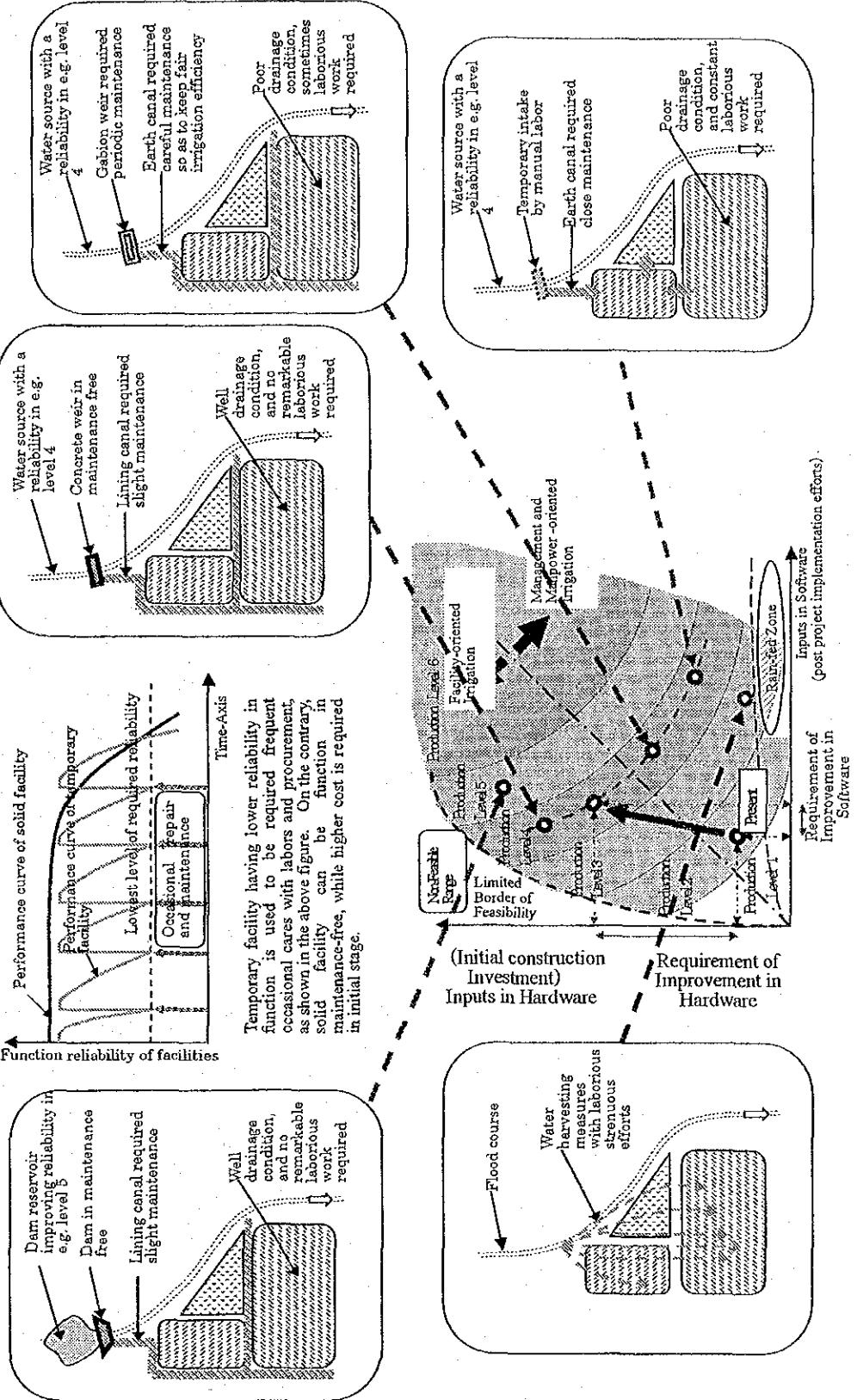


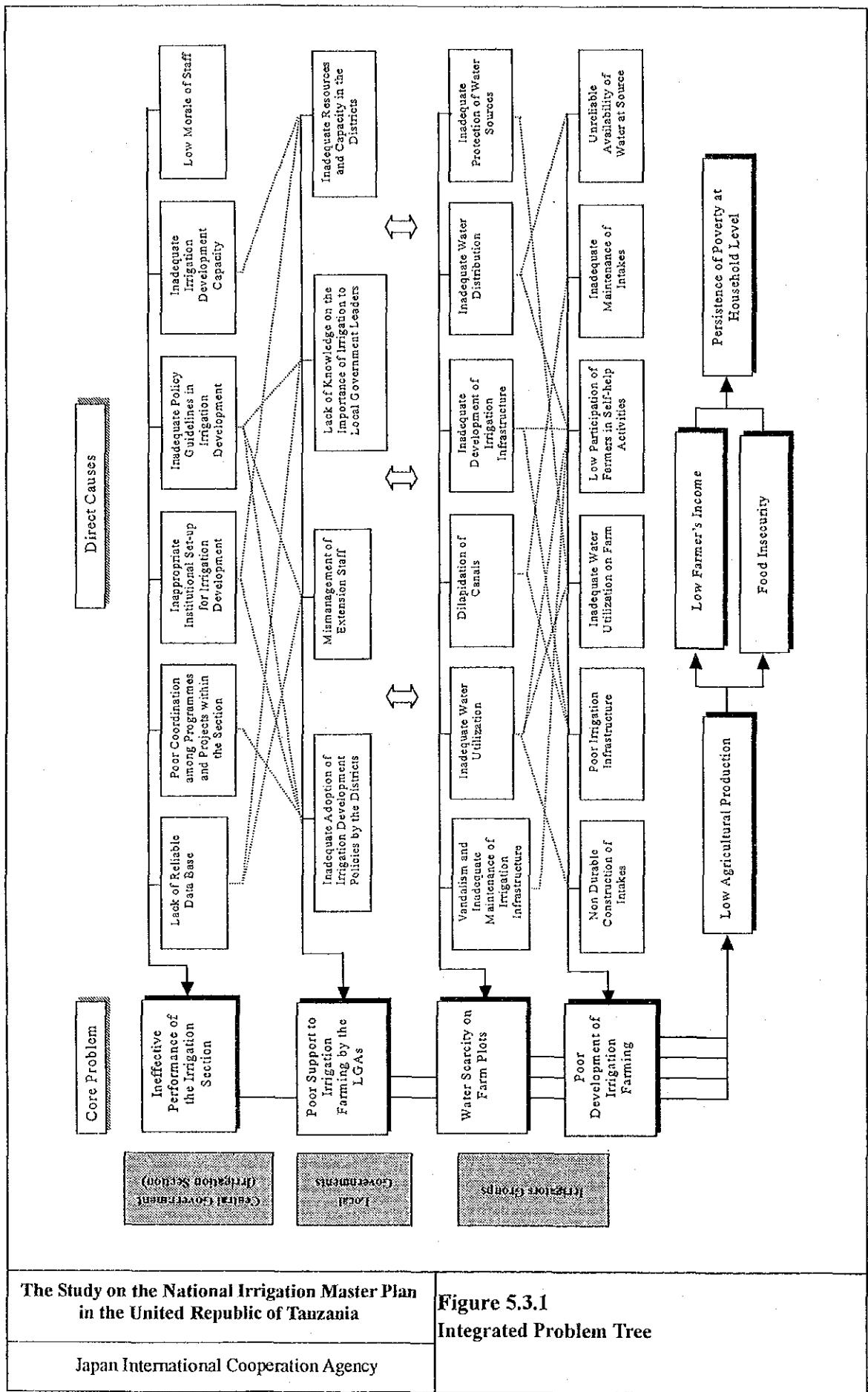
Figures



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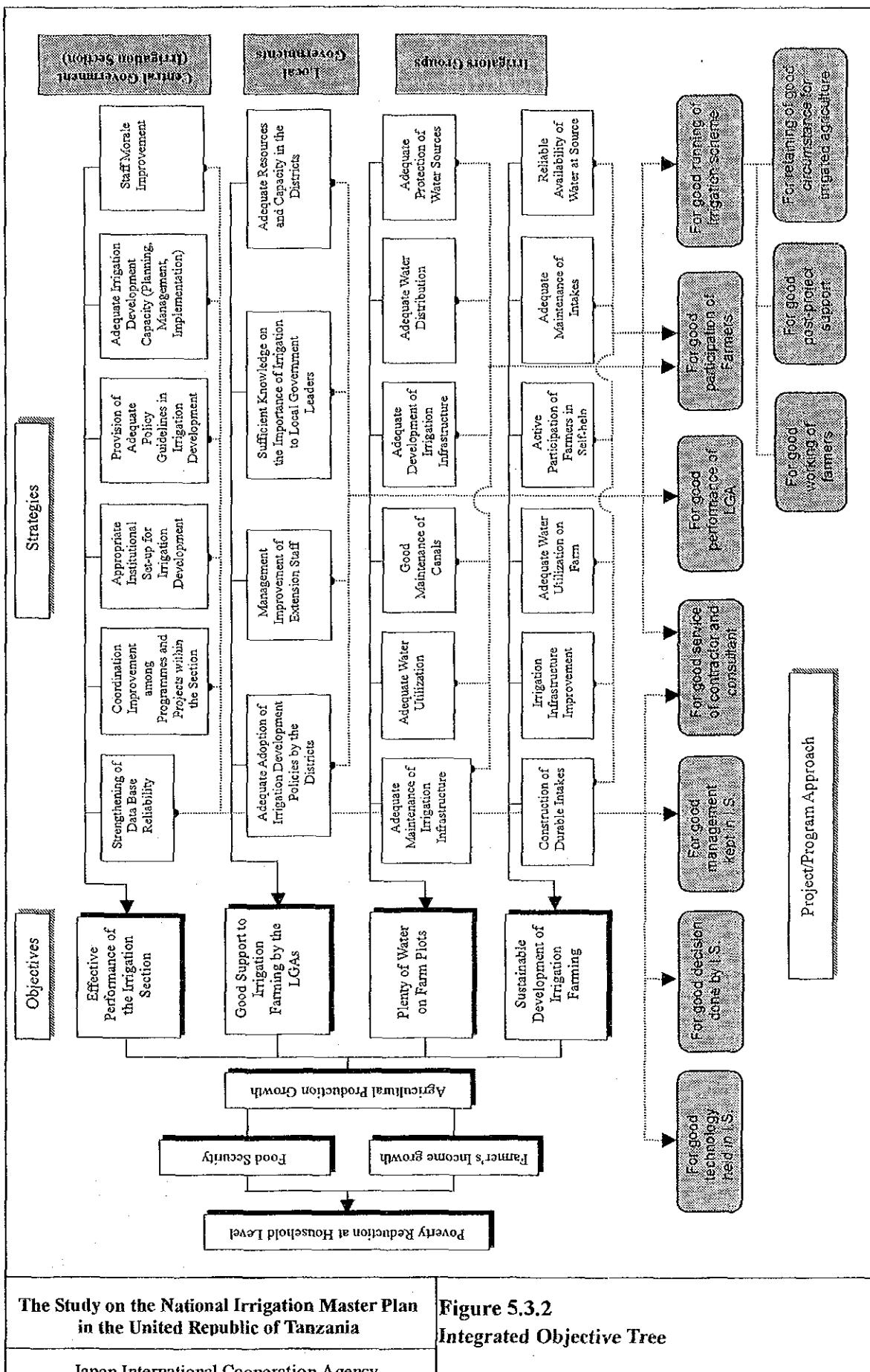
Figure 4.5.1
**Variations of Irrigation Development Level
by Typical Pattern of Irrigation System**



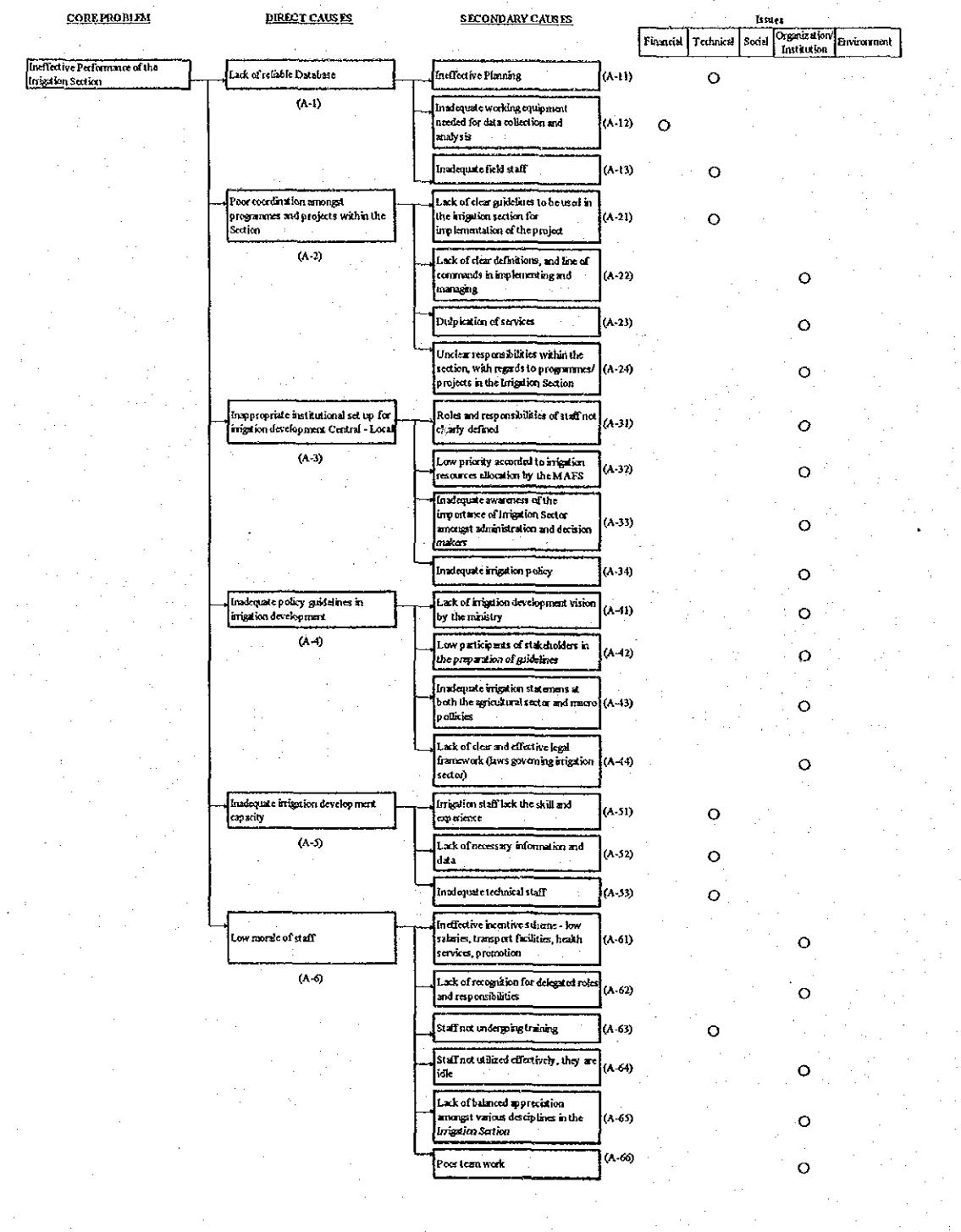
