

Appendix I
PDM of Proposed Components
of Subject-wise Programme

**THE STUDY
ON
THE NATIONAL IRRIGATION MASTER PLAN
IN
THE UNITED REPUBLIC OF TANZANIA**

Draft Master Plan Report

APPENDIX I

**PDM OF THE PROPOSED COMPONENTS OF SUBJECT-WISE
PROGRAMME**

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APPENDIX I

PDM OF THE PROPOSED COMPONENTS OF SUBJECT-WISE PROGRAMME

CHAPTER I PROPOSED COMPONENTS OF SUBJECT-WISE PROGRAMME

1.1 PDM of the Proposed Components

Twenty-nine (29) groups of components were identified so as to cover any requirement of improvement for irrigation development. The group of component is not always enable to fulfill the objectives by only single component, some one should be composed of several numbers of components. Consequently, some groups of components were divided into several components as required. Finally, thirty-seven (37) components were formed by the conceptualized aspects.

As to the all formed components, Project Design Matrix (PDM), say a Logical Framework, were prepared individually. All PDMs of the components were shown in Attachment 1.

Attachment

Attachment 1

PDM OF THE PROPOSED COMPONENTS OF SUBJECT-WISE PROGRAMME

PDM of the Programme	A1	IS Institutional Improvement Programme
PDM of the Programme	A2	LGA Institutional Strengthening Programme for Irrigation Development
PDM of the Programme	B1	IS Working Mandate Formulation Programme
PDM of the Programme	B2	Contract Management System Improvement programme
PDM of the Programme	B3	Regulatory Networking System Establishment between LGAs and IS
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PDM of the Programme	C1	Survey and Investigation Guideline Establishment Programme
PDM of the Programme	C2.1	Planning Guideline Establishment Programme
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PDM of the Programme	C3.2	Monitoring & Evaluation Guideline Establishment Programme
PDM of the Programme	C4	Farmers' Participation in Irrigation Development Programme
PDM of the Programme	C5	Village Irrigation Development Guideline Establishment Programme
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PDM of the Programme	C7	Establishment of DADP Formulation Guideline for Irrigated Agriculture Development (DADP-IA)
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PDM of the Programme	D2	Technical Manuals Handling Guideline Establishment Programme
PDM of the Programme	D3	Information and Database Improvement Programme
PDM of the Programme	D4	Irrigation Development Contactors and Consultants' Listing Programme
PDM of the Programme	D5	LGAs' Data Organization Programme
PDM of the Programme	D6	LGA Networking System Establishment Programme
PDM of the Programme	D7	Existing-scheme Monitoring System Establishment Programme
PDM of the Programme	E1.1	Irrigation Technology Research Center Establishment Programme
PDM of the Programme	E1.2	Perennial Irrigation Method Improvement Programme
PDM of the Programme	E1.3	Flood Irrigation Development Programme
PDM of the Programme	E1.4	Small Dam Technology for Irrigation Development Establishment Programme
PDM of the Programme	E1.5	Environmental Assessment Study for Irrigation Practice in Tanzania
PDM of the Programme	E1.6	Study of River-Basin Approach in Irrigation Development
PDM of the Programme	E2	Hydraulic Experimental Center Establishment Programme
PDM of the Programme	E3	IS's Equipment Management Programme
PDM of the Programme	E4	Irrigation Development Contractors and Contractors' Training Programme
PDM of the Programme	E5	Farmers' Participation Training Programme
PDM of the Programme	E6.1	<i>Irrigated Agriculture Training Programme for Rice Production Increase</i>
PDM of the Programme	E6.2	<i>Irrigated Agriculture Training Programme for Cash Crops Production Increase</i>
PDM of the Programme	E7	Integrated Irrigation Development Model establishment Programme

Attachment 1

PDM of the Programme A1
(IS Institutional Improvement) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well performance of restructured organization of Irrigation Section (IS)	Performance of IS is improved. NIMP is fulfilled almost on schedule.	Progress Reports of MINP since 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Institutional improvement plan of the IS's organization is authorized. And the institutional improvement plan of the IS is carried out.	By 20XX, the institutional improvement plan is approved by the Government. By 20XX, institutional improvement of IS is completed in line with the Plan.	Note of approval by the Government Completion report of the institutional improvement	Necessary official back-up is properly provided to restructured organization of IS so as to function properly. New organization of IS is equipped physically in line with the other programmes at the same time.
Outputs 1. Institutional improvement plan of the IS's organization is finalized. 2. Organizational structure of IS is legitimately changed. 3. Personnel changes and if necessary recruitment of staff are done in the IS in line with the institutional improvement plan. 4. New organization of IS is enabled to work.	By 20XX, institutional improvement of IS is started in line with the Plan.	Progress report of institutional improvement of IS	Staff of IS is filled up or replaced to meet the requirement in the Mission statement of new organization of IS.
Activities 1-1 Review previous institutional improvement plans on the IS. 1-2 Prepare a realistic and most effective plan of institutional improvement of IS. 1-3 Finalize the plan of institutional improvement of IS.	Inputs Donor Task Force 1) Institution 8 months 2) System operation 8 months 3) Legal specialist 6 months Subject specialist for the subject of task duties (as required)	GOT Personnel 1) Counterparts in each subject Equipment 1) Office L.S. 2) Others L.S.	All necessary arrangement for institutional improvement of IS will be fulfilled on schedule by concerned section in MAFS.

Attachment 1

<p>2-1 Make proceeding plan of legitimate change corresponding to the institutional improvement..</p> <p>2-2 Execute the proceeding plan of legitimate change.</p> <p>3-1 Make personnel assignment plan corresponding to the institutional improvement..</p> <p>3-2 Examine to apply temporary employment for the implementation of NIMP</p> <p>3-3 Finalize the personnel assignment plan</p> <p>3-4 Execute the personnel assignment plan.</p> <p>4-1 Vest authority to restructured IS to function officially.</p>	<p>Equipment</p> <p>1) Computer system L.S.</p> <p>2) Office equipment L.S.</p> <p>3) Others L.S.</p> <p>Budget</p> <p>Some part of expenditures of local activities related to the Project.</p>	<p>Preconditions</p> <p>It is clearly confirmed the needs of institutional improvement of IS is recognized in MAFS.</p> <p>MASF can provide necessary resources to IS so as to fulfill institutional improvement.</p>
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Attachment 1

PDM of the Programme A2

(LGA Institutional Strengthening for Irrigation Development) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well performance of districts' offices for irrigation development	Performance of districts' offices for irrigation development is improved. NIMP is fulfilled almost on schedule.	Progress Reports of MINP since 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Institutional improvement plan of the irrigation sector's organization in the district office is authorized. And the institutional improvement plan of the irrigation sector of the district office (IS district) is carried out.	By 20XX, the institutional improvement plan is approved by the Central and Local Government. By 20XX, institutional improvement of the IS district is completed in more than 90 % of all districts in line with the Plan.	Note of approval by the Government Completion report of the institutional improvement of IS district	Necessary official back-up is properly provided to restructured organization of IS district so as to function properly. New organization of IS is equipped physically in line with the other programmes at the same time.
Outputs 1. General institutional improvement plan of the IS district's organization is finalized. 2. Organizational structure of IS district is legally changed by district. 3. Personnel changes and if necessary recruitment of staff are done in the IS district in line with the institutional improvement plan by district. 4. New organization of IS district is enabled to work by district.	By 20XX, institutional improvement of IS district is started in line with the Plan by district.	Progress report of institutional improvement of IS district	Staff of IS district is filled up or replaced to meet the requirement corresponding to the institutional improvement plan by district.
Activities 1-1 Review previous institutional improvement plans on the IS district (by IS of MAFS). 1-2 Prepare a realistic and most effective plan of institutional improvement of IS district (by IS of MAFS).	Inputs Donor Task Force 1) Local Government Institution 6 months 2) System operation 6 months 3) Legal specialist 6 months	GOT Personnel 1) Counterparts in each subject in IS 2) Counterpart in each district	All necessary arrangement for institutional improvement of IS district will be fulfilled on schedule by concerned section in MAFS and LGAs.

Attachment 1

<p>1-3 Finalize the plan of institutional improvement of IS district (by IS of MAFS).</p> <p>2-1 Make proceeding plan of district's legitimate change corresponding to the institutional improvement (by District Office)..</p> <p>2-2 Execute the proceeding plan of district's legitimate change (by District Office).</p> <p>3-1 Make district's personnel assignment plan corresponding to the institutional improvement (by District Office)..</p> <p>3-2 Execute the district's personnel assignment plan (by District Office).</p> <p>4-1 Vest authority to restructured IS district to function officially (by District Office).</p>	<p>Subject specialist for the subject of task duties (as required)</p> <p>Equipment 1) Computer system L.S. 2) Office equipment L.S. 3) Others L.S.</p> <p>Budget Some part of expenditures of local activities related to the Project.</p> <p>Equipment 1) Office L.S. 2) Others L.S.</p> <p>Budget 1) Salaries and necessary expenses for counterparts 2) Necessary expenditures in internal investigations.</p>	<p>Preconditions</p> <p>It is clearly confirmed the needs of institutional improvement of IS district is recognized in MAFS and LGAs.</p> <p>MAFJ can provide necessary resources to IS so as to fulfill institutional improvement.</p> <p>LGA can provide necessary resources to IS district so as to fulfill institutional improvement.</p>
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Attachment 1

PDM of the Programme B1
(IS Working Mandate Formulation) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well performance of Irrigation Section (IS) in accordance with the IS mandate	Performance of IS is improved. NIMP is fulfilled almost on schedule.	Progress Reports of MINP since 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Proper waking mandate of IS is regulated and started to be applied.	By 20XX, the IS working mandate is approved by the Government. By 20XX, the IS start to work fully under the working regulation.	Note of approval by the Government Result of work investigation for IS	Organization of IS is re-structured as proposed in other institutional improvement programme. Necessary official back-up is properly provided to IS so as to maintain the application of the mandate.
Outputs 1. Mission statement of IS is established. 2. Task duties of IS is established in line with the Mission statement of IS.. 3. Procedures on scheme implementation are systemized and formalized.	The mission statement of IS is approved and proclaimed by the Government. By 20XX, the task duties of IS is in effective.	Record of official proclamation Report on-the-spot investigation.	Staff of IS is filled up or replaced to meet the <i>requirement in the Mission statement</i> . The systemized formalities of scheme implementation will become a rule for common use to the related actors.
Activities 1-1 Review previous mission for the IS. 1-2 Prepare a plan of new mission statement of IS. 1-3 Finalize the plan of mission	Inputs Donor Preparation Team 1) Task management 6 months 2) System operation 6 months 3) Institution 6 months	GOT Personnel 1) Counterparts in each subject	All necessary arrangement for installation of databases will be fulfilled on schedule by concerned section in MAFS.

