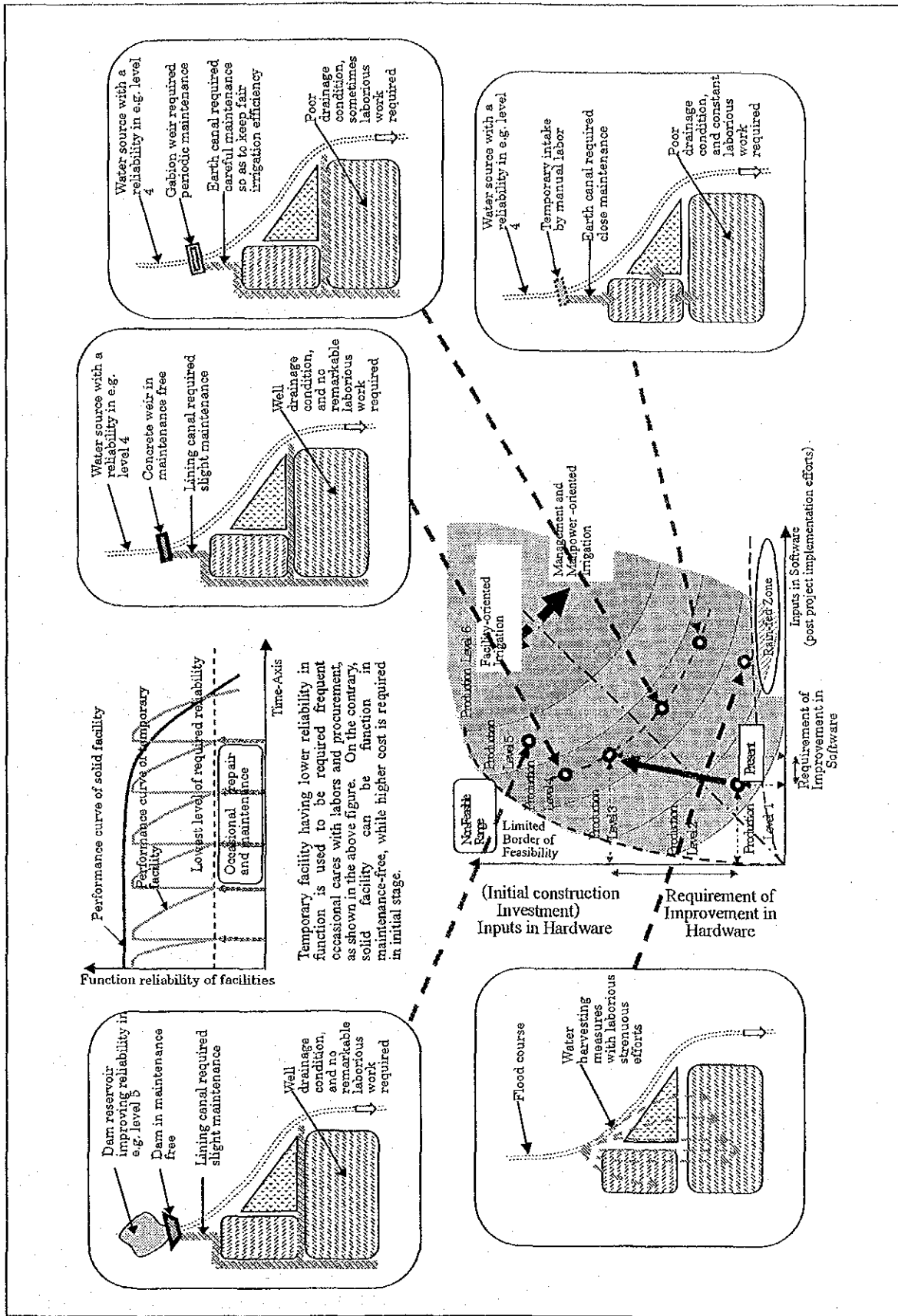


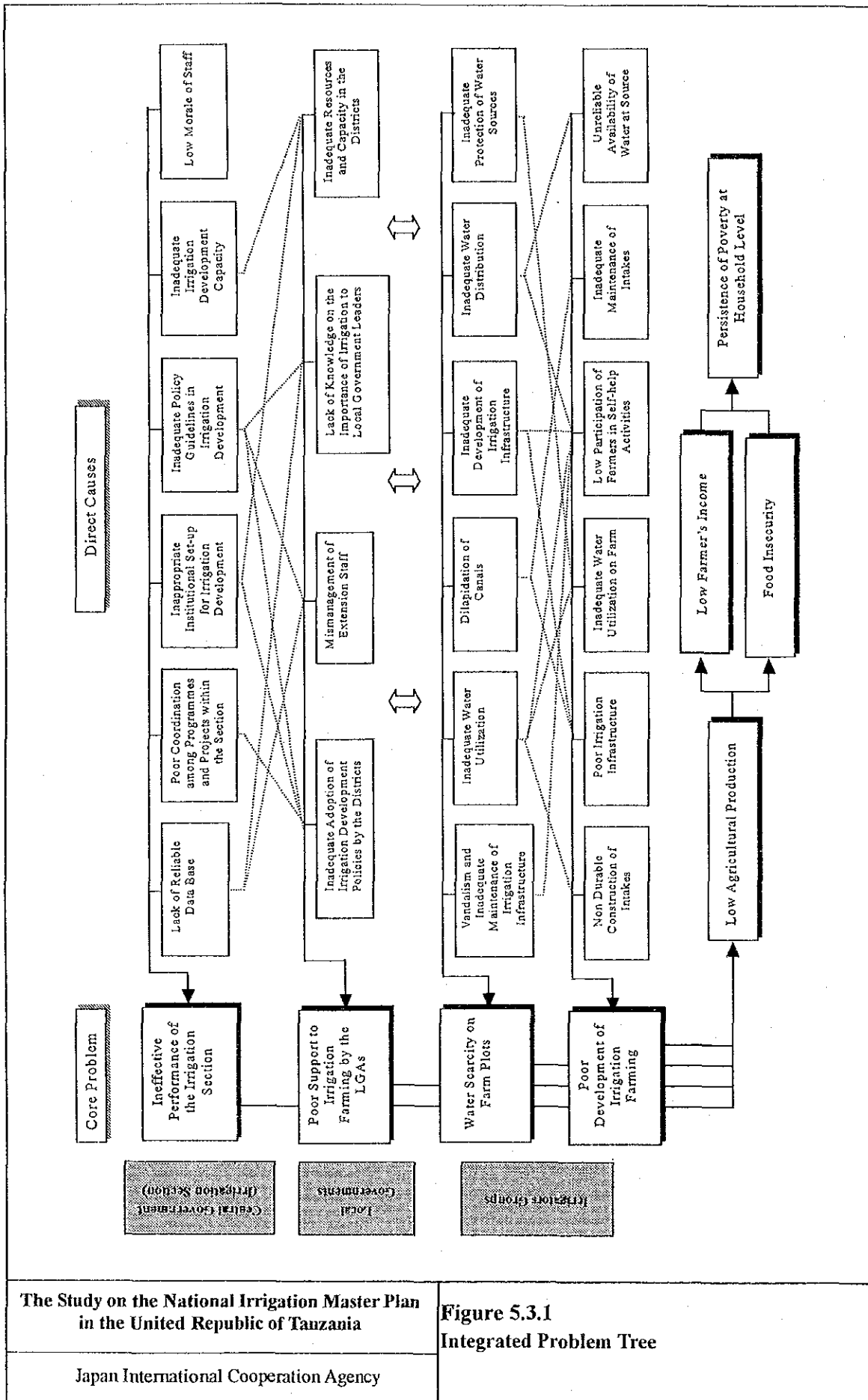
## *Figures*



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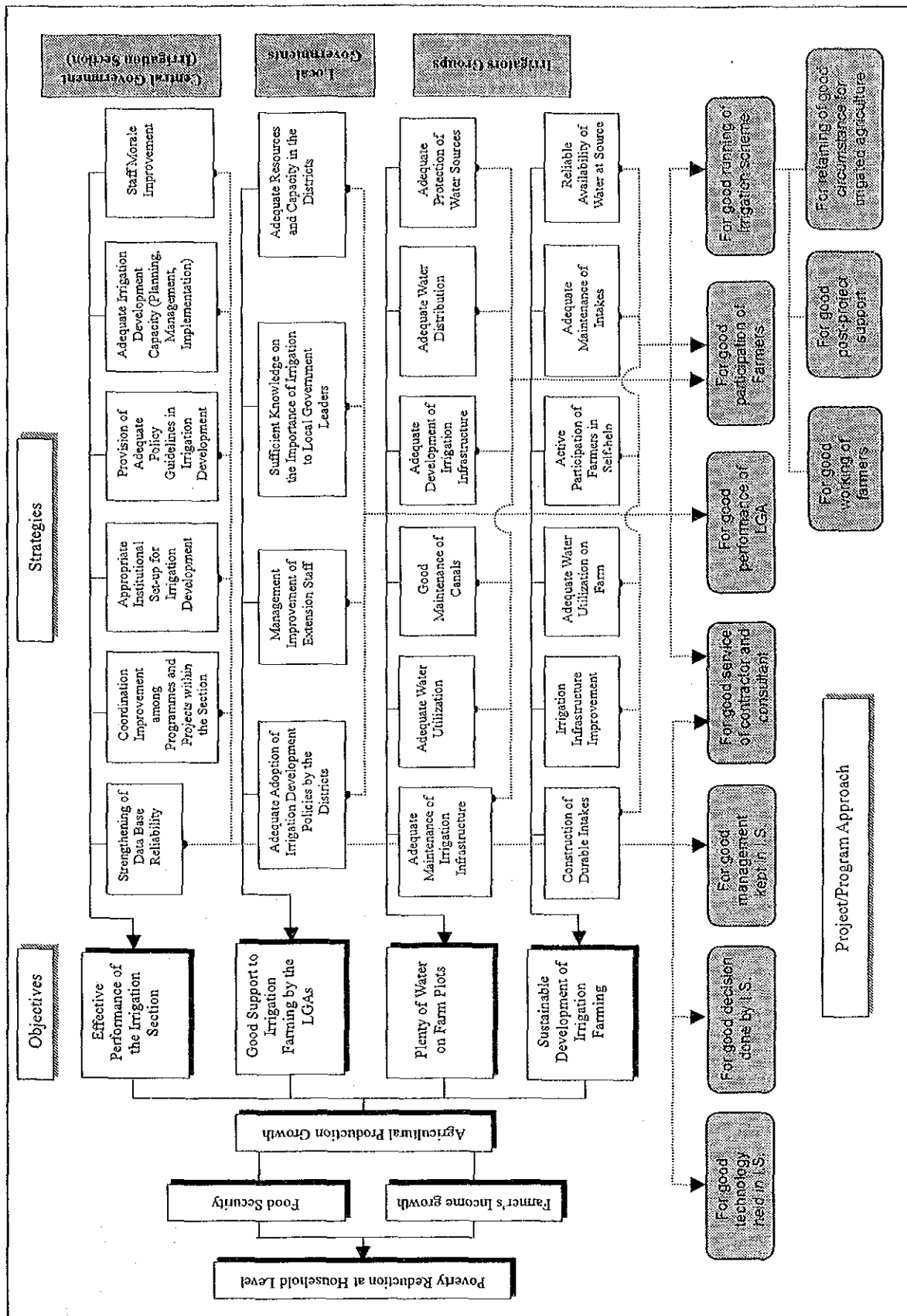
Figure 4.5.1 Variations of Irrigation Development Level by Typical Pattern of Irrigation System



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Figure 5.3.1 Integrated Problem Tree