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Figure 5.3.1
Integrated Problem Tree



IRRIGATION SECTION (MAPS)



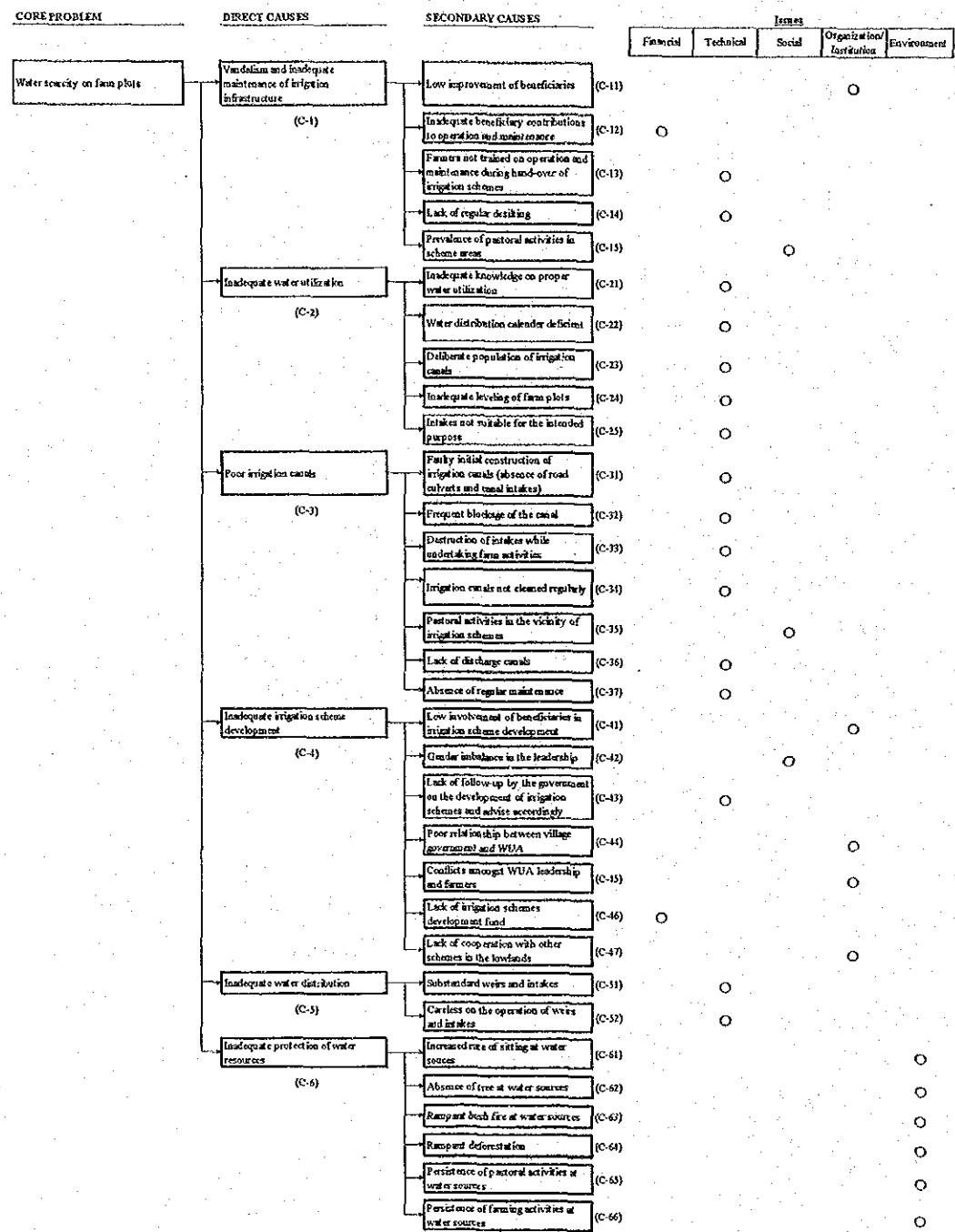
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Figure 5.3.3
Problem Analysis for MAPS

LOCAL GOVERNMENT		Issues						
CORE PROBLEM	DIRECT CAUSES	SECONDARY CAUSES		Financial	