Attachment 1

statement of IS.			Preconditions	
2-1 Study demands to be included into the new duties standard of IS.	Subject specialist for the subject of task duties (as required)		Equipment 1) Office 2) Others	L.S. L.S.
2-2 Review previous duties of IS.			It is clearly confirmed the needs of establishment of certain task duties standard of IS is recognized in MAFS.	
2-3 Finalize a plan of task duties standard of IS.	Equipment 1) Computer system 2) Office equipment 3) Others	L.S. L.S. L.S.	Budget 1) Salaries and necessary expenses for counterparts 2) Necessary expenditures in internal investigations.	MASF can provide necessary resources to IS so that IS works as required in new mission statement.
3-1 Conceptualize official procedures of schemes selection and implementation.				
3-2 Formalize each process of the scheme implementation in consideration with the finalized feature of IS and other related organizations and regulations.	Budget Some part of expenditures of local activities related to the Project.			
3-3 Prepare a written rules on the formalities on scheme implementation.				

Attachment 1

PDM of the Programme B2

(Contract Management System Improvement) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of good performance of contractors	a) By 20XX, number of certified contractor for the work of irrigation development increases at 50 % compared to 2002. b) Complains for the contractors' performance are decreased. Clients satisfy contractors' performance in more than 80 % of implemented irrigation schemes.	List of contractors for the tender of the works in irrigation development Reply of clients of implemented irrigation schemes to the question of contractors' performance.	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Contract management system for the works on irrigation development is improved. New contract management system is started to be applied.	a) By 20XX, the new contract system is prepared. b) By 20XX, new irrigation scheme implementation obeys the new contract system.	Completed documents for the regulations on new contract system Report of contract procedures of new irrigation scheme since 20XX	The contract system will continue its procedure in suitable manner. Modality and method of contract for irrigation scheme implementation will not changed drastically.
Outputs 1. Guidelines of contract procedures are prepared. 2. The new guideline is expanded to every concerned governmental staff. 3. The new guideline is expanded to contractors and organization concerned.	The prepared guidelines of contract procedures are approved officially. Every offices and personnel in MAFS dealing with contract works recognize the new guideline. Almost all contractors who are possible tenderers for the contract works of irrigation scheme implementation recognize the new guideline.	Result of interview survey to contractors on the needs of contractors training Report of the Follow-up study on expansion of the new contract system Report of the Follow-up study on expansion of the new contract system	Association of contractors or other reliable organization is cooperative for introduction of new contract system. Institutional arrangement for the establishment of the new contract system is successfully given without any delay.
Activities 1-1 Review of existing contract system 1-2 Plan proper contract procedures for irrigation scheme implementation for not only central government but also LGAs.	Inputs Donor Study Team 1) Contract specialist 10 months 2) Legal specialist 6 months 3) Documentation 6 months 4) Construction 6 months	GOT Personnel 1) Counterparts in each subject	All necessary arrangement for introduction of the new contract system will be fulfilled on schedule by any reliable parties concerned.

Attachment 1

	5) Institution	3 months		Preconditions
1-3 Prepare necessary documents on new contract method			Equipment 1) Office L.S. 2) Others L.S.	A contract system exist for irrigation scheme implementation.
2-1 Arreng circumstance of governmental offices concerning to contract so as to introduce the new contract system.	Equipment 1) Vehicles L.S. 2) Office equipment L.S. 3) Others L.S.		Budget 1) Salaries and necessary expenses for counterparts	An association of the contractors exists and functioning substantially.
2-2 Train staffs of governmental offices concerned the procedures of new contract method.	Budget Some part of expenditures of local activities related to the Project.		2) Allowances and expenses of governmental staff training 3) Some portion of the budget for establishment of new contract system	It is clearly confirmed the needs of improvement previous contract system for irrigation scheme implementation by central government, local government agencies and contractors.
3-1 Prepare an explanatory paper on the new contract method.				
3-2 Deliver the explanatory paper on the new contract method to contractors.				
3-3 Hold seminars for explanation of applying new contract method to contractors in several times.				

Attachment 1

PDM of the Programme B3

(Regulatory Networking System Establishment between LGAs and IS) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well coordination between LGAs and IS through the Regulatory Networking System between LGAs and IS (NLS system)	By 20XX, the NLS system built up by this programme is utilized by 50 % of districts.	Report on-the-spot investigation for utilization of the NLS system.	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Regulatory Networking System between LGAs (districts) and IS is established, and the system starts to work.	By 20XX, more than 80 % of districts are under the networking system.	Report interview survey to districts	Good circumstance for utilization of the networking system between districts and IS is maintained. When revised the system and database itself, the former ones should be replaced smoothly.
Outputs 1. Communication channel for transferring information between districts and IS (sometimes by way of ZIOs) is set up. 2. Necessary equipment to make communicate between both parties possible is installed. 3. Arrangement for open utilization of useful tools and information in IS to districts is made.	Proposed communication channel between districts and IS are tested to work effectively. By 20XX, deployment of the necessary equipment is completed. By 20XX, the arrangement for open utilization of useful tools/information is completed.	Report of the testing Report of inspection Report of inspection	Districts have capability and financial resource to use the communication channels effectively for irrigation development. Districts will maintain the communication channel well.

Attachment 1

Activities	Inputs		
<p>1-1 Specify responsible position in districts for the subjects of irrigation development.</p> <p>1-2 Proposed an organizational arrangement in districts to link channel from IS to the districts for the subjects of irrigation.</p> <p>1-3 Make execution of the plan of organizational arrangement in district, unless present organization of district can keep up with under present condition.</p> <p>2-1 Identify need of installation of communication mean.</p> <p>2-2 Install required equipment, if necessary.</p> <p>3-1 Investigate sort of tools and information required to deliver to districts so that district can maintain technical communication with IS on the basis of the same.</p> <p>3-2 Distribute required tools and information to districts.</p>	<p>Donor</p> <p>Preparation Team</p> <p>1) Institutional Specialist 6 months</p> <p>2) System management 6 months</p> <p>3) Networking Specialist 6 months</p> <p>4) LGA organization 6 months</p> <p>Computer operator (as required)</p> <p>Subject specialist for the subject of networking (as required)</p> <p>Equipment</p> <p>1) Computer system L.S.</p> <p>2) Office equipment L.S.</p> <p>3) Others L.S.</p> <p>Budget</p> <p>Some part of expenditures of local activities related to the Project.</p>	<p>GOT</p> <p>Personnel</p> <p>1) Counterparts in each subject</p> <p>Equipment</p> <p>1) Office L.S.</p> <p>2) Others L.S.</p> <p>Budget</p> <p>1) Salaries and necessary expenses for counterparts</p> <p>2) Some portion of the budget for installation of equipment</p>	<p>All necessary arrangement for establishment of the communication channel will be fulfilled on schedule by concerned section in MAFS.</p> <hr/> <p>Preconditions</p> <p>It is clearly confirmed the needs of establishment of communication channel between districts and IS in organizational basis and with certain means.</p> <p>MASF can provide necessary resources for opening communication channel between districts and IS.</p>

Attachment 1

PDM of the Programme B4

(NGOs' Intervention in Irrigation Development Encourage) under NIMP - Tentative

Project Name: National Irrigation Master Plan

Duration: 2003 - 2017 (15 years)

Project Area: Tanzania

Target Agency: MAFS

Date: June 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of activating NGOs' cooperation to irrigation development.	In 20XX, intervention of NGOs in irrigation sector increase more than 50 % compared to 2002.	Result of baseline survey of NGOs' intervention in 2002 Result of follow-up survey of NGOs' intervention in 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Encouragement plan for NGOs' intervention in irrigation development is established. The encouragement plan for NGOs' intervention in irrigation development is started.	a) By 20XX, the encouragement plan is completed. b) By 20XX, the encouragement plan is started its execution.	Document of the encouragement plan Progress report of implementation of the encouragement plan	Districts (or LGA) are strengthened their capability so as to accept NGOs' cooperation reliably. Good circumstance for the introduction of NGOs is maintained including legal frame.
Outputs 1. NGOs' cooperation in irrigation sector in Tanzania is unveiled 2. Strategy for encouragement of NGOs' cooperation in irrigation sector is established. 3. A encouragement plan for NGOs' intervention in irrigation development is made. 4. Necessary arrangement for implementation of the encouragement plan for NGOs' intervention in irrigation development is settled.	More than 80 % of on-going NGOs cooperation in irrigation sector are outlined with certain salient features. The strategy for encouragement of NGOs' cooperation in irrigation sector is approved by MAFS. By 20XX, the encouragement plan for NGOs' intervention in irrigation development is started its operation.	Result of investigation for NGOs' activities in irrigation sector Approval note of MAFS Progress report of the Plan	Adequate cooperation of related agencies is given in investigation for NGOs' activities and preparation of implementation of the Plan.