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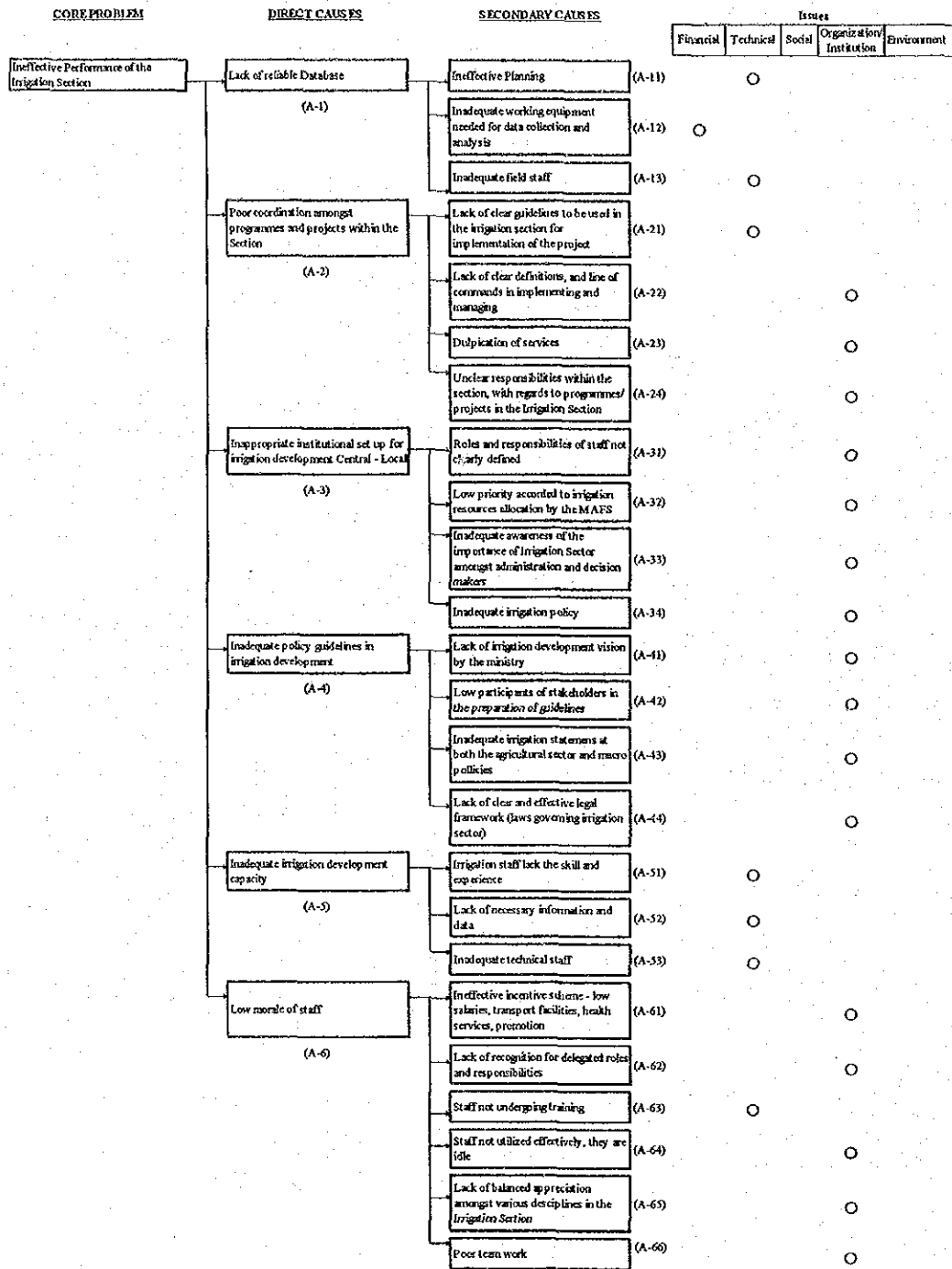


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Figure 5.3.2 Integrated Objective Tree

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**IRRIGATION SECTION (MAFS)**

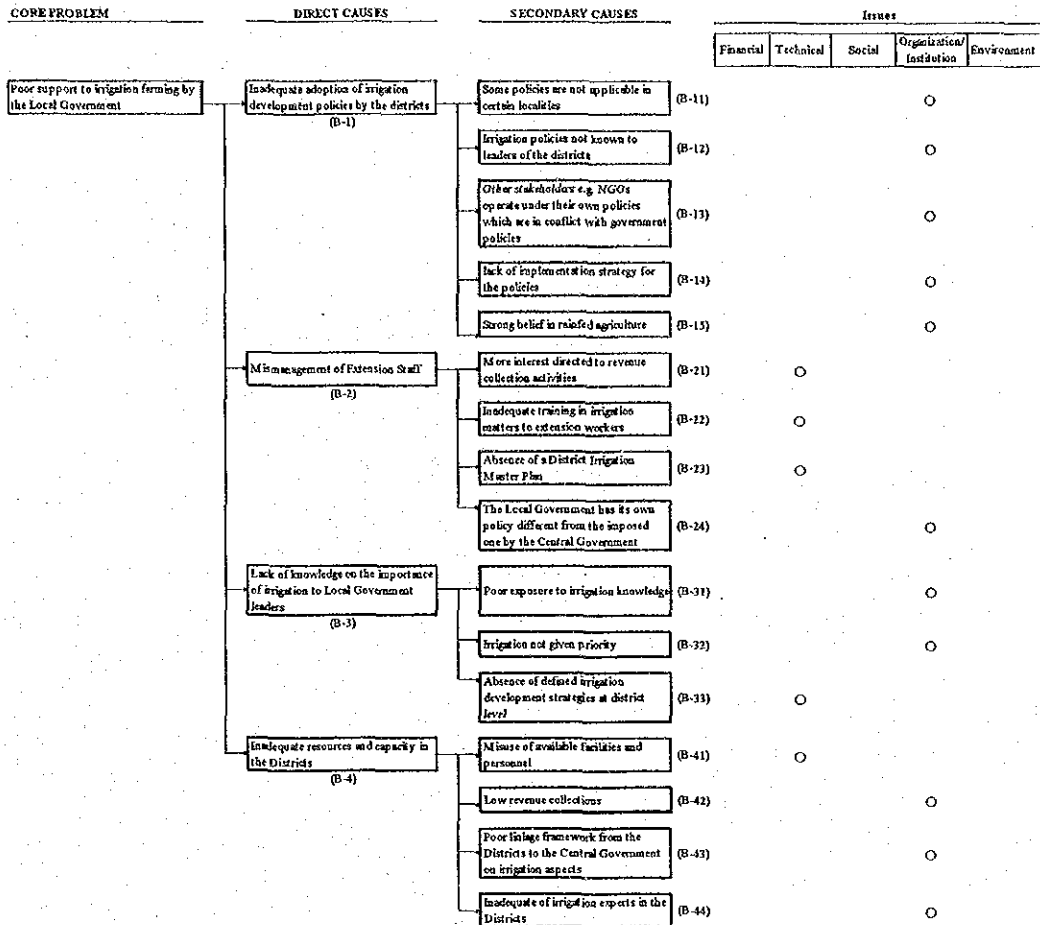


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Figure 5.3.3 Problem Analysis for MAFS

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**LOCAL GOVERNMENT**



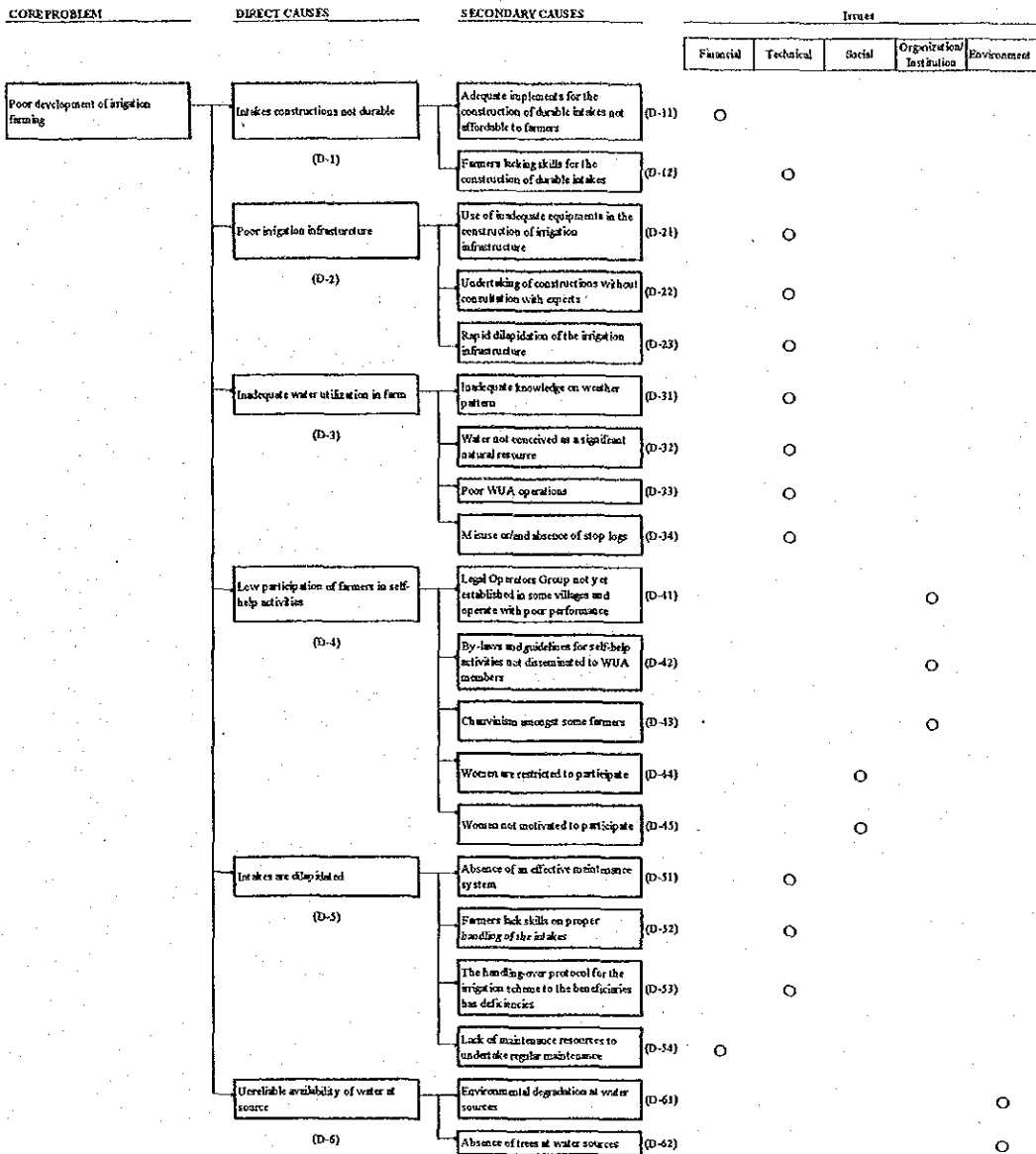
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**Figure 5.3.4**  
Problem Analysis for Local Governments