Technical	Social	Organization/Institution	Environment
Poor support to irrigation farming by the Local Government	Inadequate adoption of irrigation developmental policies by the districts (B-1)	Some policies are not applicable in certain localities (B-11) Irrigation policies not known to leaders of the districts (B-12) Other stakeholders e.g. NGOs operate under their own policies which are in conflict with government policies (B-13) Lack of implementation strategy for the policies (B-14) Strong belief in rainfed agriculture (B-15)					O	
	Management of Extension Staff (B-2)	More interest directed to revenue collection activities (B-21) Inadequate training in irrigation matters to extension workers (B-22) Absence of a District Irrigation Master Plan (B-23) The Local Government has its own policy different from the imposed one by the Central Government (B-24)					O	
	Lack of knowledge on the importance of irrigation to Local Government leaders (B-3)	Poor exposure to irrigation knowledge (B-31) Irrigation not given priority (B-32) Absence of defined irrigation development strategies at district level (B-33)					O	
	Inadequate resources and capacity in the Districts (B-4)	Misuse of available facilities and personnel (B-41) Low revenue collections (B-42) Poor linkage framework from the Districts to the Central Government on irrigation aspects (B-43) Inadequate of irrigation experts in the Districts (B-44)					O	
The Study on the National Irrigation Master Plan in the United Republic of Tanzania		Figure 5.3.4 Problem Analysis for Local Governments						
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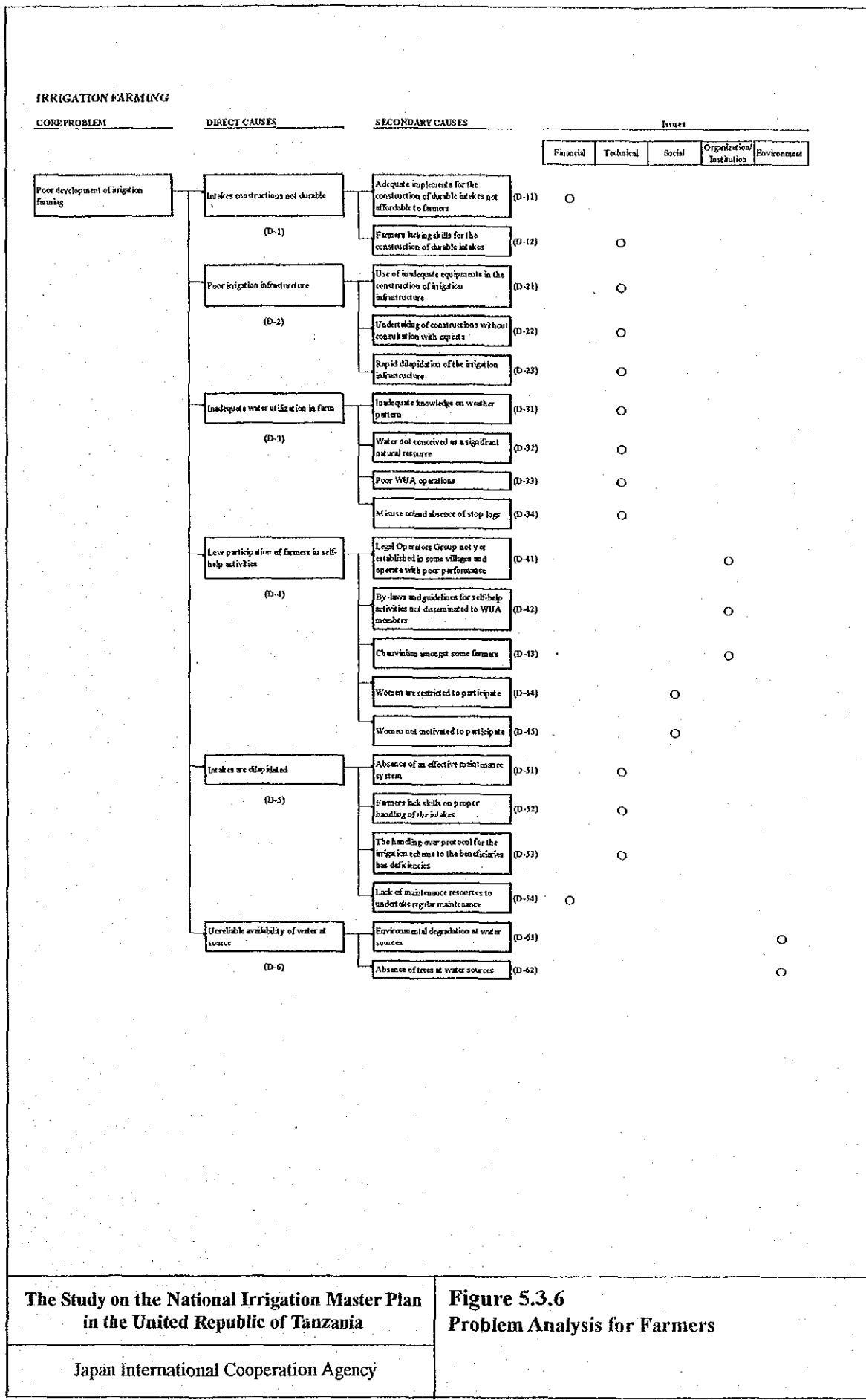
WATER USERS ASSOCIATION