Attachment 1

Activities	Inputs		
<p>1-1 Investigate NGOs' activities in irrigation sector in Tanzania.</p> <p>1-2 Analyze problems and constraints in NGOs' intervention in irrigation sector.</p> <p>2 Prepare a strategy for encouragement of NGOs' cooperation in irrigation sector.</p> <p>3 Formulate an encouragement plan for NGOs' intervention in irrigation development.</p>	<p>Donor</p> <p>Preparation Team</p> <p>1) NGO cooperation 6 months</p> <p>2) Cooperation Policy 3 months</p> <p>3) Irrigation 6 months</p> <p>4) Institution 6 months</p> <p>5) LGA specialist 6 months</p> <p>Equipment</p> <p>1) Vehicles L.S.</p> <p>2) Office equipment L.S.</p> <p>3) Others L.S.</p>	<p>GOT</p> <p>Personnel</p> <p>1) Counterparts in each subject</p> <p>Equipment</p> <p>1) Office L.S.</p> <p>2) Others L.S.</p>	<p>All necessary arrangement for the execution of this programme are completed on schedule.</p>
<p>4-1 Clarify required arrangement for the implementation of the Plan.</p> <p>4-2 Prepare necessary arrangement for the implementation of the Plan.</p>	<p>Budget</p> <p>Some part of expenditures of local activities related to the Project.</p> <p>Expenditures of investigation of NGOs' activities, and implementation of encouragement plan for NGOs' intervention in irrigation development</p>	<p>Budget</p> <p>1) Salaries and necessary expenses for counterparts</p> <p>2) Some portion of the budget for the investigation of NGOs' activities</p> <p>3) Necessary expenditures in operation of the encouragement plan for NGOs' intervention in irrigation development</p>	<p>Preconditions</p> <p>It is clearly confirmed the needs of encouragement of NGOs' intervention in irrigation sector is recognized in central government, local government agencies and NGOs.</p> <p>Organizations of NGO group are cooperative for this programme execution.</p>

Attachment 1

PDM of the Programme B5

(Cooperative Channeling within Irrigation Sector Establishment) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well harmonized performing of every parties concerned in irrigation Sector.	Performance of every parties concerned irrigation sector (IS, ZIO, Regional office, district office, and farmers group etc.) are improved. NIMP is fulfilled almost on schedule.	Progress Reports of MINP since 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Properly linked mandate and duties of each agency in irrigation sector are established.	By 20XX, every parties in irrigation sector start to work fully under the cooperative mandate.	Note of approval by the Government Result of work investigation for every parties in irrigation sector	Organization of IS and LGAs are re-structured as proposed in other institutional improvement programme. Necessary official back-up is properly provided to irrigation sector so as to maintain the application of the mandate.
Outputs 1. Cooperative mission statement of every parties in irrigation sector is established in consideration with linkage each other. 2. Cooperative Duties and Mandate of irrigation sector is established in line with the Mission statements.	The cooperative mission statement of irrigation sector is approved and proclaimed by the Government. By 20XX, the cooperative duties and mandate is in effective.	Record of official proclamation Report on-the-spot investigation.	Staff of every offices in irrigation sector is filled up or replaced to meet the requirement of fulfill the cooperative duties and mandate.
Activities 1-1 Review existing each mission for the agencies in irrigation sector.. 1-2 Prepare a plan of new cooperative mission statement of the agencies in irrigation sector. 1-3 Finalize the plan of cooperative mission statement to add to the previous ones.	Inputs Donor Preparation Team 1) Task management 6 months 2) Institution 6 months 3) Regulation specialist 6 months 4) Irrigation development 3 months Subject specialist for the subject of task duties (as required)	GOT Personnel 1) Counterparts in each subject Equipment 1) Office L.S. 2) Others L.S.	All necessary arrangement for enforcement of the cooperative duties and mandate will be fulfilled on schedule by concerned section in MAFS.

Attachment 1

<p>2-1 Study demands to be included into the new cooperative duties standard of irrigation sector.</p> <p>2-2 Review previous duties and mandate of irrigation sector.</p> <p>2-3 Finalize a plan of cooperative task duties standard of irrigation sector.</p> <p>2-4 prepare the Cooperative Duties and Mandate of irrigation sector</p>	<p>Equipment</p> <p>1) Computer system L.S.</p> <p>2) Office equipment L.S.</p> <p>3) Others L.S.</p> <p>Budget</p> <p>Some part of expenditures of local activities related to the Project.</p>	<p>Budget</p> <p>1) Salaries and necessary expenses for counterparts</p> <p>2) Necessary expenditures in internal investigations.</p>	<p>Preconditions</p> <p>It is clearly confirmed the needs of establishment of certain cooperative task duties and mandate of irrigation sector is recognized in MAFS.</p> <p>MASF can provide necessary resources to IS so that IS works as required in execution of this programme.</p>
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Attachment 1

PDM of the Programme B6

(Sub-Sectors' Coordination System Establishment) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well coordinated supporting of other sub-sectors.	Performances of other sub-sectors concerned irrigated agriculture (research, extension, rural development, education, health etc.) are coordinated.	Progress Reports of new irrigation scheme implementation and monitoring for existing irrigation schemes since 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Proper coordination directive among every sub-sectors related to irrigated agriculture are established.	By 20XX, every sub-sectors related to irrigated agriculture start to consult the coordination directive when needed.	Note of approval by the Government Result of interview survey to sub-sectors concerning to irrigated agriculture.	Necessary official supports are properly provided from sub-sectors to irrigation sector so as to maintain irrigated agriculture at the developed areas, and develop new areas.
Outputs 1. Coordination system (or directive and rules system) among sub-sectors related to irrigated agriculture development are established. 2. The coordination system among sub-sectors works on retaining of good progress of irrigated agriculture.	The coordination system is approved and proclaimed by the Government. By 20XX, the coordination system is in effective.	Record of official proclamation Report on-the-spot investigation.	Sub-sectors related to irrigated agriculture are cooperative to retain good progress of irrigated agriculture in rural areas.
Activities 1-1 Design coordination structure of sub-sectors related to irrigated agriculture development. 1-2 Prepare a plan of coordination system among sub-sectors	Inputs Donor Preparation Team 1) Task management 6 months 2) Institution 6 months 3) Regulation specialist 6 months	GOT Personnel 1) Counterparts in each subjects from related sub-sectors	All necessary arrangement for enforcement of the coordination system will be fulfilled on schedule by MAFS.

Attachment 1

<p>related to irrigated agriculture development</p> <p>1-3 Finalize the plan of coordination system.</p> <p>2-Establish the coordination system in the concerned sub-sectors.</p>	<p>4) Irrigated agriculture 3 months</p> <p>Equipment 1) Office 2) Others</p> <p>Subject specialist for the subject of task duties (as required)</p> <p>Equipment 1) Computer system L.S. 2) Office equipment L.S. 3) Others L.S.</p> <p>Budget Some part of expenditures of local activities related to the Project.</p>	<p>Preconditions</p> <p>L.S. L.S.</p> <p>It is clearly confirmed the needs of establishment of certain coordination system of related sub-sectors is <i>recognized</i> by MAFS.</p> <p>MASF can provide necessary resources to IS so that IS works as required in execution of this programme.</p>
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Attachment 1

PDM of the Programme C1

(Survey and Investigation Guideline Establishment) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: June 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well utilizing of the survey guideline.	By 20XX, the survey guideline is utilized at the stage of survey and investigation for 80 % of irrigation schemes newly planned by IS and districts since 2002.	Investigation Reports for new irrigation scheme from 2002 to 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Survey and Investigation(S&I) Guideline which is convenient for survey and investigation of new irrigation planning is completed A copy of the S&I Guideline is placed in each district and section related irrigation development.	a) By 20XX, completed S&I Guideline is approved by officials concerned. b) In 20XX, delivered copies of the S&I Guideline are confirmed popularity in their sections (positive for more than 80 %).	Official document on approval of the S&I Guideline. Report on-the-spot investigation (An on-the spot investigation shall be taken)	Good circumstance for utilization of the S&I Guideline is maintained. When revised the S&I Guideline, delivered one should be replaced smoothly.
Outputs 1. Fields and its level of survey and investigation to meet requirement for the S&I Guideline are decided. 2. A S&I Guideline is prepared. 3. Handling manual for the S&I Guideline is prepared. 4. Copy of the S&I Guideline is delivered to each district and section related irrigation development.	All fields and survey items contained into previous similar instructions are included in the S&I Guideline. By 20XX, the S&I Guideline is completed for its preparation. By 20XX or before starting of guideline delivering, the handling manual is completed for its preparation. By 20XX, the guideline is completely delivered.	Result of interview survey to personnel concerned to on the needs of preparation of S&I Guideline for irrigation development S&I Guideline Handling manual Record of delivery of the S&I Guideline	Districts and concerned agencies have technical capability and financial resource to fully conduct survey and/or investigation designated into the &I Guideline. Management system of the &I Guideline exists and function properly in every concerned agencies.
Activities 1-1 Study previous failures in planning and designing due to lack of necessary survey and investigation. 1-2 Study requirement for survey and investigation for irrigation development.	Inputs Donor Preparation Team 1) Coordinator 6 months 2) Irrigation 3 months 3) Meteo-hydrology 3 months 4) Topo-survey 3 months 5) Hydraulics 3 months 6) Geology 3 months	GOT Personnel 1) Counterparts in each subject	All necessary arrangement for the stationing of the system will be fulfilled on schedule by any reliable parties concerned.

Attachment 1

<p>2 Prepare the S&I Guideline reflecting identified requirement for the guideline.</p>	<p>7) Land use, GIS 3 months 8) Agronomy 3 months 9) Environment 3 months</p>	<p>Equipment 1) Office L.S. 2) Others L.S.</p>	<p>Preconditions</p>
<p>3-1 Plan a management and utilizing system of the guideline..</p>	<p>Equipment 1) Vehicles L.S. 2) GIS L.S. 3) Others L.S.</p>	<p>Budget 1) Salaries and necessary expenses for counterparts 2) Some portion of the budget for publication of the Guideline 3) Necessary expenditures in operation of the system</p>	<p>It is clearly confirmed the needs of preparation of the S&I Guideline is recognized in local government agencies and private groups.</p>
<p>3-2 Prepare the handling manual in line with the management plan..</p>	<p>Budget Some part of expenditures of local activities related to the Project.</p>		
<p>4. Transport copies of the S&I Guideline to the agencies designated in the management plan.</p>			

Attachment 1

PDM of the Programme C2.1

(Planning Guideline Establishment) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well utilizing of the planning guideline.	By 20XX, the planning guideline is utilized at the stage of planning for 80 % of irrigation schemes newly planned by IS and districts since 2002.	Planning Reports for new irrigation scheme from 2002 to 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Planning Guideline which is convenient for planning of new irrigation scheme is completed A copy of the Planning Guideline is placed in each district and section related irrigation development.	a) By 20XX, completed Planning Guideline is approved by officials concerned. b) In 20XX, delivered copies of the Planning Guideline are confirmed popularity in their sections (positive for more than 80 %).	Official document on approval of the Planning Guideline. Report on-the-spot investigation (An on-the spot investigation shall be taken)	Good circumstance for utilization of the Planning Guideline is maintained. When revised the Planning Guideline, delivered one should be replaced smoothly.
Outputs 1. Fields and its level of planning and decision making to meet requirement for the Planning Guideline are decided. 2. A Planning Guideline is prepared. 3. Handling manual for the Planning Guideline is prepared. 4. Copy of the Planning Guideline is delivered to each district and section related irrigation development.	All fields and technical items contained into previous similar instructions are included in the Planning Guideline. By 20XX, the Planning Guideline is completed for its preparation. By 20XX or before starting of guideline delivering, the handling manual is completed for its preparation. By 20XX, the guideline is completely delivered.	Result of interview survey to personnel concerned on the needs of preparation of Planning Guideline for irrigation development Planning Guideline Handling manual Record of delivery of the Planning Guideline	Districts and concerned agencies have technical capability and financial resource to fully conduct planning and/or decision making designated into the Planning Guideline. Management system of the Planning Guideline exists and function properly in every concerned agencies.