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**IRRIGATION FARMING**

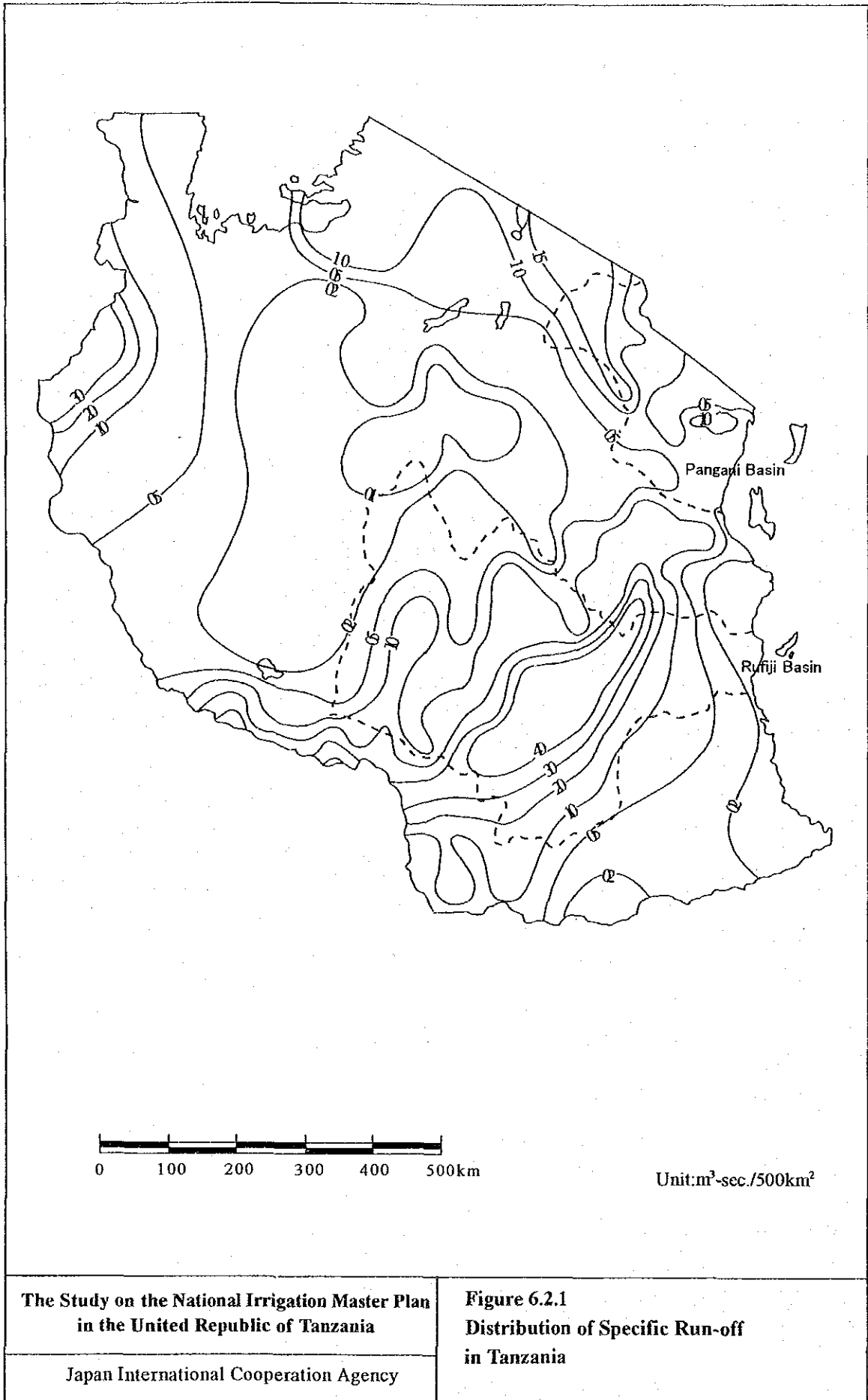


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**Figure 5.3.6**  
Problem Analysis for Farmers

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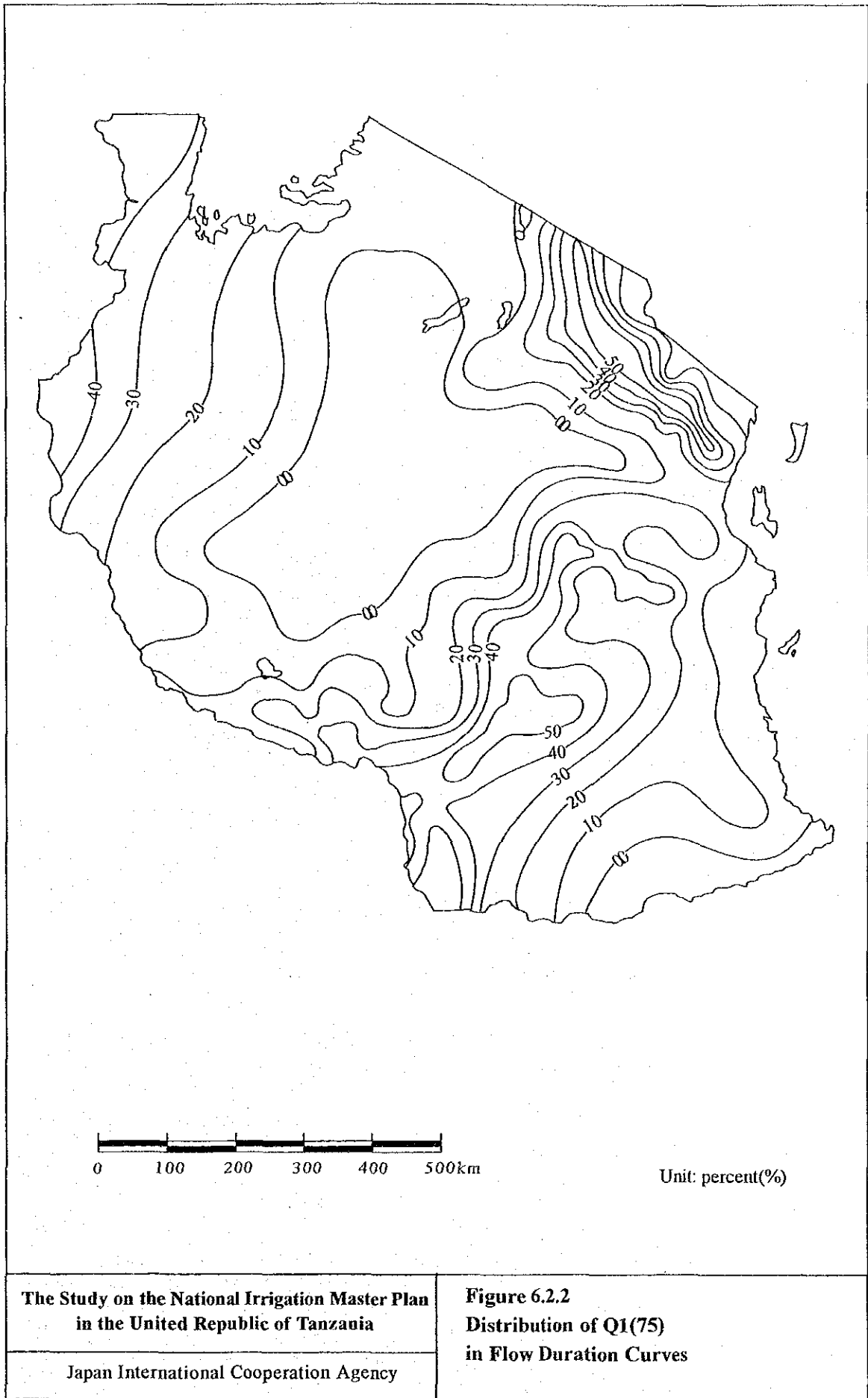


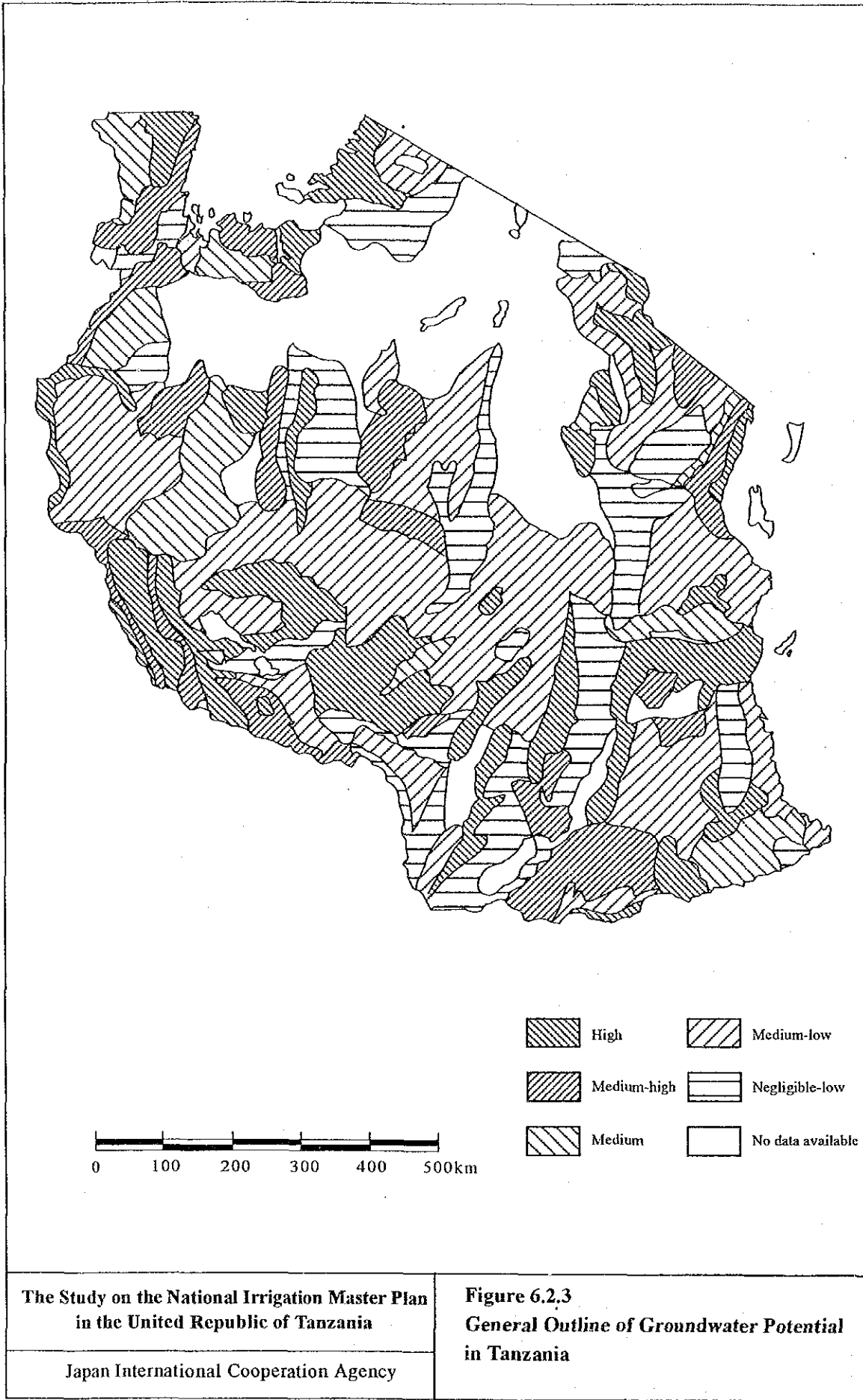
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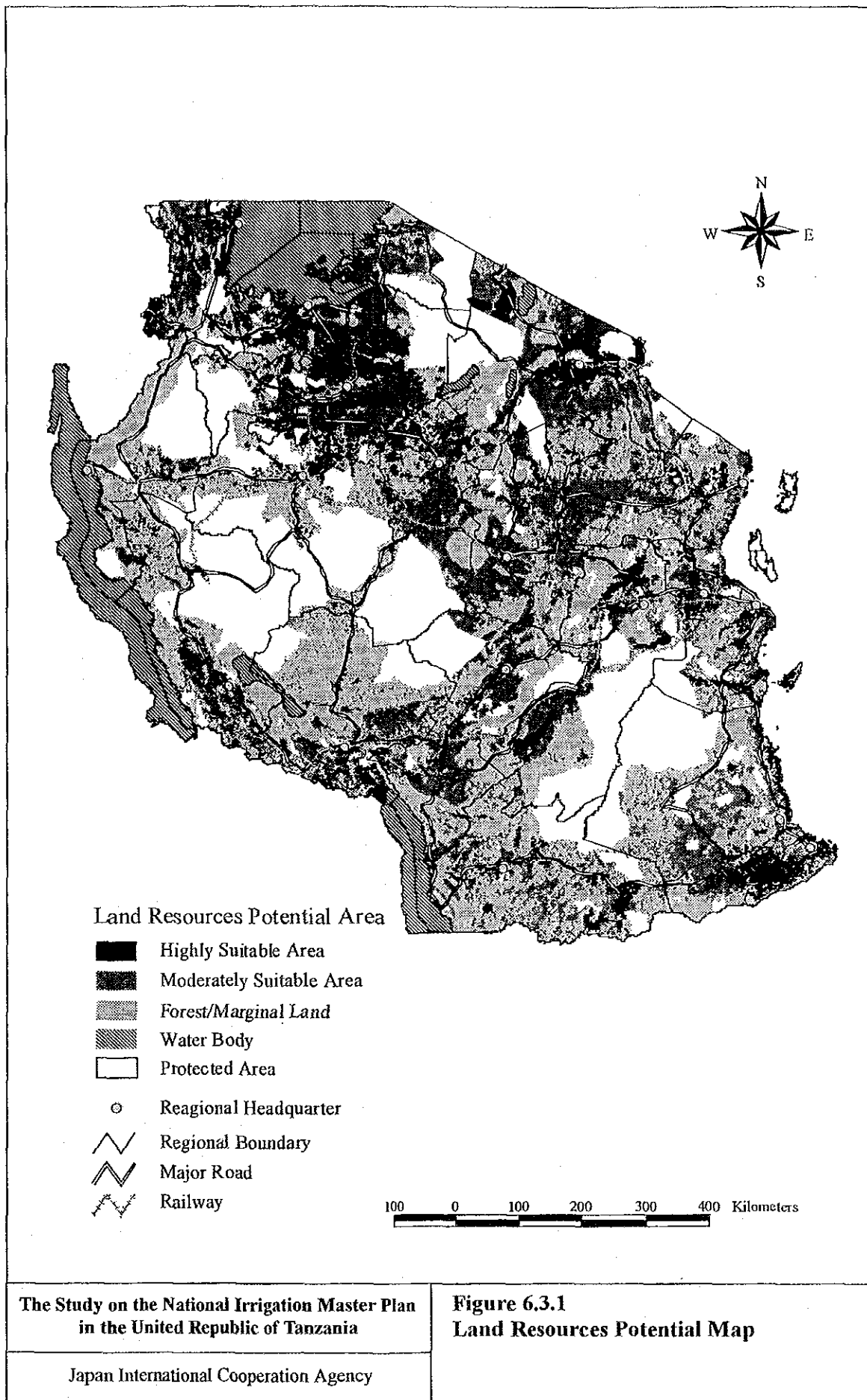
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**Figure 6.2.1  
Distribution of Specific Run-off  
in Tanzania**



