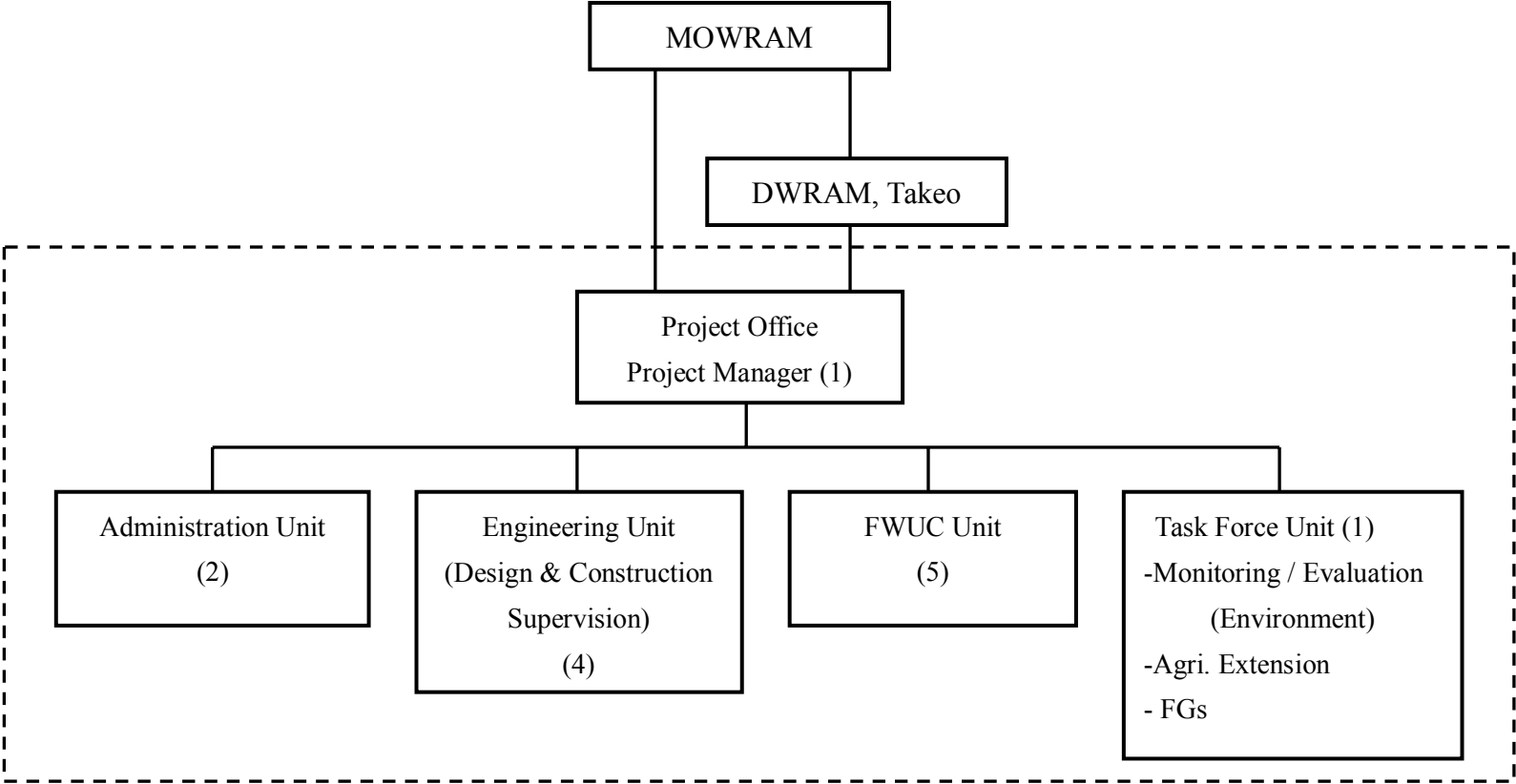
Subject	1st Year												2nd Year												3rd Year												4th Year												5th year												6th Year															
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12				
Training to Project Office by Experts																																																																												
Planning / Design and Bid																																																																
Construction Supervision																																																																												
Training to Project Office by Experts																																																																												
FWUC & Its Formation																																																																
On-farm Development																																																																												
FWUC Operation & Management																																																																												
O & M of Irrigation Facilities																																																																												
Marketing																																																																												
Farming Practice																																																																												
Training to FWUC by Project Office																																																																												
FWUC formation																																																																
On-farm development																																																																												
Management Course																																																																												
O & M Irrigation Facilities																																																																												
Marketing																																																																												
Farmer training																																																																												

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Figure IV-5.5.2
Institutional Development & Capacity Building Schedule