Attachment 1

Activities	Inputs		
<p>1-1 Study previous failures in planning and designing due to lack of necessary technology in planning.</p> <p>1-2 Study requirement for planning and decision making for irrigation development.</p> <p>2 Prepare the Planning Guideline reflecting identified requirement for the guideline.</p>	<p>Donor</p> <p>Preparation Team</p> <p>1) Planning 6 months</p> <p>2) Irrigation 6 months</p> <p>3) Meteo-hydrology 6 months</p> <p>4) River/Watershed 6 months</p> <p>4) Topo-survey 3 months</p> <p>5) Hydraulics 6 months</p> <p>6) Geology 3 months</p> <p>7) Land use, GIS 6 months</p> <p>8) Agronomy 6 months</p> <p>9) Environment 3 months</p> <p>10) Participation 6 months</p>	<p>GOT</p> <p>Personnel</p> <p>1) Counterparts in each subject</p> <p>Equipment</p> <p>1) Office L.S.</p> <p>2) Others L.S.</p>	<p>All necessary arrangement for the stationing of the management system of the guideline will be fulfilled on schedule by any reliable parties concerned.</p>
<p>3-1 Plan a management and utilizing system of the guideline..</p> <p>3-2 Prepare the handling manual in line with the management plan..</p> <p>4. Transport copies of the Planning Guideline to the agencies designated in the management plan.</p>	<p>Equipment</p> <p>1) Vehicles L.S.</p> <p>2) GIS L.S.</p> <p>3) Others L.S.</p> <p>Budget</p> <p>Some part of expenditures of local activities related to the Project.</p>	<p>Budget</p> <p>1) Salaries and necessary expenses for counterparts</p> <p>2) Some portion of the budget for publication of the Guideline</p> <p>3) Necessary expenditures in operation of the system</p>	<p>Preconditions</p> <p>It is clearly confirmed the needs of preparation of the Planning Guideline is recognized in local government agencies and private groups.</p>

Attachment 1

PDM of the Programme C2.2
(Designing Guideline Establishment) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p>Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty</p>			
<p>Overall Goal To attain the objectives of NIMP by means of well utilizing of the Designing guideline.</p>	By 20XX, the designing guideline is utilized at the stage of planning for 80 % of irrigation schemes newly planned by IS and districts since 2002.	Design Reports for new irrigation scheme from 2002 to 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
<p>Project Purpose</p> <p>Designing Guideline which is convenient for designing of new irrigation scheme is completed</p> <p>A copy of the Designing Guideline is placed in each district and section related irrigation development.</p>	<p>a) By 20XX, completed Designing Guideline is approved by officials concerned.</p> <p>b) In 20XX, delivered copies of the Designing Guideline are confirmed popularity in their sections (positive for more than 80 %).</p>	<p>Official document on approval of the Designing Guideline.</p> <p>Report on-the-spot investigation (An on-the spot investigation shall be taken)</p>	<p>Good circumstance for utilization of the Designing Guideline is maintained.</p> <p>When revised the Designing Guideline, delivered one should be replaced smoothly.</p>
<p>Outputs</p> <ol style="list-style-type: none"> Fields and its level of designing of irrigation system to meet requirement for the Designing Guideline are decided. A Designing Guideline is prepared. Handling manual for the Designing Guideline is prepared. Copy of the Designing Guideline is delivered to each district and section related irrigation development. 	<p>All fields and technical items contained into previous similar instructions are included in Designing Guideline.</p> <p>By 20XX, the Designing Guideline is completed for its preparation.</p> <p>By 20XX or before starting of guideline delivering, the handling manual is completed for its preparation.</p> <p>By 20XX, the guideline is completely delivered.</p>	<p>Result of interview survey to personnel concerned on the needs of preparation Designing Guideline for irrigation development</p> <p>Designing Guideline</p> <p>Handling manual</p> <p>Record of delivery of the Designing Guideline</p>	<p>Districts and concerned agencies have technical capability and financial resource to fully conduct designing designated into the Designing Guideline.</p> <p>Management system of the Designing Guideline exists and function properly in every concerned agencies.</p>

Attachment 1

Activities	Inputs		
<p>1-1 Study previous failures in designing and construction due to lack of necessary technology in designing.</p> <p>1-2 Study requirement for designing for irrigation development.</p> <p>1-3 Review previous designing guidelines prepared by any other projects/programmes.</p>	<p>Donor</p> <p>Preparation Team</p> <p>1) Irrigation system 6 months</p> <p>2) Structure 6 months</p> <p>3) Hydraulics 6 months</p> <p>4) River/Watershed 6 months</p> <p>5) Structure design 6 months</p> <p>6) Geology 3 months</p> <p>7) Land use, GIS 6 months</p> <p>8) Agronomy 6 months</p> <p>9) Environment 3 months</p> <p>10) participation 4 months</p>	<p>GOT</p> <p>Personnel</p> <p>1) Counterparts in each subject</p> <p>Equipment</p> <p>1) Office L.S.</p> <p>2) Others L.S.</p>	<p>All necessary arrangement for the stationing of the management system of the guideline will be fulfilled on schedule by any reliable parties concerned.</p>
<p>2 Prepare the Designing Guideline reflecting identified requirement for the guideline.</p> <p>3-1 Plan a management and utilizing system of the guideline..</p> <p>3-2 Prepare the handling manual in line with the management plan.</p> <p>4. Transport copies of the Designing Guideline to the agencies designated in the management plan.</p>	<p>Equipment</p> <p>1) Vehicles L.S.</p> <p>2) GIS L.S.</p> <p>3) Others L.S.</p> <p>Budget</p> <p>Some part of expenditures of local activities related to the Project.</p>	<p>Budget</p> <p>1) Salaries and necessary expenses for counterparts</p> <p>2) Some portion of the budget for publication of the Guideline</p> <p>3) Necessary expenditures in operation of the system</p>	<p>Preconditions</p> <p>It is clearly confirmed the needs of preparation of the Designing Guideline is recognized in local government agencies and private groups.</p>

Attachment 1

PDM of the Programme C3.1

(Operation and Maintenance (O&M) Guideline Establishment) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well utilizing of the O&M guideline.	By 20XX, the O&M guideline is utilized at the stage of operation for 80 % of irrigation schemes newly planned by IS and districts since 2002.	Operation Reports for new irrigation scheme from 2002 to 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose O&M Guideline which is convenient for the works of operation and maintenance of any irrigation schemes is completed. A copy of the O&M Guideline is placed in each district and section related irrigation development.	a) By 20XX, completed O&M Guideline is approved by officials concerned. b) In 20XX, delivered copies of the O&M Guideline are confirmed popularity in their sections (positive for more than 80 %).	Official document on approval of the O&M Guideline. Report on-the-spot investigation (An on-the spot investigation shall be taken)	Good circumstance for utilization of the O&M Guideline is maintained. When revised the O&M Guideline, delivered one should be replaced smoothly.
Outputs 1. Fields and its level of works in O&M of irrigation system to meet requirement for the O&M Guideline are decided. 2. A O&M Guideline is prepared. 3. Handling manual for the O&M Guideline is prepared. 4. Copy of the O&M Guideline is delivered to each district and section related irrigation development.	All technical and sociological items contained into previous similar instructions are included in O&M Guideline. By 20XX, the O&M Guideline is completed for its preparation. By 20XX or before starting of guideline delivering, the handling manual is completed for its preparation. By 20XX, the guideline is completely delivered.	Result of interview survey to personnel concerned on the needs of preparation O&M Guideline for irrigation development O&M Guideline Handling manual Record of delivery of the O&M Guideline	Districts and concerned farmers groups have technical capability and financial resource to fully conduct O&M designated into the O&M Guideline. Management system of the O&M Guideline exists and function properly in every concerned agencies.
Activities 1-1 Study previous failures in operation and maintenance due to lack of necessary technology in O&M. 1-2 Study requirement for operation and maintenance for irrigation development. 1-3 Review previous O&M guidelines prepared by any other projects/programmes.	Inputs Donor Preparation Team 1) Irrigation system 6 months 2) Structure 6 months 3) Water management 6 months 4) River/Watershed 6 months 5) Structure design 6 months 6) Farmers group 6 months 7) Accounting 6 months 8) Agronomy 6 months 9) Environment 3 months 10) participation 4 months	GOT Personnel 1) Counterparts in each subject Equipment 1) Office L.S. 2) Others L.S.	All necessary arrangement for the stationing of the management system of the guideline will be fulfilled on schedule by any reliable parties concerned.