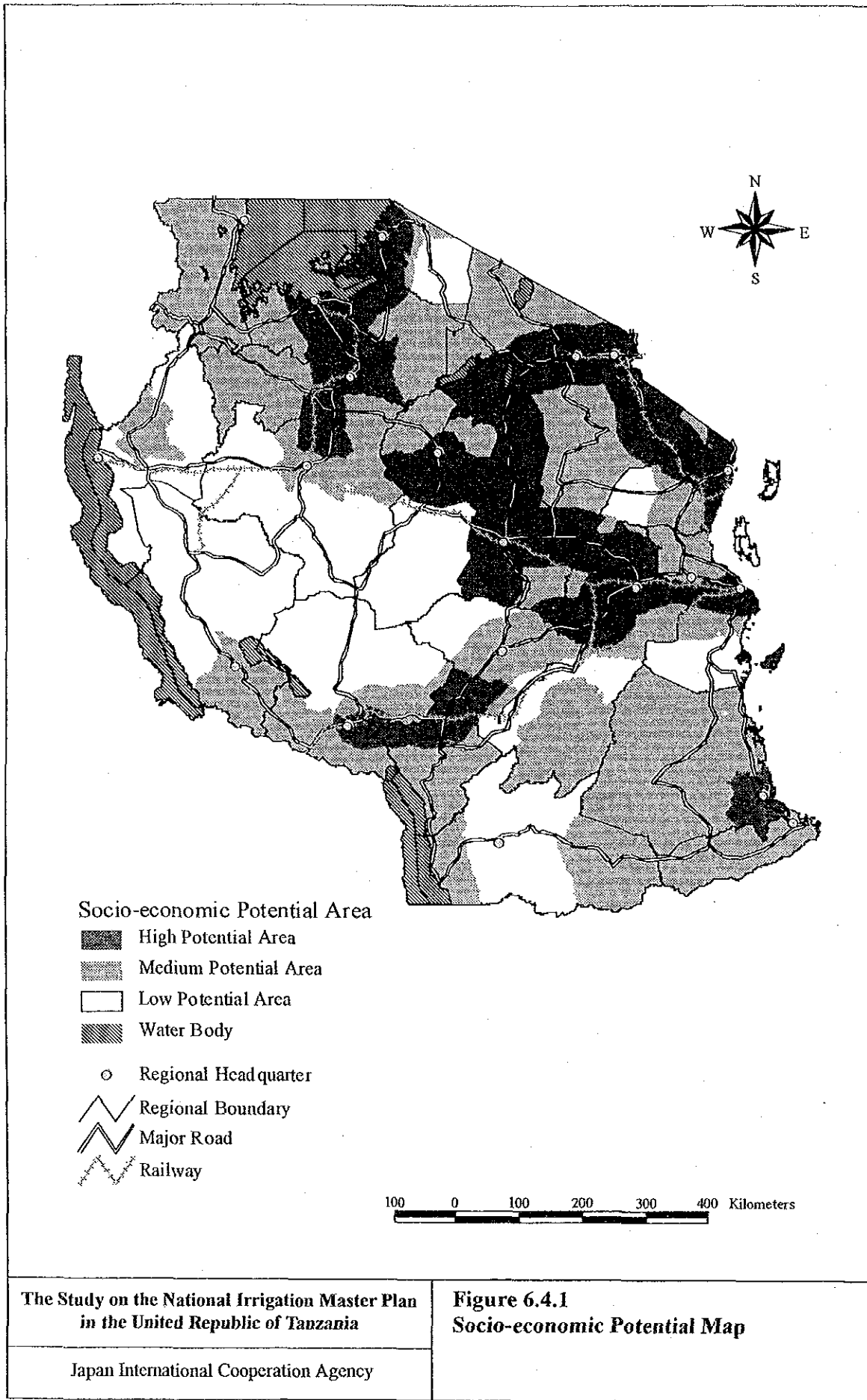




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**Figure 6.3.1**  
**Land Resources Potential Map**

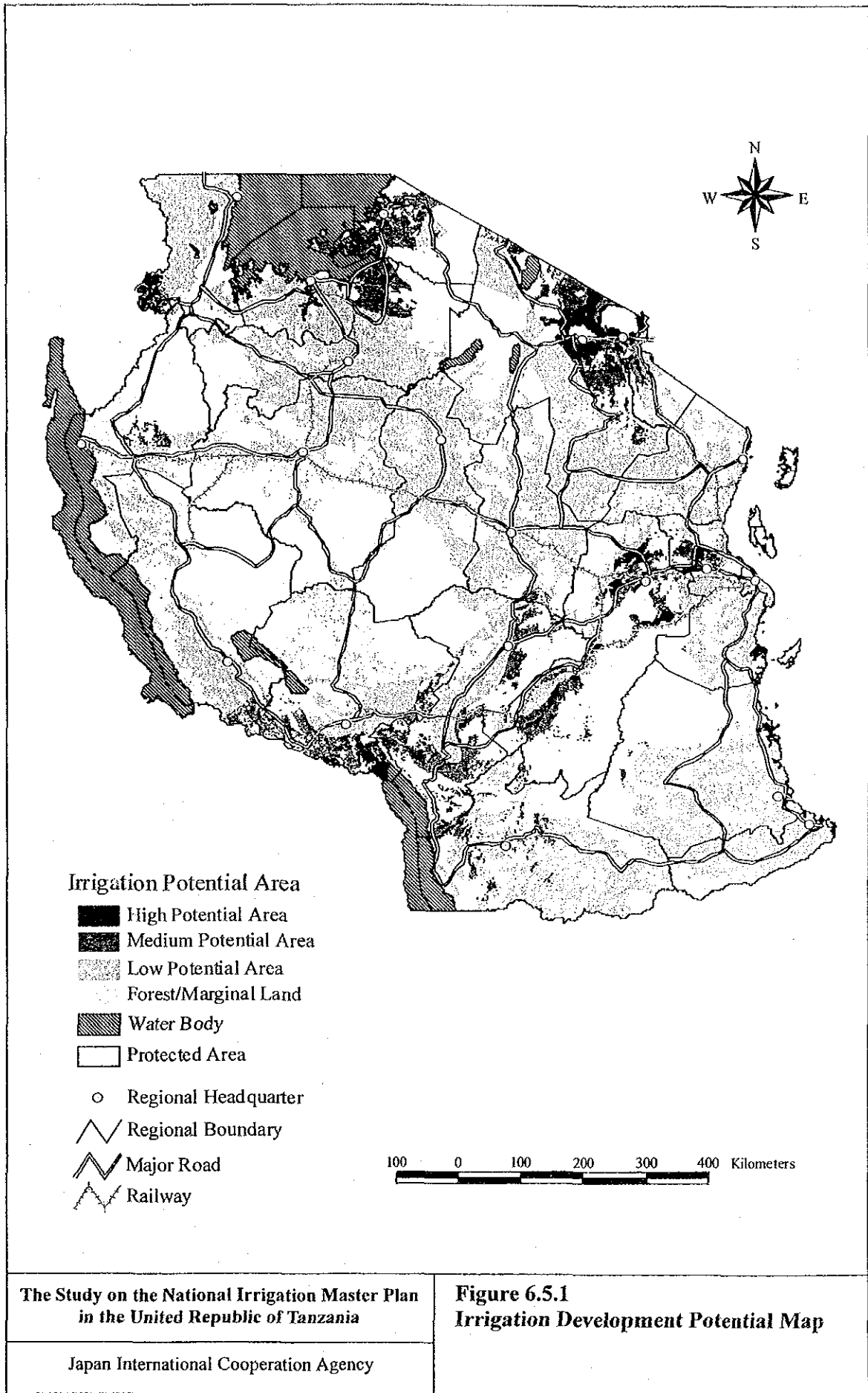
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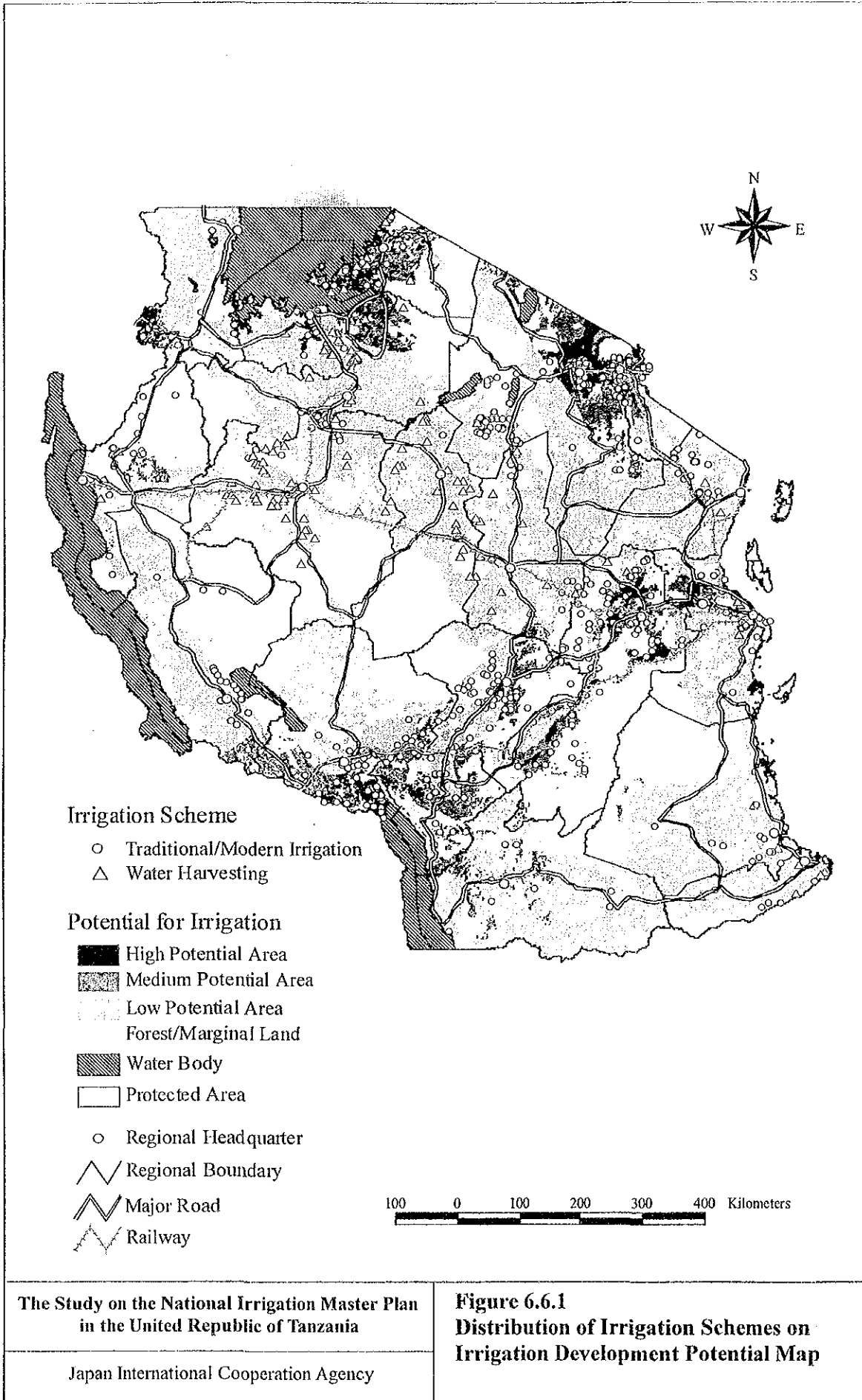