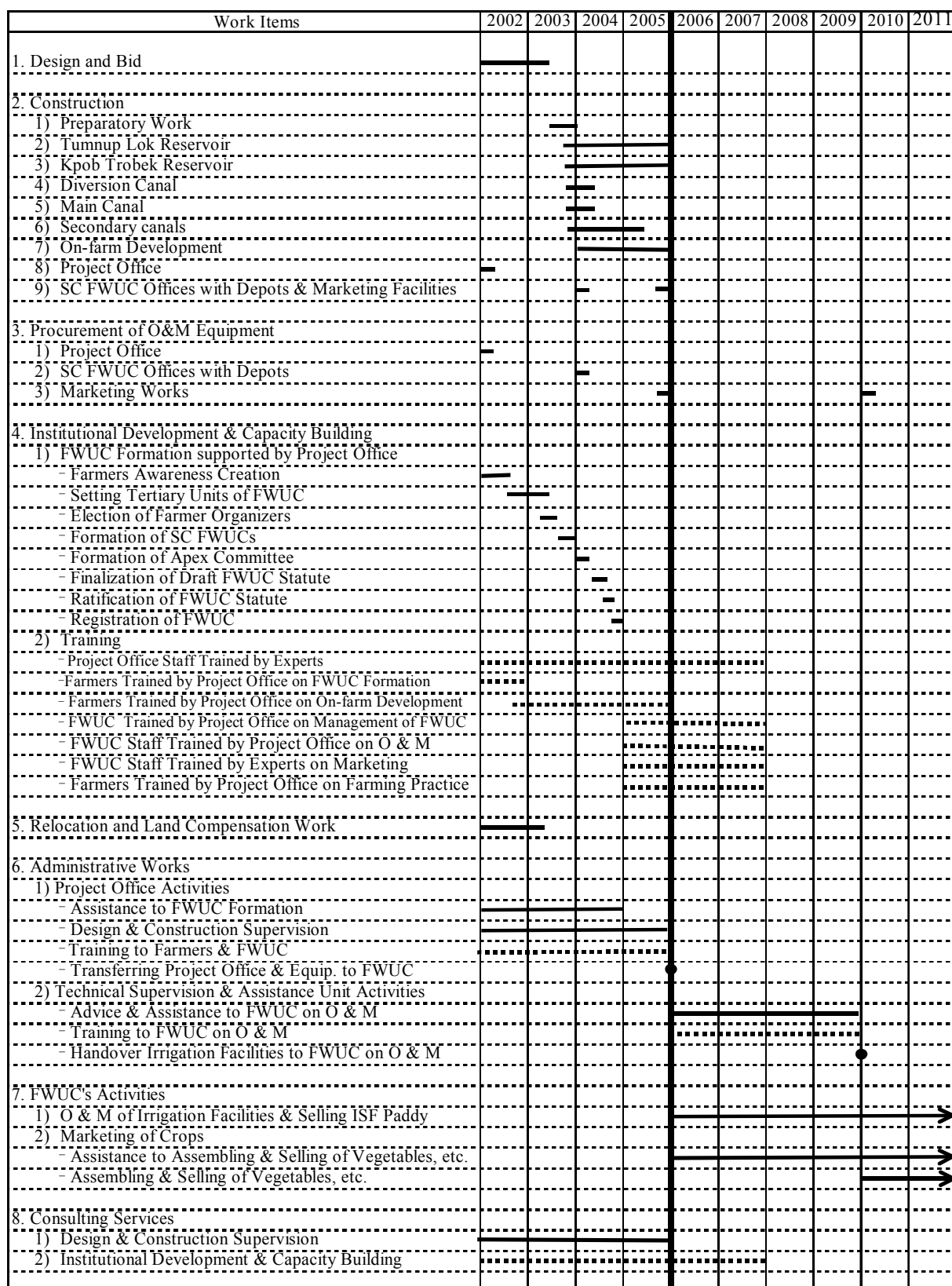
**Organization of the Project Office
(Design & Construction Stage)**



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Figure IV-6.1.1
Organization of the Project Office



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Figure IV-6.2.1

Overall Implementation Plan for USP

Overall Implementation Plan for SRP

Work Items	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1. Review of Design and Bidding	█									
2. Construction										
1) Preparatory Work (Access road of Ang 160)	█	█								
2) Ang 160 Reservoir	█	█								
3) Kim Sei Reservoir			█							
3. Institutional Development										
1) FWUG Formation supported by DWRAM	█	█								
2) Training										
† FWUG Staff Trained by DWRAM on Management of FWUC	█	█								
† FWUG Staff Trained by DWRAM on O & M	█	█	█	█	█	█	█	█	█	█
† Farmers Trained by DAFF on Farming Practice	█	█	█	█	█	█	█	█	█	█
4. Administrative Works										
1) DWRAM Activities										
† Assistance to FWUG Formation	█	█								
† Design Review & Construction Supervision	█	█	█							
† Training to FWUG	█	█								
2) DAFF Activities										
† Advice & Assistance to FWUG on diversified crop farming										
† Advice & Assistance to FWUG on paddy rice farming			█	█	█	█	█	█	█	█
3) Handover Irrigation Facilities to FWUG on O & M				●						
7. FWUG's Activities										
1) O & M of Irrigation Facilities										→
8. Engineering Services										
1) Design & Construction Supervision	█	█	█							
2) Institutional Development	█	█	█	█	█	█	█	█	█	█

Overall Implementation Plan for PDP

Work Items	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1. Design and Bidding	█	█	█	█	█	█	█	█	█	█
2. Construction										
1) Stage-1 (Pilot Stage: 6 ponds)	█	█								
2) Stage-2 (Intensive Development Stage: 9 ponds)			█	█	█					
3) Stage-3 (Self-supportive Development Stage: 15 ponds)						█	█	█	█	█
3. Institutional Development										
1) PUG Formation supported by DWRAM	█									
2) Training										
† PUG Staff Trained by DWRAM on accounting	█	█								
† Training of Village Extension Workers	█	█	█	█	█	█	█	█	█	█
4. Administrative Works										
1) DWRAM Activities										
† Assistance to PUG Formation	█	█								
† Design & Construction Arrangement, Support	█	█	█	█	█	█	█	█	█	█
† Training to PUG	█	█								
† PDP Fund Management	█	█	█	█	█	█	█	█	█	█
2) DAFF Activities										
† Advice & Support to Village Extension Workers										
† Agricultural Extension Services										
7. PUG's Activities										
1) Refunding to Pond Development Fund										→
2) Arrangement and Coordination on Development										→
3) Agricultural Extension to PUG Members										→
8. Engineering Services										
1) Support on Design & Construction	█	█	█							
2) Institutional Development	█	█	█	█	█	█	█	█	█	█

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Figure IV-6.2.2

Overall Implementation Plans for SRP & PDP