Attachment 1

<p>2 Prepare the O&M Guideline reflecting identified requirement for the guideline.</p>	<p>Equipment</p>	<p>Preconditions</p>
<p>3-1 Plan a management and utilizing system of the guideline..</p>	<p>1) Vehicles L.S. 2) Office equipment L.S. 3) Others L.S.</p>	<p>It is clearly confirmed the needs of preparation of the O&M Guideline is recognized in local government agencies and farmers groups.</p>
<p>3-2 Prepare the handling manual in line with the management plan..</p>	<p>Budget Some part of expenditures of local activities related to the Project.</p>	
<p>4. Transport copies of the O&M Guideline to the agencies designated in the management plan.</p>	<p>Budget 1) Salaries and necessary expenses for counterparts 2) Some portion of the budget for publication of the Guideline 3) Necessary expenditures in operation of the management system of the guideline</p>	

Attachment 1

PDM of the Programme C3.2

(Monitoring and Evaluation (M&E) Guideline Establishment) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p>Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty</p>			
<p>Overall Goal To attain the objectives of NIMP by means of well utilizing of the M&E guideline.</p>	By 20XX, the M&E guideline is utilized at the stage of operation for 80 % of irrigation schemes newly planned by IS and districts since 2002.	Operation Reports for new irrigation scheme from 2002 to 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
<p>Project Purpose</p> <p>M&E Guideline which is convenient for monitoring and evaluation of any irrigation schemes is completed.</p> <p>A copy of the M&E Guideline is placed in each district and section related irrigation development.</p>	<p>a) By 20XX, completed M&E Guideline is approved by officials concerned.</p> <p>b) In 20XX, delivered copies of the M&E Guideline is confirmed popularity in their sections (positive for more than 80 %).</p>	<p>Official document on approval of the M&E Guideline.</p> <p>Report on-the-spot investigation (An on-the spot investigation shall be taken)</p>	<p>Good circumstance for utilization of the M&E Guideline is maintained.</p> <p>When revised the M&E Guideline, delivered one should be replaced smoothly.</p> <p>Results of monitoring and evaluation on irrigation schemes' performance utilizing the M&E guideline are properly reflected to the improvement of the irrigation system so as to maintain good project cycle.</p>
<p>Outputs</p> <p>1. Fields and its level of works in M&E of irrigation system to meet requirement for the M&E Guideline are decided.</p> <p>2. A M&E Guideline is prepared.</p> <p>3. Handling manual for the M&E Guideline is prepared.</p> <p>4. Copy of the M&E Guideline is delivered to each district and section related irrigation development.</p>	<p>All technical and socio-economical items contained into previous similar instructions are included in M&E Guideline.</p> <p>By 20XX, the M&E Guideline is completed for its preparation.</p> <p>By 20XX or before starting of guideline delivering, the handling manual is completed for its preparation.</p> <p>By 20XX, the guideline is completely delivered.</p>	<p>Result of interview survey to personnel concerned on the needs of preparation M&E Guideline for irrigation development</p> <p>M&E Guideline</p> <p>Handling manual</p> <p>Record of delivery of the M&E Guideline</p>	<p>Districts and concerned agencies have technical capability and financial resource to fully conduct M&E designated into the M&E Guideline.</p> <p>Management system of the M&E Guideline exists and function properly in every concerned agencies.</p>

Attachment 1

Activities	Inputs		
1-1 Study causes of failure in the previous failed irrigation schemes due to lack of necessary improvement works after completion of the schemes.	Donor		All necessary arrangement for the stationing of the management system of the guideline will be fulfilled on schedule by any reliable parties concerned.
1-2 Study requirement for monitoring and evaluation for irrigation schemes.	GOT		
1-3 Review previous M&E guidelines prepared by any other projects/programmes.	Preparation Team 1) M&E 6 months 2) Irrigation system 6 months 3) Socio-economy 6 months 4) System performance 6 months 5) Farmers group 6 months 6) Accounting 6 months 7) Agronomy 6 months 8) Environment 3 months 9) Participation 4 months	Personnel 1) Counterparts in each subject Equipment 1) Office L.S. 2) Others L.S.	Preconditions
1-4 Study adequate measures and coping system for the monitored and evaluated result in irrigation schemes.	Equipment 1) Vehicles L.S. 2) Office equipment L.S. 3) Others L.S.	Budget 1) Salaries and necessary expenses for counterparts 2) Some portion of the budget for publication of the Guideline 3) Necessary expenditures in operation of the management system of the guideline	It is clearly confirmed the needs of preparation of the M&E Guideline is recognized in local government agencies and farmers groups.
2 Prepare the M&E Guideline reflecting identified requirement for the guideline.	Budget Some part of expenditures of local activities related to the Project.		
3-1 Plan a management and utilizing system of the guideline.			
3-2 Prepare the handling manual in line with the management plan.			
4. Transport copies of the M&E Guideline to the agencies designated in the management plan.			

Attachment 1

PDM of the Programme C4

(Farmers' Participation in Irrigation Development) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well participation of farmers in irrigation development.	By 20XX, for new irrigation schemes of more than 80 % of the schemes started since 2002, PRA is properly conducted. And, all village irrigation schemes are progressed by self-determination and self-reliance of farmers.	Investigation Reports for new irrigation schemes including village irrigation schemes from 2002 to 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose A Guideline for farmers' participation is prepared. Some numbers of pilot model irrigation schemes for farmers' participation are established, and replicable effects of the pilot models for farmers' participation is expanded to other areas.	a) By 20XX, completed Farmers' Participation Guideline is approved by officials concerned. b) Special and appropriate supports for farmers' participation are given in XX irrigation schemes c) Totally and annually more than XX times of farmers' visiting for learning form other areas to the pilot model schemes are taken. d) XXX sheets of the leaflet are provided and spread in all over the country.	Official document on approval of the Guideline. Report on-the-spot investigation (An on-the spot investigation shall be taken) Follow-up Report of the special support to the pilot model schemes Record of preparation and treatment of the leaflet	Districts (or LGA) are strengthened their capability so as to backstop farmers' participation in irrigation development independently. Necessary resources are adequately given in order to implement the pilot model strengthening. The Guideline for farmers' participation is utilized and maintained properly. Several opportunities of other villagers to visit to the pilot model irrigation scheme for farmers' participation.

Attachment 1

Outputs			
1-1 Contents for the Farmers' Participation Guideline are decided.	All fields and items contained into previous similar instructions are included in the Farmers' Participation Guideline.	Result of interview survey to personnel concerned on contentment of the Farmers' Participation Guideline for their requirement.	Districts and concerned agencies have technical capability and financial resource to fully support farmers participation in irrigation development.
1-2 The Farmers' Participation Guideline is prepared.	By 20XX, the Farmers' Participation Guideline is completed for its preparation.	Farmers' Participation Guideline	Management system of the Farmers' Participation Guideline exists and function properly in every concerned agencies.
2-1 Typical irrigation schemes for good farmers' participation are selected as the pilot models.	By 20XX, the strengthening Plan for farmers' participation will be completed.	Completion Report for the Strengthening Plan	
2-2 Strengthening Plan for farmers' participation to the selected pilot schemes are made.			
2-3 The Strengthening Plan for farmers' participation is executed in the pilot schemes.			
3-1 Good farmers' participation is maintained in the pilot schemes.	Good farmers participation continues	Follow-up Report of the Strengthening Plan	
3-2 Tours of other villagers to the pilot schemes are prepared and executed often.	By 20XX, XX times tours and scheduled and executed.	Record of Tours	Villagers participated the tours will soundly reflect the lesson learned through the tours to their own life.
4. Leaflet propagating pilot model effects for strengthening farmers' participation is prepared as being effective.	By 20XX, the leaflet is completed its preparation.	Memorandum on the preparation of the leaflet	Prepared leaflet will be spread effectively.
Activities	Inputs		
1.1.1 Review previous similar references on farmers' participation.	Donor Preparation Team 1) Participation 12 months 2) Irrigation 12 months 3) Rural develop't 6 months 4) Extension 12 months 5) Agriculture 6 months 6) Coordinator 12 months		GOT Personnel 1) Counterparts in each subject
1.1.2 Study on the contents of the guideline for farmers' participation.			
1.2 Prepare the Farmers' participation Guideline reflecting identified requirement for the guideline.	Field workers L.S.	Equipment 1) Office L.S. 2) Others L.S.	
2.1.1 Prepare an inventory of irrigation schemes for farmers' participation in consideration with the irrigation scheme inventory prepared in NIMP Study.	Equipment 1) Vehicles L.S. 2) GIS L.S. 3) Others L.S.	Budget 1) Salaries and necessary expenses for counterparts 2) Some portion of the budget for publication of the Guideline	
2.1.2 Make a criteria of scheme selection for the pilot model for strengthening farmers' participation.	Budget Some part of expenditures of local activities related to the Project.	3) Necessary expenditures in operation of the system	
2.1.3 Select pilot model schemes among possible schemes listed in the inventory.			
2.2 Prepare the Strengthening Plan for farmers participation to the selected pilot schemes.			

Attachment 1

<p>2.3.1 Arrange necessary resources for implementation of the Strengthening Plan.</p> <p>2.3.2 Implement the Strengthening Plan as planned.</p> <p>3.1.1 Monitor the performance of farmers' participation in the pilot schemes.</p> <p>3.1.2 Support in O&M of the pilot schemes as required.</p> <p>3.2.1 Arrange necessary resources for implementation of villagers tour to the pilot scheme.</p> <p>3.2.2 Plan tours of visiting pilot schemes.</p> <p>3.2.3 Conduct the tours as scheduled.</p> <p>4.1 Draft leaflet for the effect of strengthening farmers' participation.</p> <p>4.2 Finalize the draft of leaflet.</p> <p>4.3 Print leaflet at required sheets.</p>		<p>Preconditions</p> <p>It is clearly confirmed the needs of strengthening farmers participation is recognized in local government agencies and private groups.</p>
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Attachment 1

PDM of the Programme C5

(Village Irrigation Development (VID) Guideline Establishment) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: June 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well utilizing of the Village Irrigation Development (VID) Guideline	By 20XX, the VID guideline is utilized for planning, designing, construction and O&M of more than 80 % of village irrigation schemes newly implemented by districts and farmers' groups since 2002.	Investigation Reports for new village irrigation schemes from 2002 to 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Village Irrigation Development (VID) Guideline which is convenient for planning, designing, construction and O&M of new village irrigation scheme is completed. A copy of the VID Guideline is placed in each district and organization related irrigation development including NGOs.	a) By 20XX, completed VID Guideline is approved by officials concerned. b) In 20XX, delivered copies of the VID Guideline are confirmed popularity in their areas (positive for more than 80 %).	Official document on approval of the VID Guideline. Report on-the-spot investigation (An on-the spot investigation shall be taken)	Districts (or LGA) are strengthened their capability so as to fulfill village irrigation development independently. Good circumstance for utilization of the DIV Guideline is maintained. When revised the Survey Guideline, delivered one should be replaced smoothly.
Outputs 1. Fields and its level of contents for the VID Guideline are decided. 2. A VID Guideline is prepared. 3. Handling manual for the VID Guideline is prepared. 4. Copy of the VID Guideline is delivered to each district and organization related irrigation development including NGOs.	All fields and items contained into previous similar instructions are included in the VID Guideline. By 20XX, the VID Guideline is completed for its preparation. By 20XX or before starting of guideline delivering, the handling manual is completed for its preparation. By 20XX, the guideline is completely delivered.	Result of interview survey to personnel concerned on contentment of the VID Guideline for their requirement. VID Guideline Handling manual Record of delivery of the VID Guideline	Districts and concerned agencies have technical capability and financial resource to fully conduct survey and/or investigation designated into the Survey Guideline. Management system of the Survey Guideline exists and function properly in every concerned agencies.
Activities 1-1 Study previous remarkable efforts of farmers' groups and districts for village irrigation schemes. 1-2 Study previous failures in village irrigation schemes due to lack of technical (e.g. micro-irrigation etc.) and socio-economical	Inputs Donor Preparation Team 1) Rural Develop't 6 months 2) Irrigation 6 months 3) Meteo-hydrology 3 months 4) Topo-survey 3 months 5) Hydraulics 3 months 6) Geology 3 months 7) Land use, GIS 3 months	GOT Personnel 1) Counterparts in each subject Equipment	All necessary arrangement for acceptance and utilization of the VID Guideline are completed in every districts and organizations concerned.