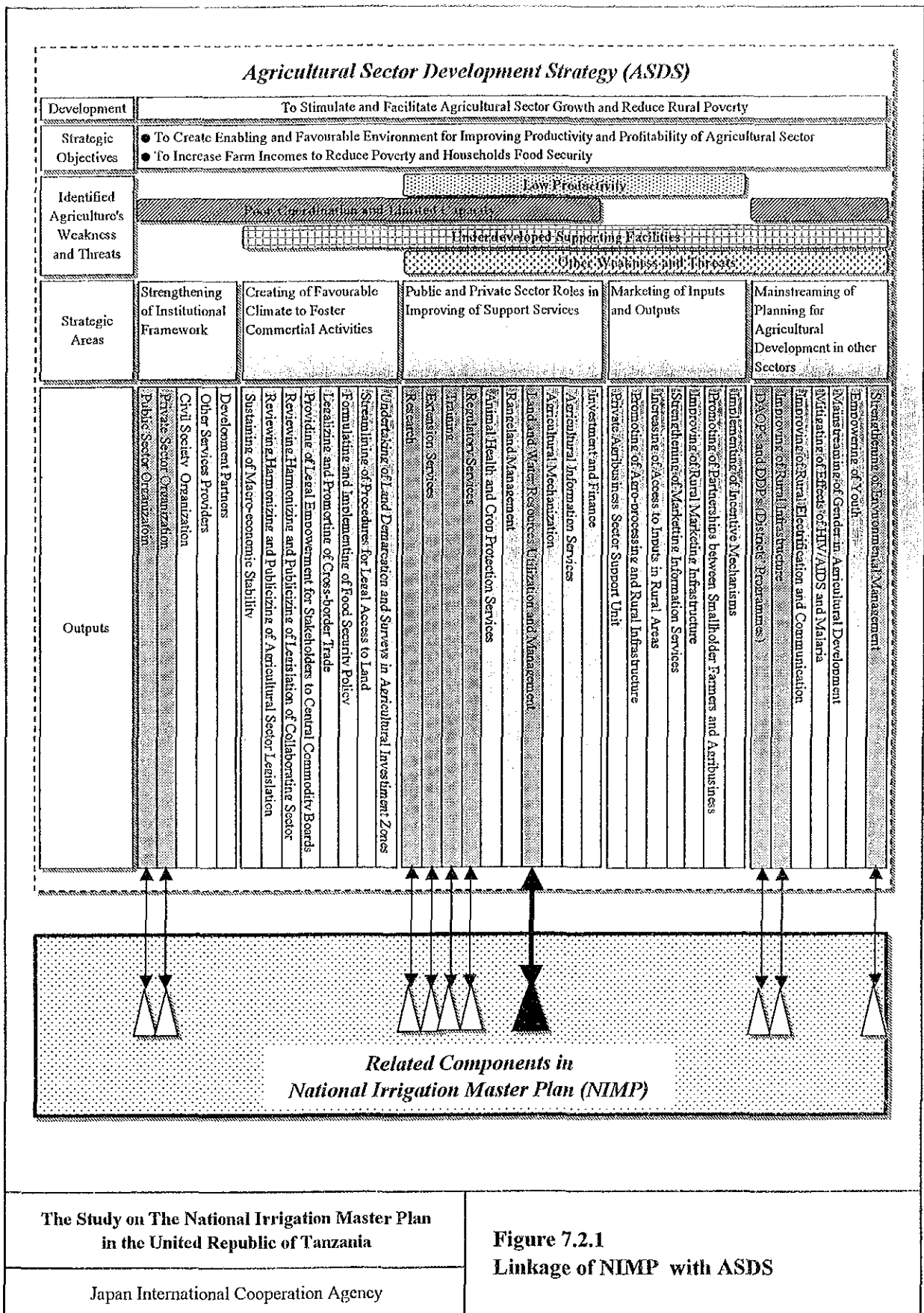
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**Figure 6.4.1**  
**Socio-economic Potential Map**

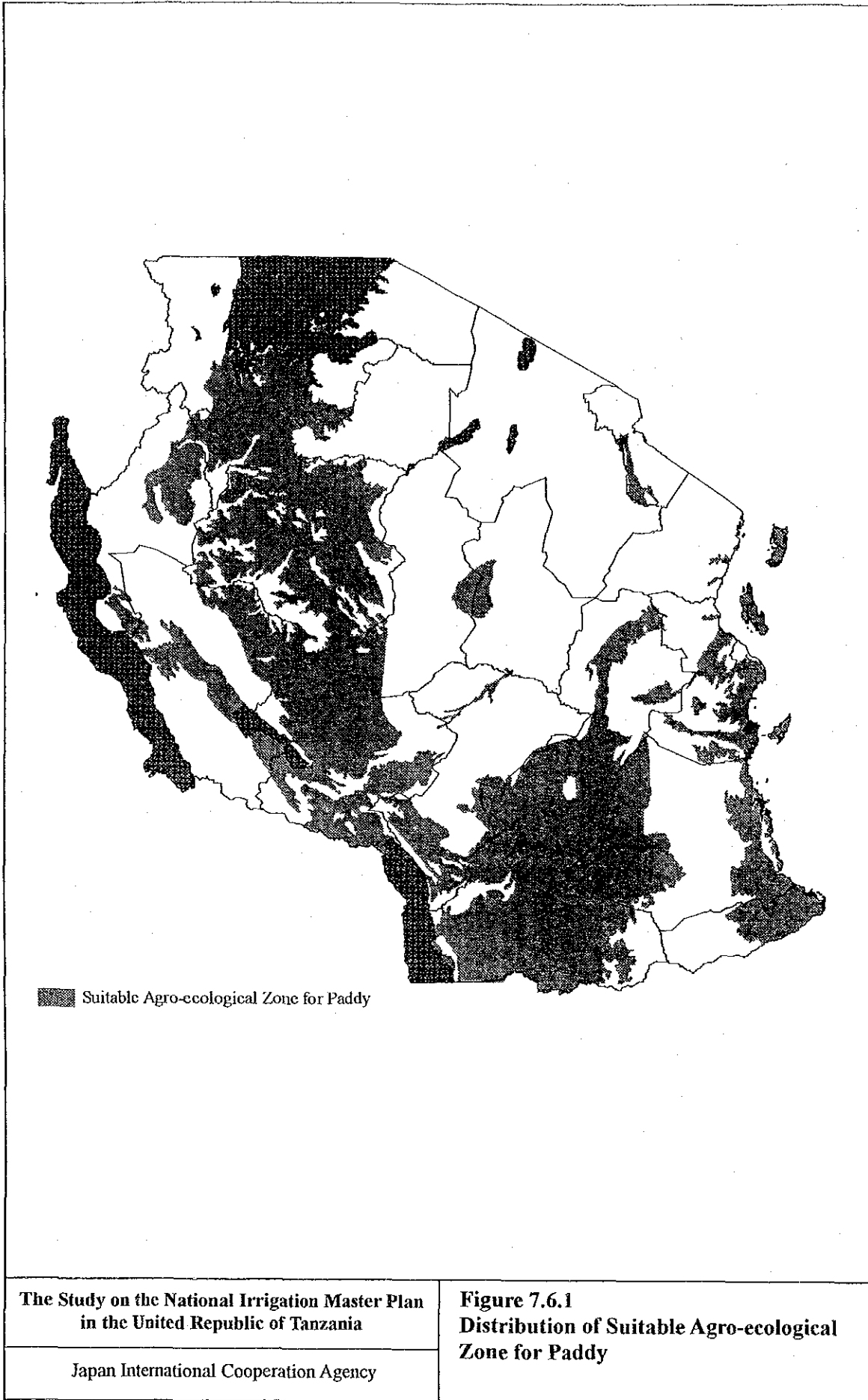
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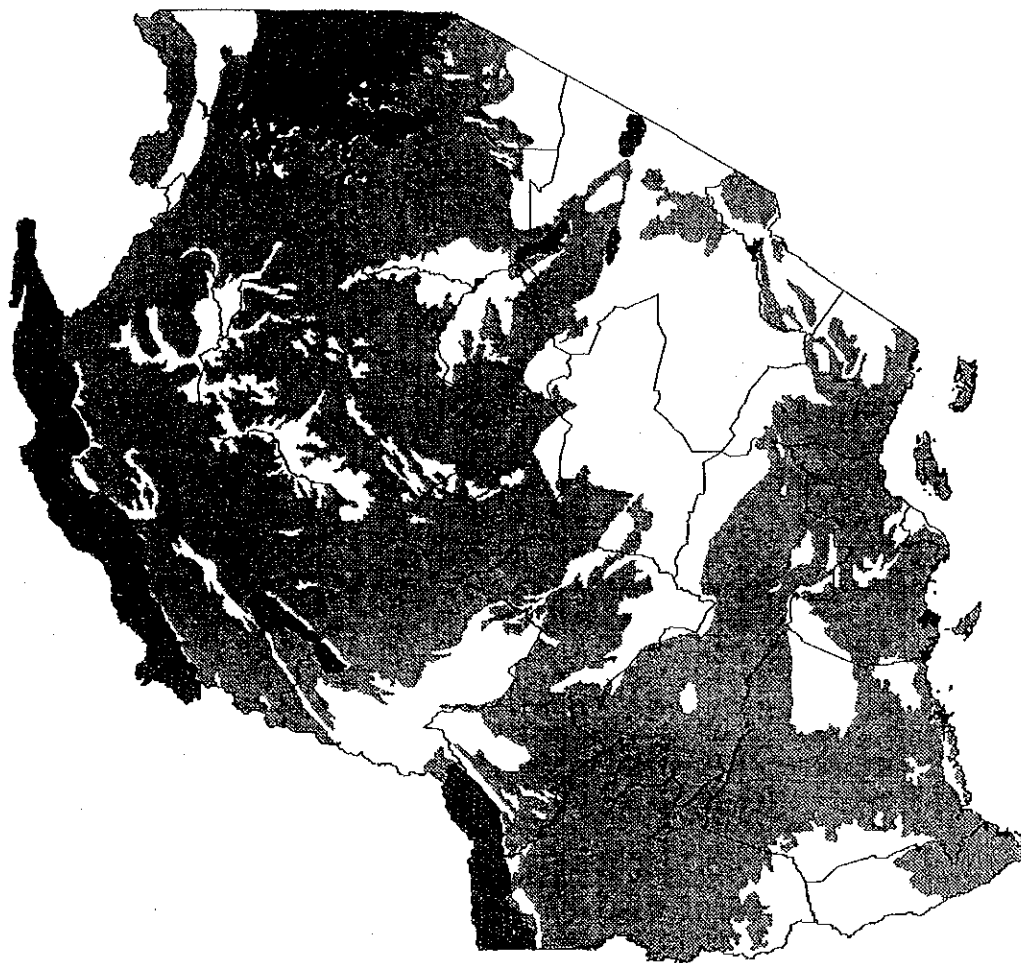