Attachment 1

considerations.	8) Agronomy 3 months	1) Office L.S.		Preconditions <i>It is clearly confirmed the needs of preparation of the VID Guideline is recognized in local government agencies and private groups.</i>
1-3 Identify requirement for planning, designing, construction and O&M of village irrigation scheme development.	9) Environment 3 months 10) Structure design 6 months 11) Construction 6 months 12) Farmers group 6 months 13) Participation 6 months 14) O&M 6 months	2) Others L.S.		
2 Prepare the VID Guideline reflecting identified requirement for the guideline.	Equipment	Budget	1) Salaries and necessary expenses for counterparts	
3-1 Plan a management and utilizing system of the guideline.	1) Vehicles L.S. 2) GIS L.S. 3) Others L.S.	2) Some portion of the budget for publication of the Guideline	3) Necessary expenditures in operation of the system	
3-2 Prepare the handling manual in line with the management plan.	Budget Some part of expenditures of local activities related to the Project.			
4. Transport copies of the VID Guideline to the organizations designated in the management plan.				

Attachment 1

PDM of the Programme C6

(Farmers' Operation and Maintenance (F'O&M) Manual Establishment) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

(This F'O&M guideline is focusing to strengthen farmers' activities relating to O&M retaining sound PCM.)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well utilizing of the Farmers' O&M(F'O&M) manual for farmers.	By 20XX, the F'O&M manual is utilized for farmers at the stage of operation for 80 % of irrigation schemes newly planned since 2002.	Operation Reports for new irrigation scheme from 2002 to 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Farmers' O&M Manual which is convenient for the farmers' works and activities to be taken during operation and maintenance of any irrigation schemes is completed. A copy of the F'O&M Manual is placed in each district, section related irrigation development and farmers' organization of every implemented schemes.	a) By 20XX, completed F'O&M Manual is approved by officials concerned. b) In 20XX, delivered copies of the F'O&M Manual are confirmed popularity in their works on O&M (positive for more than 80 %).	Official document on approval of the F'O&M Manual. Report on-the-spot investigation (An on-the spot investigation shall be taken)	Good circumstance for utilization of the F'O&M Guideline is maintained. When revised the F'O&M Guideline, delivered one should be replaced smoothly.
Outputs 1. Fields and its level of works in O&M of irrigation system to meet requirement for the F'O&M Manual are decided. 2. A O&M Guideline is prepared. 3. Handling manual for the F'O&M Manual is prepared. 4. Copy of the F'O&M Manual is delivered to each district and section related irrigation development.	All technical and sociological items and points related to PCM management contained into previous similar instructions are included in F'O&M Manual. By 20XX, the F'O&M Manual is completed for its preparation. By 20XX or before starting of manual delivering, the handling guide is completed for its preparation. By 20XX, the guideline is completely delivered.	Result of interview survey to personnel concerned on the needs of preparation O&M Guideline for irrigation development F'O&M Manual Handling Guide Record of delivery of the F'O&M Manual	Concerned farmers groups have technical capability and financial resource to fully conduct O&M designated into the F'O&M Manual, under the backstopping of LGAs. Management system of the F'O&M Manual exists and function properly in every concerned groups.

Attachment 1

Activities	Inputs		
<p>1-1 Study previous failures in operation and maintenance due to lack of necessary farmers' efforts in O&M.</p> <p>1-2 Study requirement to farmers in operation and maintenance on the whole.</p> <p>1-3 Review previous O&M manuals for farmers prepared by any other projects/programmes.</p> <p>2 Prepare the F'O&M Manual reflecting identified requirement for the manual.</p> <p>3-1 Plan a management and utilizing system of the manual.</p> <p>3-2 Prepare the handling guide in line with the management plan.</p> <p>4. Transport copies of the F'O&M Manual to the organizations designated in the management plan.</p>	Donor	GOT	<p>All necessary arrangement for the stationing of the management system of the manual will be fulfilled on schedule by any reliable parties concerned.</p>
	<p>Preparation Team</p> <p>1) Irrigation system 6 months</p> <p>2) Irrigated agriculture 6 months</p> <p>3) Water management 6 months</p> <p>4) Water rights 3 months</p> <p>5) Structures 3 months</p> <p>6) Farmers group 6 months</p> <p>7) Accounting 6 months</p> <p>8) Marketing 6 months</p> <p>9) Environment 3 months</p> <p>10) Participation 4 months</p>	<p>Personnel</p> <p>1) Counterparts in each subject</p> <p>Equipment</p> <p>1) Office L.S.</p> <p>2) Others L.S.</p>	
<p>Equipment</p> <p>1) Vehicles L.S.</p> <p>2) Office equipment L.S.</p> <p>3) Others L.S.</p>	<p>Budget</p> <p>1) Salaries and necessary expenses for counterparts</p> <p>2) Some portion of the budget for publication of the Guideline</p> <p>3) Necessary expenditures in operation of the management system of the guideline</p>	<p>Preconditions</p> <p>It is clearly confirmed the needs of preparation of the F'O&M Manual is recognized in local government agencies and farmers groups.</p>	
<p>Budget</p> <p>Some part of expenditures of local activities related to the Project.</p>			

Attachment 1

PDM of the Programme C7

(Establishment of DADP Formulation Guideline for Irrigated Agriculture Development (DADP-IA))

under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well utilizing of the DADP-IA formulation Guideline which indicate proper know-hows to formulate successfully the part for irrigated agriculture development within DADP.	By 20XX, the DADP-IA Guideline for is utilized for planning, designing, construction and after-care of more than 80 % of small-scale irrigation schemes and village irrigation schemes newly implemented by districts and farmers' groups since 2002.	Investigation Reports for new irrigation schemes promoted by LGAs from 2002 to 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose DADP-IA Guideline which is convenient for planning of new irrigation scheme dealt with Districts is completed. A copy of the DADP-IA Guideline is placed in each district and organization related irrigation development (including NGOs).	a) By 20XX, completed DADP-IA Guideline is approved by officials concerned. b) In 20XX, delivered copies of the DADP-IA Guideline are confirmed popularity in their districts (positive for more than 80 %).	Official document on approval of the DADP-IA Guideline. Report on-the-spot investigation (An on-the spot investigation shall be taken)	Districts (or LGA) are strengthened their capability so as to fulfill irrigation development independently. Good circumstance for utilization of the DADP-IA Guideline is maintained. When revised the DADP-IA Guideline, delivered one should be replaced smoothly.
Outputs 1. Fields and its level of contents for the DADP-IA Guideline are decided. 2. A DADP-IA Guideline is prepared. 3. Handling manual for the DADP-IA Guideline is prepared. 4. Copy of the DADP-IA Guideline is delivered to each district and organization related irrigation development (including NGOs).	All fields and items contained into previous and on-going similar instructions are included in the DADP-IA Guideline. By 20XX, the DADP-IA Guideline is completed for its preparation. By 20XX or before starting of guideline delivering, the handling manual is completed for its preparation. By 20XX, the guideline is completely delivered.	Result of interview survey to personnel concerned on contentment of the DADP-IA Guideline for their requirement. DADP Guideline Handling manual Record of delivery of the DADP-IA Guideline	Districts have technical capability and financial resource to fully prepare DADP designated into the DADP-IA Guideline. Management system of the DADP-IA Guideline exists and function properly in every concerned agencies.

Attachment 1

Activities	Inputs		
1-1 Study problems and constraints of districts when districts plan irrigation development independently.	Donor	GOT	All necessary arrangement for acceptance and utilization of the DADP-IA Guideline are completed in every districts and organizations concerned.
1-2 Study previous failures in irrigation schemes planned by districts due to lack of technical and socio-economical considerations.	Preparation Team 1) Rural Develop't 6 months 2) Irrigation 6 months 3) Meteo-hydrology 3 months 4) Topo-survey 3 months 5) Hydraulics 3 months 6) Geology 3 months 7) Land use, GIS 3 months 8) Agronomy 3 months 9) Environment 3 months 10) Structure design 6 months 11) Construction 6 months 12) Farmers group 6 months 13) Participation 6 months 14) O&M 6 months 15) Institution 6 months	Personnel 1) Counterparts in each subject Equipment 1) Office L.S. 2) Others L.S. Budget 1) Salaries and necessary expenses for counterparts 2) Some portion of the budget for publication of the Guideline 3) Necessary expenditures in operation of the system	
1-3 Identify requirement for districts in planning of irrigation scheme development.	Equipment 1) Vehicles L.S. 2) GIS L.S. 3) Others L.S.		Preconditions It is clearly confirmed the needs of preparation of the DADP-IA Guideline is recognized in central government, local government agencies and private groups.
2 Prepare the DADP-IA Guideline reflecting identified requirement for the guideline.	Budget Some part of expenditures of local activities related to the Project.		
3-1 Plan a management and utilizing system of the guideline.			
3-2 Prepare the handling manual in line with the management plan.			
4. Transport copies of the DADP-IA Guideline to the organizations designated in the management plan.			

Attachment 1

PDM of the Programme D1

(Web-site and Network System Establishment) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well facilitation of Web-site and network system over the Irrigation Section (IS).	In 20XX, response of the IS is improved. Number of official communication through the network concerning to the IS is more than 3 time of the same in 2002.	Record of network performance in 2002 and 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Web-site for IS is established. And, intra-network system is extended within IS and in between ZIOs.	In 20XX, more than 80 % of staff of IS including ZIOs are able to access intra-network system individually at their office.	Report on-the-spot inspection for accessibility to the MAFS's intra-network.	Good circumstance for utilization of the intra-network and its management system is maintained. Sound moral of IS's staff in utilization of the intra-network are kept.
Outputs 1. Web-site for IS is opened. 2. Up-dating routine for the web-site is established. 3. Extending plan of the MAFS intra-network to the IS is made. 4. The extending plan of the intra-network is executed.	By 20XX, the extending work of the intra-network to IS is completed.	Report on-the-spot investigation for the extension work of the intra-network.	Staff concerning IS can operate intra-networks individually, otherwise, training and short course for learning are provided properly.
Activities 1-1 Procure necessary equipment to IS in order to open the web-site for IS. 1-2 Build up the web-site for IS. 2-1 Make a plan of the up-dating routine for the web-site. 2-2 Establish the up-dating routine for the web-site into the organization of IS.	Inputs Donor Preparation Team 1) System engineer 3 months 2) Web-site specialist 3 months 3) Intra-net specialist 3 months Computer operator (as required)	GOT Personnel 1) Counterparts in each subject Equipment 1) Office L.S. 2) Others L.S.	All necessary arrangement for installation within the programme will be fulfilled on schedule by concerned section in MAFS.

Attachment 1

<p>3-1 Investigate required procurement and installation for expanding the intra-network to IS.</p> <p>3-2 Make a plan of intra-network expanding.</p> <p>4-1 Arrange conditions so that the plan can be commenced.</p> <p>4-2 Commence the plan of intra-network expanding.</p>	<p>Equipment</p> <p>1) Computer system L.S. 2) Equipment for networking L.S. 3) Office equipment L.S. 4) Others L.S.</p> <p>Budget</p> <p>Some part of expenditures of local activities related to the programme.</p>	<p>Budget</p> <p>1) Salaries and necessary expenses for counterparts 2) Some portion of the budget for installation of lines for networking 3) Necessary expenditures in operation of the system.</p>	<p>Preconditions</p> <p>It is clearly confirmed the needs of preparation of the web-site of IS and networking is recognized in MAFS and IS.</p> <p>MASF can provide necessary resources for the execution of this programme</p>
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Attachment 1

PDM of the Programme D2

(Technical Manuals Handling Guideline Establishment) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well utilizing of the technical manuals as regulated in the technical manuals handling guideline (TMH Guideline).	By 20XX, Parson in charge of the every concerned offices can answer where delivered technical guidelines and manuals are stationed in their office for open use.	Report of interview survey for utilization of technical references	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Technical Manuals Handling TMH Guideline which is convenient for handling and managing all technical references is completed. A copy of the TMH Guideline is placed in each section related irrigation development in central government and districts.	a) By 20XX, completed TMH Guideline is approved by officials concerned. b) In 20XX, delivered copies of the TMH Guideline are confirmed popularity in their sections (positive for more than 80 %).	Official document on approval of the TMH Guideline. Report on-the-spot investigation (An on-the spot investigation shall be taken)	Circumstances for utilization of technical references are improved and maintained as regulated by the TMH Guideline. When revised the TMH Guideline, delivered one should be replaced smoothly.
Outputs 1. Realistic utilization system for technical references is drawn up. 2. A TMH Guideline is prepared. 3. Copy of the TMH Guideline is delivered to each section related irrigation development in central government and districts.	All issues on utilization of technical references which are prevailed in PCM workshop are considered anyhow. By 20XX, the TMH Guideline is completed for its preparation. By 20XX, the guideline is completely delivered.	Result of PCM problem analysis on utilization of technical references TMH Guideline Record of delivery of the TMH Guideline	Districts and concerned agencies have technical capability and financial resource to fully manage technical references in accordance with the TMH Guideline.
Activities 1-1 Study previous malfunction of technology management which caused scheme's failure. 1-2 Conceive improvement plan of management system for technical references utilization.	Inputs Donor Preparation Team 1) Knowledge Management 3 months 2) Technology training 3 months	GOT Personnel 1) Counterparts in each subject Equipment	All necessary arrangement for the stationing of the management system of the guideline will be fulfilled on schedule.

Attachment 1

<p>2 Prepare the TMH Guideline reflecting improvement idea for technical references handling.</p> <p>3. Transport copies of the TMH Guideline to the agencies designated in the management plan.</p>	<p>3) Irrigation 3 months</p> <p>4) Institution 3 months</p> <p>Equipment</p> <p>1) Office equipment L.S.</p> <p>2) Others L.S.</p> <p>Budget</p> <p>Some part of expenditures of local activities related to the Project.</p>	<p>1) Office L.S.</p> <p>2) Others L.S.</p> <p>Budget</p> <p>1) Salaries and necessary expenses for counterparts</p> <p>2) Some portion of the budget for publication of the Guideline</p> <p>3) Necessary expenditures in operation of the system</p>	<p>Preconditions</p> <p>It is clearly confirmed the needs of preparation of the TMH Guideline is recognized in local government agencies.</p>
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Attachment 1

PDM of the Programme D3
(Information and Database Improvement) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well facilitation of necessary Information and Database System (I&D) related to irrigation development and management.	By 20XX, the I&D system built up by this programme is utilized at any stages for 80 % of irrigation schemes newly planned by IS and districts since 2002.	Progress Reports for new irrigation scheme from 2002 to 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Databases related to irrigation development and management are completed and started for its services.	In 20XX, the databases are in condition for open use to personnel of IS and others.	Report on-the-spot inspection for operational condition of the databases (An on-the-spot inspection shall be taken)	Good circumstance for utilization of the databases and its management system is maintained. When revised the system and database itself, the former ones should be replaced smoothly.
Outputs 1. Databases related to irrigation development and management are constructed. 2. Operation manual for the databases are prepared. 3. Up-dating system for the databases is structured.	 The constructed databases are confirmed its workability and demonstrated for commonly use. By 20XX, the operation manual for the databases is completed for its preparation. In the year of passing 3 years after inaugurating of the databases, the up-dating system will be confirmed its function by means of confirming the fact of databases updating.	 Report of Briefing Session on utilization of the databases (Several briefing Session for IS held) Operational Manual Report on-the-spot investigation for updating of databases.	 Districts and concerned agencies have technical capability and financial resource to manage and operate the constructed databases and its system properly.
Activities 1-Identify necessary kind and modality of database to be required for the purpose of irrigation development and management. 1-2 Prepare all required kinds of databases so as to utilize either GIS technology.	Inputs Donor Preparation Team 1) Database 6 months 2) Computer system 6 months 3) Data processor 6 months 4) GIS specialist 6 months Computer operator (as required)	GOT Personnel 1) Counterparts in each subject Equipment 1) Office L.S. 2) Others L.S.	 All necessary arrangement for installation of databases will be fulfilled on schedule by concerned section in MAFS.

Attachment 1

<p>2-1 Identify types of computer system by which constructed databases are accessed.</p> <p>2-2 Prepare operation manual for the databases so as to be operational for the identified computer systems.</p> <p>3-1 Investigate possible resources to be mobilized for database up-dating under the present institutional conditions.</p> <p>3-2 Make a cycle plan for updating databases by utilizing possible resources in MAFS.</p>	<p>Subject specialist for the subject of database (as required)</p> <p>Equipment</p> <p>1) Computer system L.S. 2) Office equipment L.S. 3) Others L.S.</p> <p>Budget</p> <p>Some part of expenditures of local activities related to the Project.</p>	<p>Preconditions</p> <p>It is clearly confirmed the needs of preparation of the databases and its operation system is recognized in MAFS and local government agencies concerning to irrigation development.</p> <p>MAFS can provide necessary resources for operation of database updating, otherwise, strengthen organization of IS so that IS can deal with the updating tasks.</p>
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Attachment 1

PDM of the Programme D4

(Irrigation Development Contractors and Consultants' Listing) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: June 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of good performance of contractors	a) By 20XX, number of certified contractor for the work of irrigation development increases at 50 % compared to 2002. b)Complain for the contractors' performance is decreased. Clients satisfy contractors' performance in more than 80 % of implemented irrigation schemes.	List of contractors for the tender of the works in irrigation development Reply of clients of implemented irrigation schemes to the question of contractors' performance.	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Contractors and consultants' inventory for the contract works of irrigation development is completed. Up-dating system for the contractors and consultants' inventory is established.	a) By 20XX, the contractors who have proper capacity for the contract of irrigation development works can be identified with their outlines. b) After completion of the contractors' inventory, the up-dating system will be confirmed its function by means of confirming the fact of the inventory updating annually.	Completed contractors' inventory Updated contractors' inventory	The contractors' inventory will be handled in suitable manner. Inventoried contractor will display their proper skill in the works of irrigation development.
Outputs 1. Outlines of contractors having proper capability above required level are collected. 2. Collected data for the contractors are arranged in specified format of inventory. 3. Up-dating plan for the contractors' inventory is made. 4. The up-dating plan for the contractors' inventory is systematized.	More than 90 % of contractors registered are covered in the investigation of screening. The up-dating system plan is certified by the organizations concerned.	Result of contractor investigation carried out under this programme, and list of registered contractors Comments to the document circular attached the up-dating system plan for the contractors inventory.	Association of contractors or other reliable organization is capable for managing the contractors inventory, otherwise the association will be strengthened so as to take charge of.

Attachment 1

Activities	Inputs		
1-1 Prepare a guideline of contractors' capability for applying irrigation development works.	Donor	GOT	All necessary arrangement for the stationing of the up-dating system will be fulfilled on schedule by any reliable parties concerned.
1-2 Investigate present situation of registered contractors through questionnaire survey.	Study Team 1) Leader 3 months 2) Construction 3 months 3) Irrigation 3 months 4) Legislation 3 months 5) Investigators 3 months	Personnel 1) Counterparts in each subject	
1-3 Screen contractors by the guideline.	Equipment 1) Vehicles L.S. 2) Office equipment L.S. 3) Others L.S.	Equipment 1) Office L.S. 2) Others L.S.	Preconditions
2-1 Decide an inventory format.			An association of the contractors exists and functioning substantially.
2-2 Arrange data of contractors into the specified format.			
3-1 Plan up-dating cycle of the contractors inventory.	Budget Some part of expenditures of local activities related to the Project.	Budget 1) Salaries and necessary expenses for counterparts 2) Allowances and expenses of trainees concerning experts' training 3) Some portion of the budget for establishment of up-dating system	It is clearly confirmed the needs of contractors inventory for open contract, by governmental personnel and private sectoral people.
3-2 Investigate required resources for operating the up-dating cycle.	Some portion of the budget for establishment of up-dating system		
3-3 Adjust the up-dating cycle plan to be realistic.			
4-1 Conduct a planning study for the establishment of contractors training system in line with decided framework.			
4-2 Facilitate up-dating system in line with the plan.			