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**Figure 7.6.1  
Distribution of Suitable Agro-ecological  
Zone for Paddy**

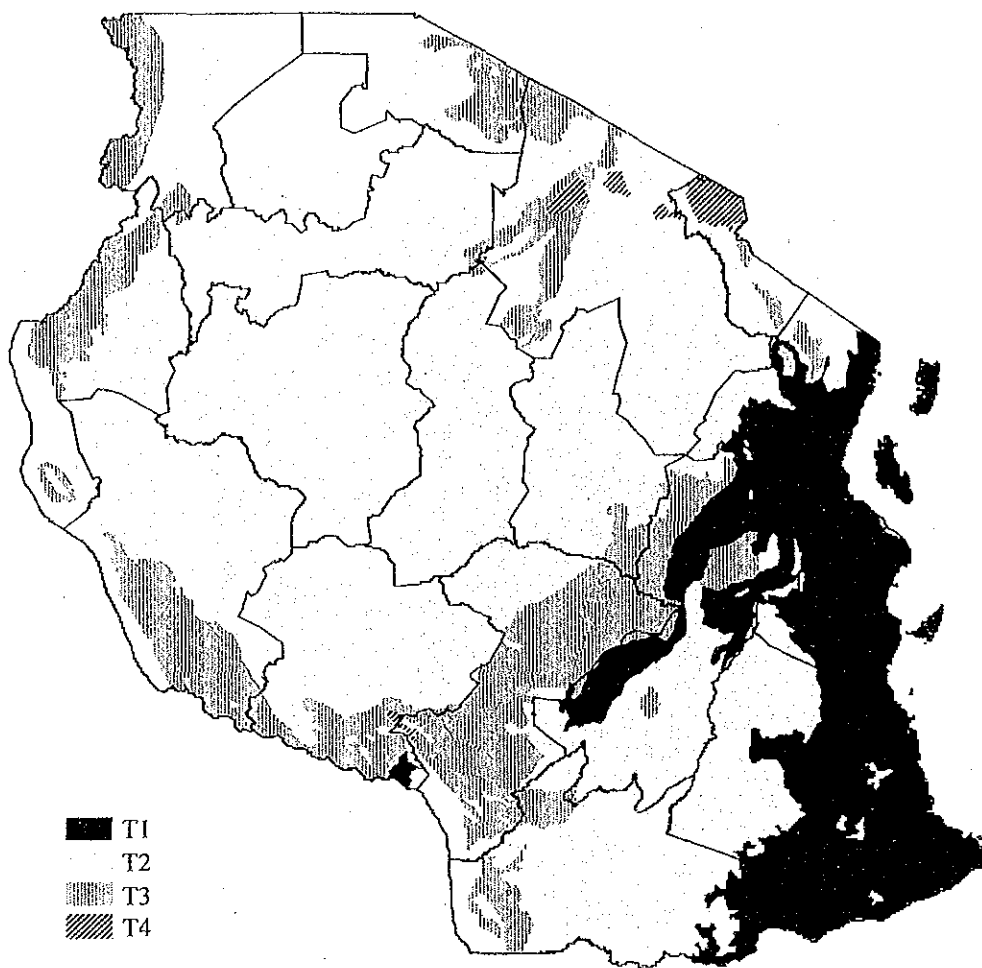


■ Suitable Agro-ecological Zone for Maize

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Figure 7.6.2  
Distribution of Suitable Agro-ecological  
Zone for Maize

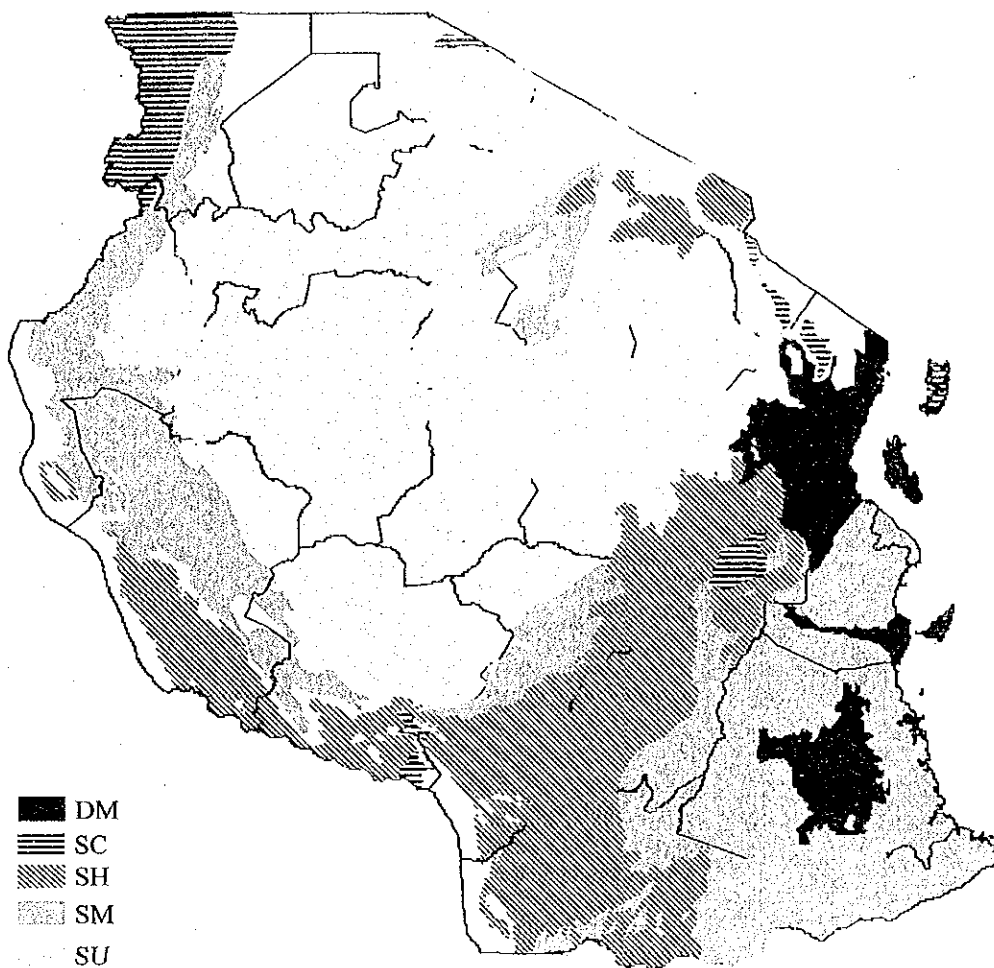


Temperature regime	Altitude range	Temperature range			Major crops
		Mean annual max.	Mean annual min.	Range	
T1	0-750	29-31	19-23	9	cotton, rice, sugarcane, groundnuts, cowpeas, cassava, Bananas, citrus, soya, sisal, maize, sorghum, sweet potatoes, millet
T2	750-1,500	27-30	15-18	12	cotton, rice, sugarcane, sesame, groundnuts, cowpeas, cassava, bananas, pineapple, citrus, soya, sisal, sorghum, beans, coffee, maize, millet, wheat, sweet potatoes
T3	1,500-2,300	22-25	10-15	11	maize, millet, wheat, pyrethrum, apples, peaches, plums, grapes, potatoes, sweet potatoes, beans
T4	2,300-	16-19	5-10	10	apples, plums, peaches, grapes, apricots, potatoes, pyrethum

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**Figure 7.6.3**  
**Distribution of Temperature Regime**

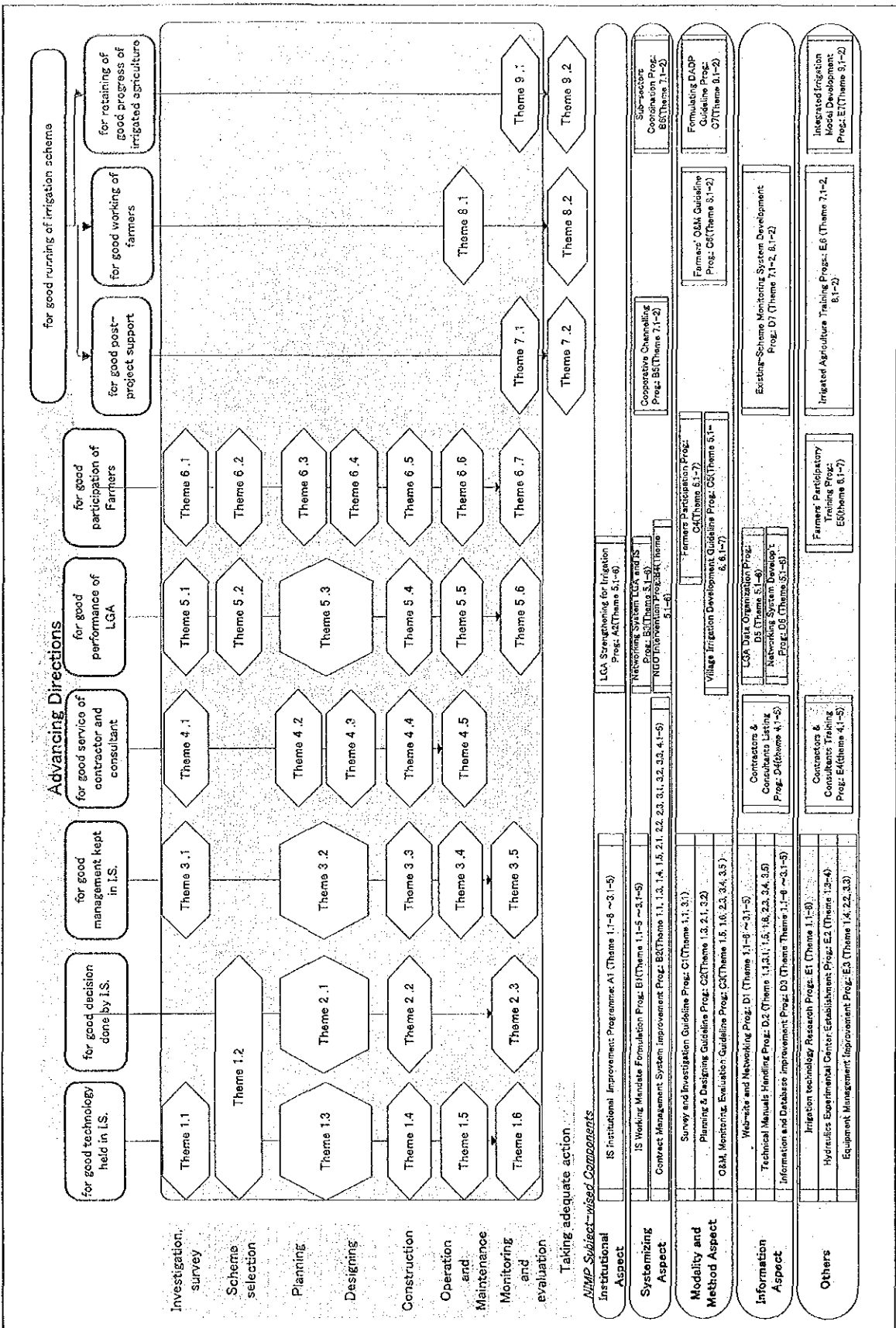


Moisture Zones	Growing period characteristics
DM	Areas with double cropping period
SC	Areas with single, often continuous growing period
SH	Areas with single growing period, highly responsive to moisture storage capacity
SM	Areas with single growing period, moderately responsive to moisture storage capacity
SU	Areas with single growing period, unresponsive to moisture storage capacity

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**Figure 7.6.4**  
**Distribution of Moisture Zones**



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**Figure 8.3.1**  
**Procedures of Formulation of Subject-wise Improvement Programme**

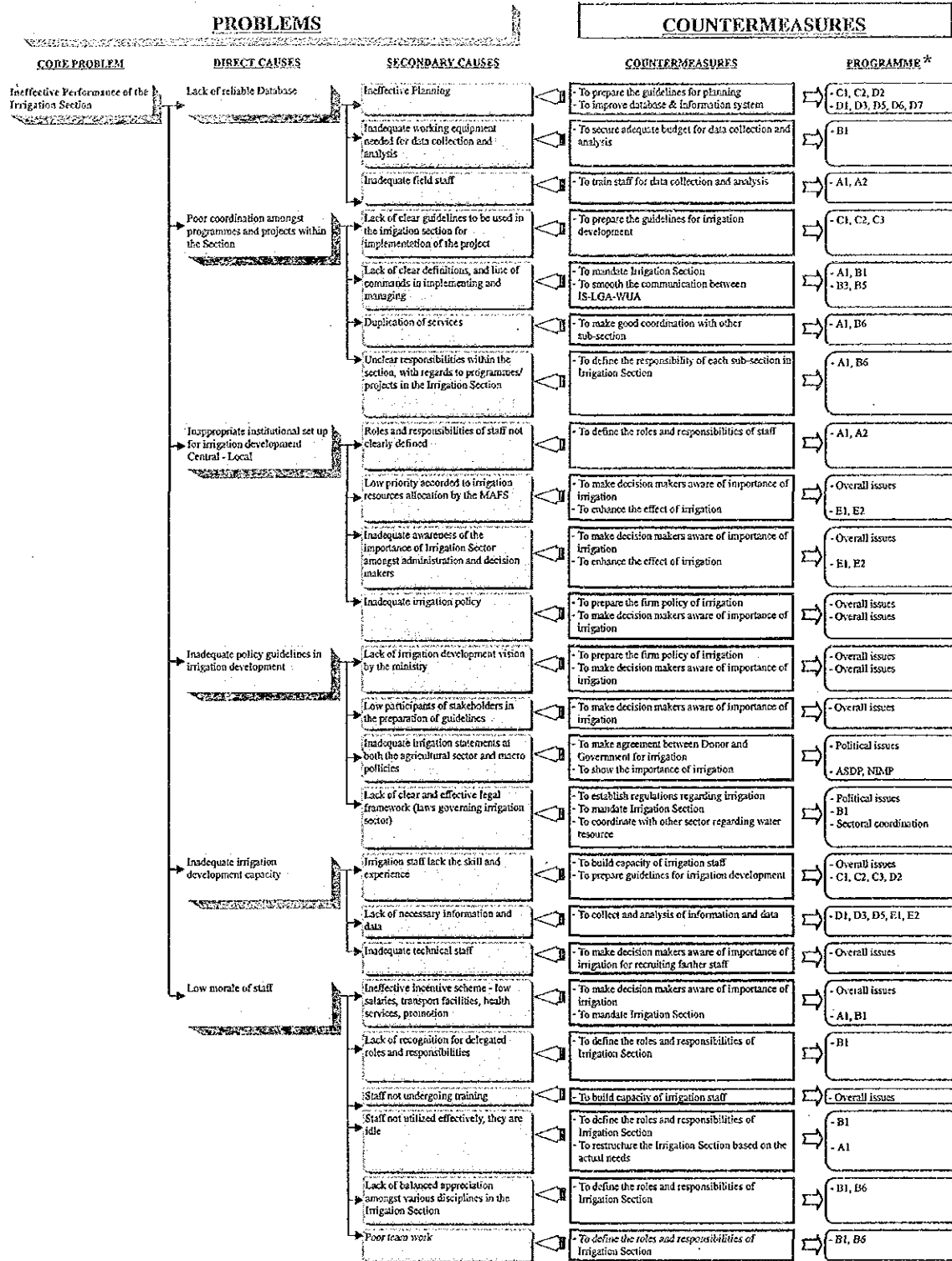
Subject-wise Programmes:				
Categories of Subject-wised Components				
Institutional Aspects (A)	Systemizing Aspects (B)	Modarity and Method Aspects (C)	Information Aspects (D)	Others (E)
IS Institutional Improvement :A1	IS Working Mandate Formulation :B1	Survey and Investigation Guideline :C1	Web-site and Networking :D1	Irrigation Technology Research :E1 Irrigation Technology Center Establishment: E1.1 Perennial Irrigation Development: E1.2 Flood Irrigation Development: E1.3 Small Dam Development: E1.4 Environmental Assesment: Study for Irrigation E1.5 River-basin approach in Irrigation E1.6 KIPARWIN Hydraulics Experimental Center Establishment :E2
LGA Strengthening for Irrigation :A2	RBM, ASPS Contract Managmt System Improvt :B2	Planning & Designing Guideline :C2 RBM, ASPS, PIDP Planning Guideline :C2.1 RBM, ASPS, PIDP Designing Outline :C2.2	Technical Manuals Handling Guideline :D2	
	Networking System LGA and IS :B3	O&M Monitor, Evaluation Guideline :C3 ASPS-IC O&M Guideline :C3.1 Monitoring & Evaluation Guideline :C3.2	SUA, UDS Information and Database Improvement :D3	
	NGO Intervention :B4	SPPS Farmers participation :C4	ASPS-IC, RBM Contactors' Listing :D4	Equipment Management Improvement :E3
	Cooperative Channeling in Irrigation Sector: B5	Village Irrigation Development Guideline :C5	LGA Data Organization :D5	Contactors' Training :E4
	Sub-sectors Coordination :B6	Farmers' O&M Guideline :C6	LGA Networking System Development :D6	Farmers' Participation Training :E5
		DADP Formulation Guideline :C7	Existing-Scheme Monitoring System Development :D7	Trigated Agriculture Training :E6 Training for Cash Crops Increase: E6.1 Training for Cash Crops Production Increase: E6.2 JICA SCSRD Integrated Irrigation Model Development:E7

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Figure 8.3.2  
Proposed Programme in NIMP and Related On-going Projects

# IRRIGATION SECTION (MAFS)

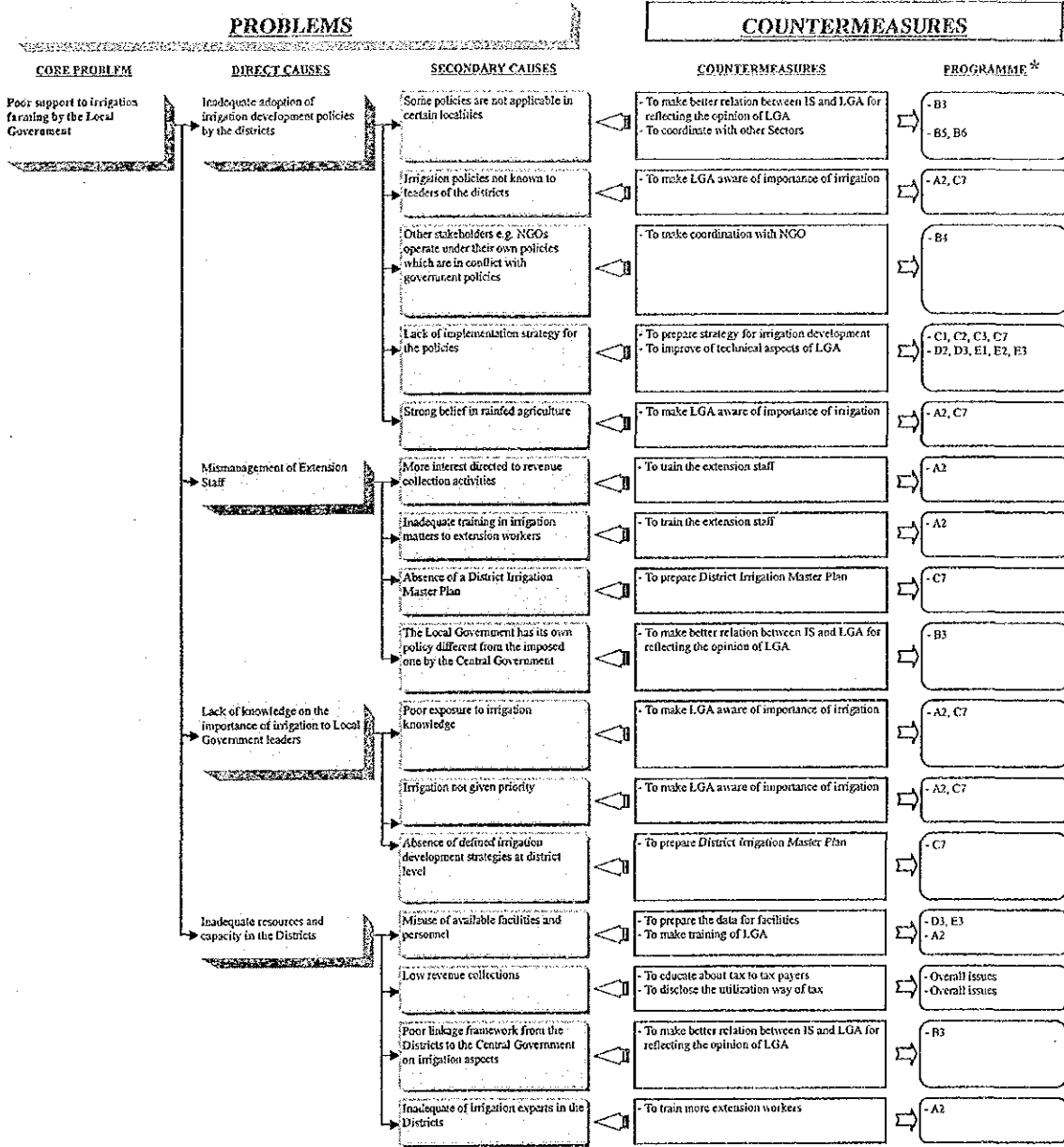


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**Figure 8.3.3**  
Linkage between PCM Workshop Results and Subject-wise Improvement Programme (1/4)