Attachment 1

PDM of the Programme D5
(LGAs' Data Organization) under NIMP - Tentative

Project Name: National Irrigation Master Plan _____ Duration: 2003 - 2017 (15 years) _____

Project Area: Tanzania _____ Target Agency: MAFS _____ Date: August 2002 _____

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p>Super Goal <i>To stimulate and facilitate agricultural sector growth, and to reduce rural poverty</i></p>			
<p>Overall Goal To attain the objectives of NIMP by means of skillful performance of LGAs in organizing necessary data and information related to irrigation development and management</p>	<p>By 20XX, all LGAs hold their own information and data on existing irrigation schemes and planned schemes in the forms specified by the data organization system.</p> <p>And LGAs update those data periodically.</p>	<p>Filed information and data in the districts</p>	<p>Other related programmes of NIMP are animatedly implemented as scheduled.</p>
<p>Project Purpose</p> <p>LGAs' data (related to irrigation development) organization system are established or improved.</p> <p>LGAs are enabled to organize necessary information and data related to irrigation development using the system.</p>	<p>In 20XX, all LGAs apply the "LGAs' Data Organization System", and there are assigned staff who deal with data organization in their offices.</p>	<p>Report on-the-spot inspection to the districts offices (An on-the-spot inspection shall be taken)</p>	<p>Good circumstance for utilization of the information & data and its management system is maintained.</p> <p>When revised the system by IS, the former ones should be replaced smoothly.</p>
<p>Outputs</p> <p>1. Method and modality of data organization for LGAs offices are framed..</p> <p>2. Preparation and Establishment manual for the LGAs' data organization system are prepared.</p> <p>3. The data organization system is set up in the districts office in line with the manual.</p> <p>4. Established data organizational system in the districts start its operation.</p>	<p>Applicability of the proposed method and modality is ensured.</p> <p>By 20XX, the manual for the system is completed for its preparation.</p> <p>The data organization system establishment is expanded to the districts in accordance with a time schedule which is programmed to complete by 20XX.</p>	<p>Result of sample verifying survey on the proposed method and modality of data organization for LGAs</p> <p>Preparation and Establishment Manual</p> <p>Time schedule of the system expanding to the districts</p>	<p>Districts and concerned agencies have technical capability and financial resource to manage and operate the data organization system properly.</p> <p>ZIOs give districts' offices concerned adequate support and advices.</p>
<p>Activities</p> <p>1-Identify necessary kind and contents of information data to be required for the purpose of irrigation development and management.</p>	<p>Inputs</p> <p>Donor</p> <p>Preparation Team</p> <p>1) Irrigation development 6 months</p> <p>2) Data processing 6 months</p> <p>3) Data management 6 months</p>	<p>GOT</p> <p>Personnel</p> <p>1) Counterparts in each subject</p>	<p>All necessary arrangement for establishment of the data organization system will be fulfilled on schedule by districts.</p>

Attachment 1

<p>1-2 Decide method and modality of data organization for LGAs offices to meet requirement of data organizing.</p> <p>2-1 Identify process and supply to introduce the proposed data organization system in districts</p> <p>2-2 Prepare a manual for preparation and establishment of the data organization system in the districts.</p> <p>3-1 Prepare an implementation plan for establishing the data organization in the districts.</p> <p>3-2 Implement establishment of the data organization in districts in accordance with the implementation plan.</p> <p>4-1 Lead districts' office concerned to operate the established data organization system properly.</p>	<p>4) LGA organization 3 months</p> <p>Computer operator (as required)</p> <p>Subject specialist for the subject of data required (as required)</p> <p>Equipment</p> <p>1) Computer system L.S.</p> <p>2) Office equipment L.S.</p> <p>3) Others L.S.</p> <p>Budget</p> <p>Some part of expenditures of local activities related to the Project.</p>	<p>Preconditions</p> <p>It is clearly confirmed the needs of preparation of the LGAs' data organization system is recognized in MAFS and local government agencies concerning to irrigation development.</p> <p>Other related programmes proposed in NIMP which enhance LGAs' capability and strength the linkage between LGAs and IS, are implemented keeping pace with.</p>
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Attachment 1

PDM of the Programme D6
(LGAs Networking System Establishment) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: August 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP by means of well facilitation of network system in the office concerning to irrigation development under the districts.	In 20XX, response of the irrigation offices of districts is improved. Number of official communication of districts concerning to irrigation development through the network is more than 3 time of the same in 2002.	Record of network performance in 2002 and 20XX	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose Irrigation offices of districts are enabled to access intra-network of IS and ZIOs individually and at any time, so as to communicate any matters of irrigation development.	By 20XX, more than 80 % of all irrigation offices of districts are able to access IS's intra-network system individually at their office.	Report on-the-spot inspection for accessibility of internet to the irrigation offices of districts.	Good circumstance for utilization of internet and its management system is maintained in the districts. Sound moral of Irrigation offices' staff in utilization of the internet are kept.
Outputs 1. Information facilities so as to access to internet is installed in the irrigation offices of districts. 2. Staff of the irrigation offices of districts can operate the installed system to access to internet. 3. The network system linked to internet installed in the irrigation offices of districts utilize effectively for the purpose of irrigation development.	By 20XX, installation of necessary information equipment in order to link to internet is completed for all irrigation offices of districts.	Report on-the-spot investigation for the irrigation offices of districts.	Staff concerning IS can operate intra-networks individually, otherwise, training and short course for learning are provided properly.
Activities 1-1 Procure necessary equipment to irrigation offices of districts in order to access to internet. 2-1 Train staff of irrigation offices of districts so as to utilize internet in his duties for	Inputs Donor Network specialist (as required) Equipment	GOT Budget 1) Some portion of the budget for installation of lines for networking	All necessary arrangement for installation within the programme will be fulfilled on schedule by concerned section in districts.

Attachment 1

<p>irrigation development.</p> <p>3-1 Make a rule for utilization of the network for official use only.</p>	<p>1) Computer system L.S. 2) Equipment for networking L.S. 3) Others L.S.</p> <p>Budget Some part of expenditures of local activities related to the programme.</p>	<p>2) Some portion of the budget for installation of necessary equipment 3) Necessary expenditures in operation of the system.</p>	<p>Preconditions</p> <p>Local Government and/or districts can provide necessary resources for the execution of this programme</p>
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Attachment 1

PDM of the Programme D7

(Existing Scheme Monitoring System Development) under NIMP - Tentative

Project Name: National Irrigation Master Plan Duration: 2003 - 2017 (15 years)

Project Area: Tanzania Target Agency: MAFS Date: July 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Super Goal To stimulate and facilitate agricultural sector growth, and to reduce rural poverty			
Overall Goal To attain the objectives of NIMP through proper monitoring of existing schemes.	a) XX existing irrigation scheme (more than 80 % of all) are monitored properly. b) Technical solution will be given to the problems in the monitored schemes. The fact giving solution is recorded.	Output of the Monitoring system	Other related programmes of NIMP are animatedly implemented as scheduled.
Project Purpose An existing irrigation monitoring system is established. <i>The monitoring system starts its operation as required.</i>	a) By 20XX, the Project for establishment of the monitoring system is completed. b) In 20XX, the monitoring system starts its operation.	Annual report of the existing irrigation scheme monitoring system operation	No remarkable obstacles on establishment of the existing irrigation scheme monitoring system exist, or removed it when disrupted.
Outputs 1. Hardware of the monitoring system is stationed. 2. Software of the monitoring system (database of schemes, and necessary information etc.) is prepared. 3. Operation and utilized arrangement is systemized. 4. Up-dating system for the monitoring system is systemized. (linked with the programme D3)	Mechanical function of the hardware is tested for good functioning. Usefulness of the software is tested. By 20XX, the monitoring system starts its operation.	Report of the mechanical function test for the hardware. Report of the test for the software. Record of performance of the monitoring system	Institutional arrangement for the establishment of the existing irrigation scheme monitoring system is successfully given without any delay. All necessary arrangement for the establishment of the monitoring system is taken on schedule.
Activities 1-1 Design computer system of the monitoring system 1-2 Procure computer set (or arrange existing computer) for the monitoring system operation.	Inputs Donor Study Team 1) Monitoring 12 months 2) Computer system 12 months 3) Database 12 months 4) System operator 12 months	GOT Personnel 1) Counterparts in each subject Equipment 1) Office L.S.	Participation and cooperation of beneficiaries in the existing irrigation schemes will be kept.

Attachment 1

<p>2-1 Design database and software for the monitoring system.</p> <p>2-2 Investigate condition of existing irrigation system.</p> <p>2-3 Prepare database and information file for the investigated condition of existing irrigation scheme.</p> <p>3-1 Design management structure for the monitoring system operation.</p> <p>3-2 Arrange institutional set-up for the operation of the monitoring system in IS, ZIOs and designated districts.</p> <p>3-3 Train staff concerned to operation of the monitoring system</p> <p>4-1 Plan re-investigation cycle for the latest condition of the existing irrigation schemes.</p> <p>4-2 Systemize execution of the re-investigation study periodically.</p>	<p>Equipment</p> <p>1) Computer system L.S.</p> <p>2) network hardware L.S.</p> <p>3) Others L.S.</p> <p>Budget</p> <p>Some part of expenditures of local activities related to the Project.</p> <p>Investigation study of present condition of existing irrigation scheme.</p> <p>Budget for installation of computer system and database</p>	<p>2) Furniture and Acces. L.S.</p> <p>3) Tel. and business eq. L.S.</p> <p>Budget</p> <p>1) Salaries and necessary expenses for counterparts</p> <p>2) Allowances and expenses of installation of the monitoring system</p> <p>3) Necessary expenditures in operation of the monitoring system</p>	<p>Preconditions</p> <p>Necessity of proper monitoring for the existing irrigation system is recognized by almost personnel concerned in IS and LGAs.</p>
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