# LOCAL GOVERNMENT



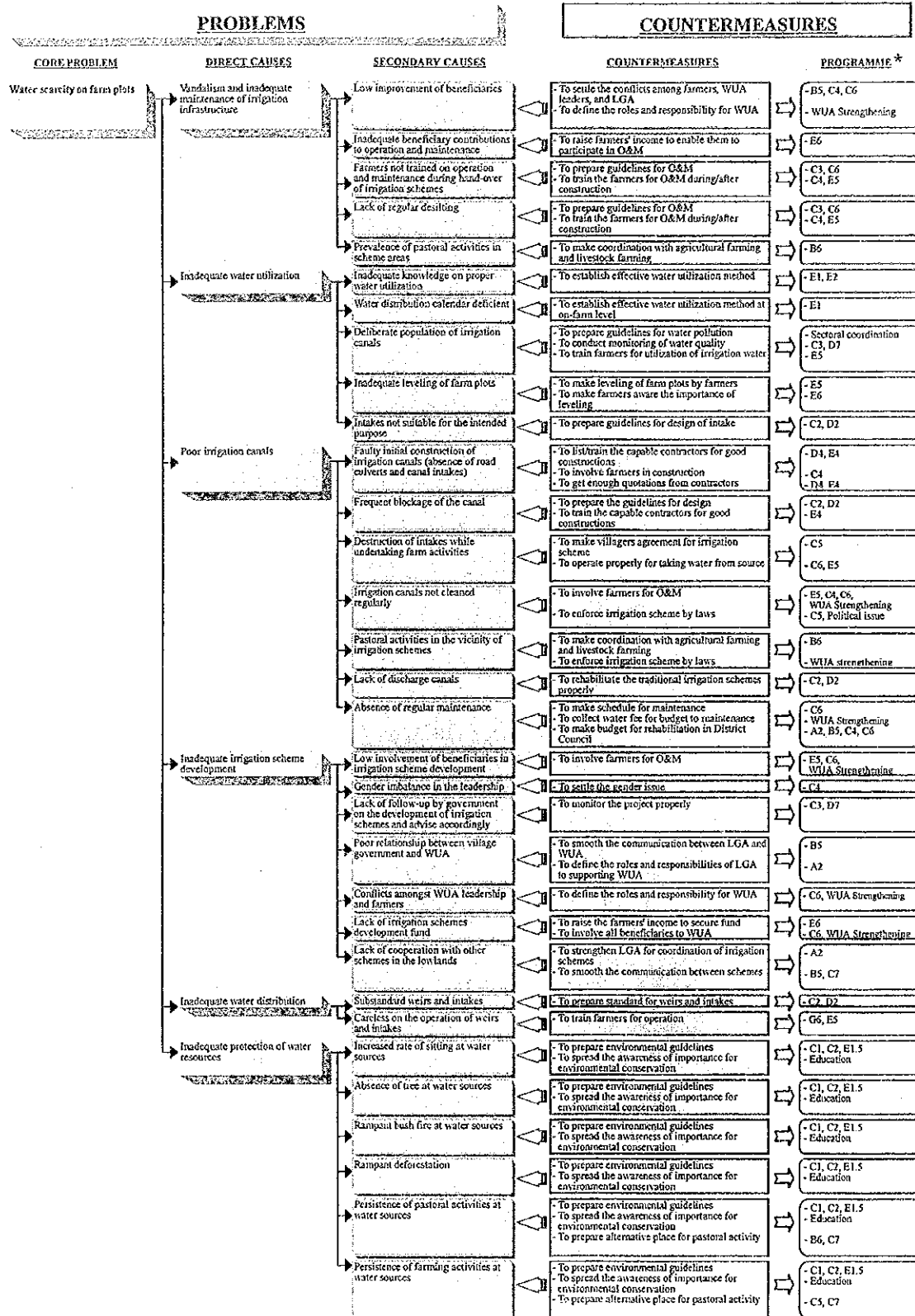
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**Figure 8.3.3**  
Linkage between PCM Workshop Results and Subject-wise Improvement Programme (2/4)



# WATER USERS ASSOCIATION

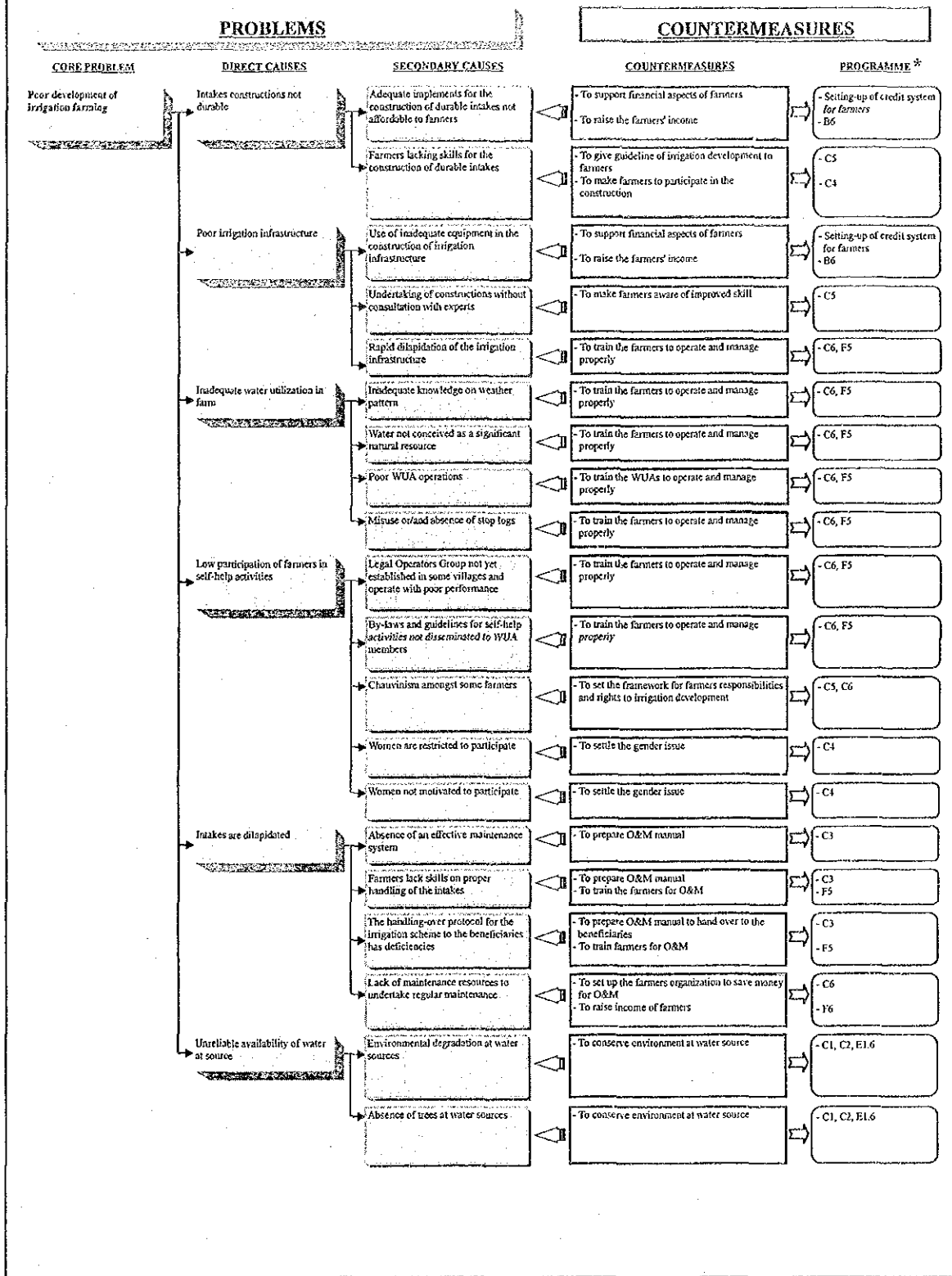


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**Figure 8.3.3**  
Linkage between PCM Workshop Results and Subject-wise Improvement Programme (3/4)

# IRRIGATION FARMING



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**Figure 8.3.3**  
Linkage between PCM Workshop Results and Subject-wise Improvement Programme (4/4)

Reference No.	Component Title	Implementation period	Year										Remarks					
			2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		2012	2013	2014	2015	2016
Key Word in Stage-wise Development Programme																		
A1	IS Institutional Improvement Programme	2.0																
A2	LGA Institutional Strengthening Programme for Irrigation Development	2.0																
B1	IS Working Mandate Formulation Programme	1.0																
B2	Contract Management System Improvement Programme	1.0																
B3	Regulatory/Networking System Establishment between LGAs and IS	1.0																
B4	NGOs' Intervention in Irrigation Development Encouragement Programme	1.0																
B4	Cooperation Channelling within Irrigation Sector Establishment Programme	1.0																
B4	Sub-sectors Coordination System Establishment	1.0																
C1	Survey and Investigation Guideline Establishment Programme	1.0																
C1	Planning Guideline Establishment Programme	1.0																
C2	Designing Guideline Establishment Programme	1.0																
C3	O&M Guideline Establishment Programme	1.0																
C3	Monitoring & Evaluation Guideline Establishment Programme	1.0																
C4	Farmers' Participation in Irrigation Development Programme	1.0																
C4	Village Irrigation Development Guideline Establishment Programme	1.0																
C5	Farmers' O&M Manual Establishment Programme	1.0																
C6	Establishment of DADP Formulation Guideline for Irrigated Agriculture Development	1.0																
D1	Web-site and Networking Establishment Programme	1.0																
D2	Technical Manuals Handling Guideline Establishment Programme	0.5																
D3	Information and Database Improvement Programme	1.5																
D4	Irrigation Development Contractors and Consultants' Listing Programme	1.0																
D5	LGAs' Data Organization Programme	1.5																
D6	LGA Networking System Establishment Programme	1.0																
D7	Existing-scheme Monitoring System Establishment Programme	3.0																
E1	Irrigation Technology Research Centre Establishment Programme	2.0																
E1	Farmer's Irrigation Method Improvement Programme	1.5																
E1	Flood Irrigation Development Programme	2.0																
E1	Small Dam Technology for Irrigation Development Programme	2.0																
E1	Environmental Assessment Study for Irrigation Practices in Tanzania	2.0																
E1	Study of River-Basin Approach in Irrigation Development	1.0																
E2	Hydraulic Experimental Centre Establishment Programme	2.5																
E3	IS's Equipment Management Programme	1.5																
E4	Irrigation Development Contractors and Contractors' Training Programme	1.5																
E4	Farmers' Participation Training Programme	1.0																
E6	Irrigated Agriculture Training Programme for Rice Production Increase	3.0																
E6	Irrigated Agriculture Training Programme for Cash Crops Production Increase	2.0																
E7	Integrated Irrigation Development Model Establishment Programme	2.0																
Expected Type of Scheme Implementation																		
			Schemes implementation by Private Sector															
			Schemes implementation by Central Government															
			Scheme implementation by Government Approach															
			Scheme implementation by Farmers-oriented Approach															
			Scheme implementation by Private Sector-oriented Approach															

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Figure 8.3.4 Implementation Schedule of Subject-wise Improvement Programme