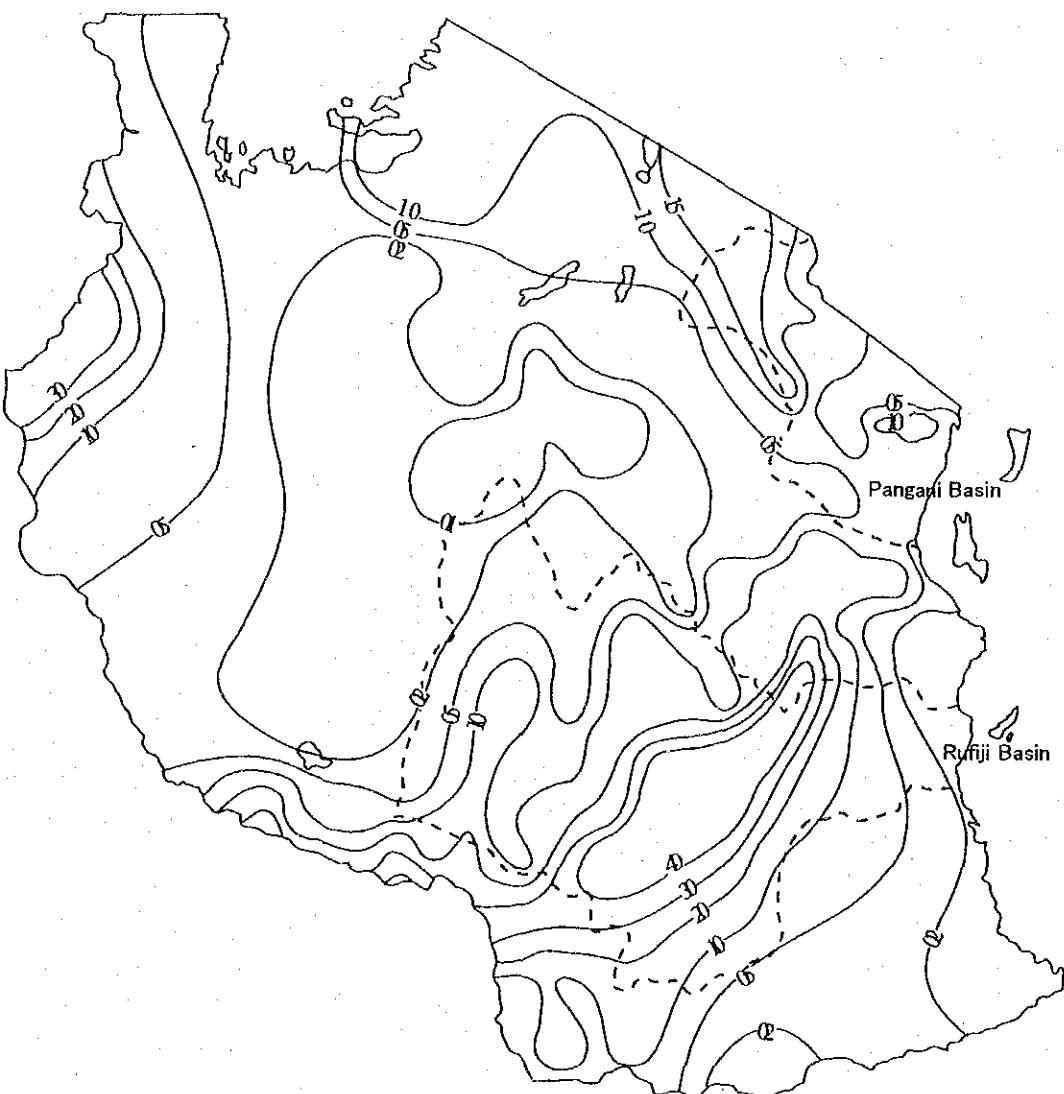


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Figure 5.3.5
Problem Analysis for Water Users' Association

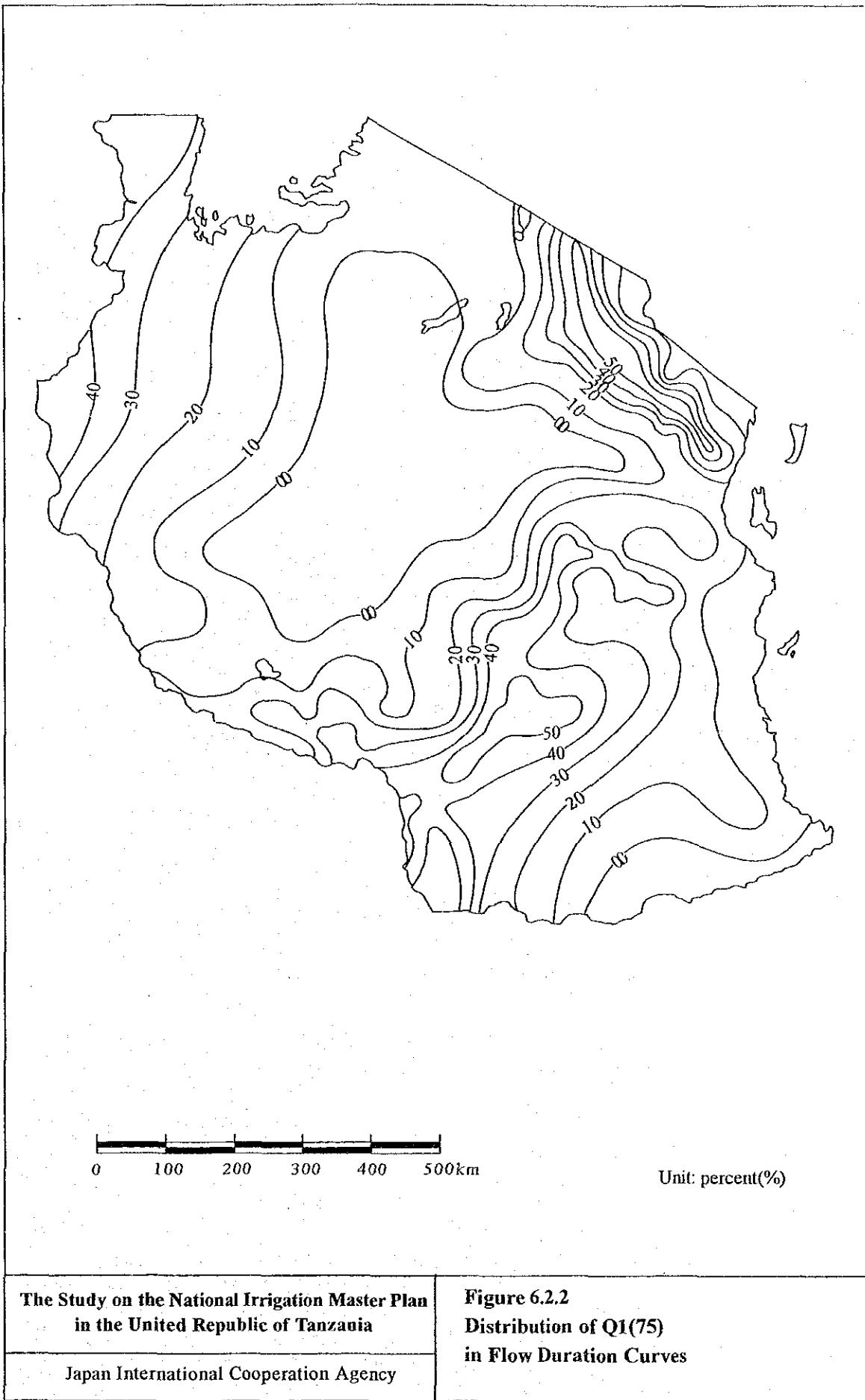


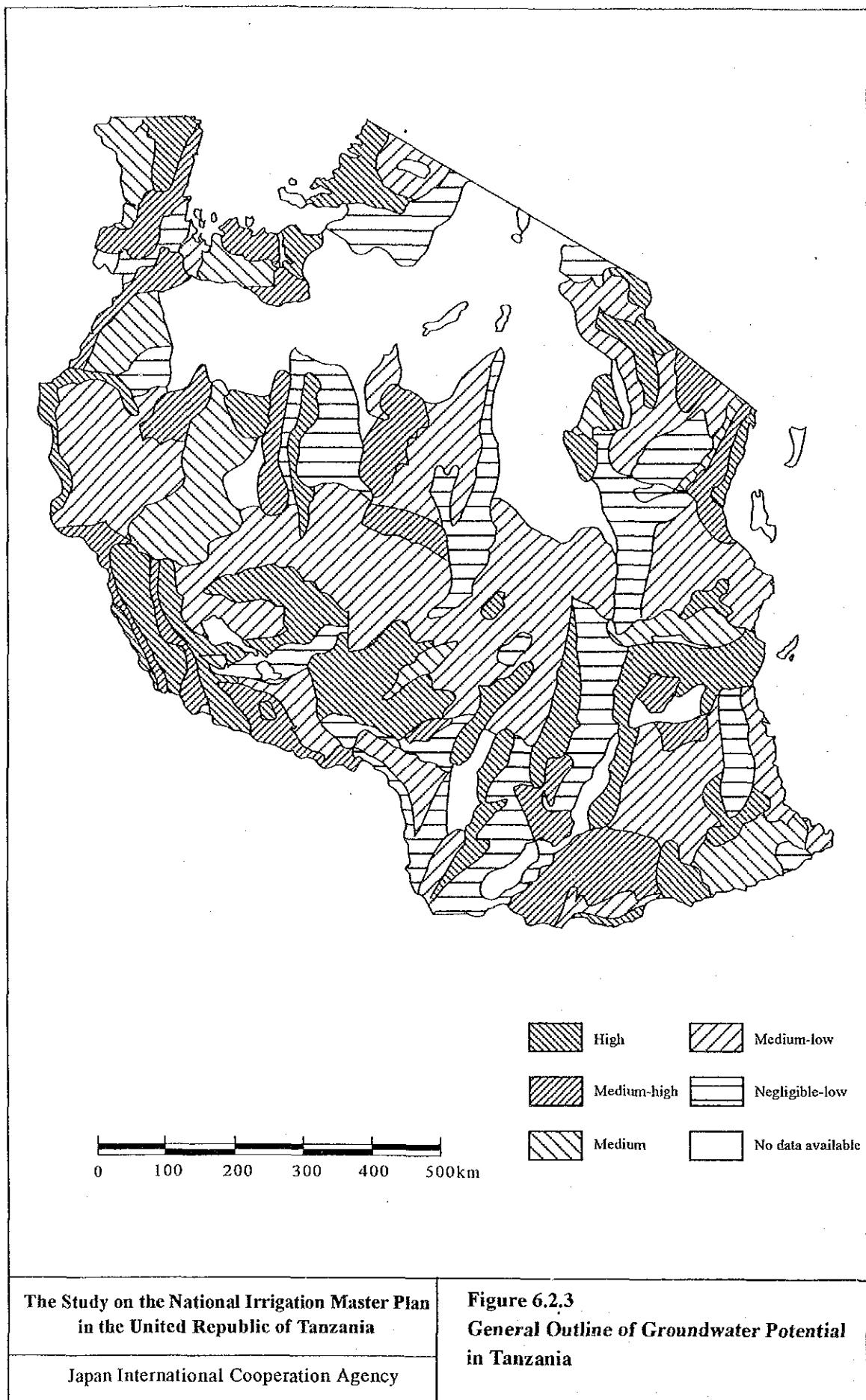


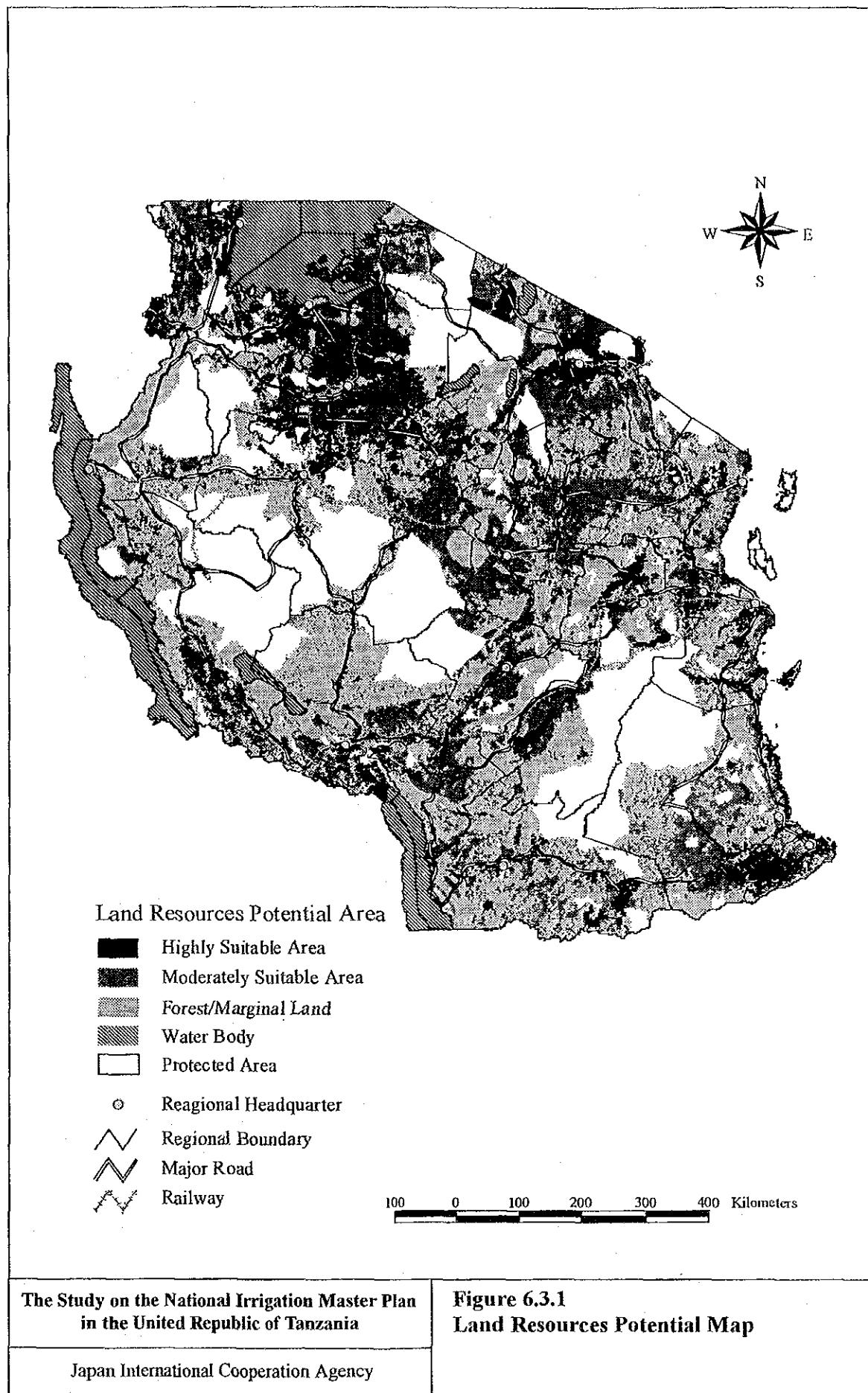
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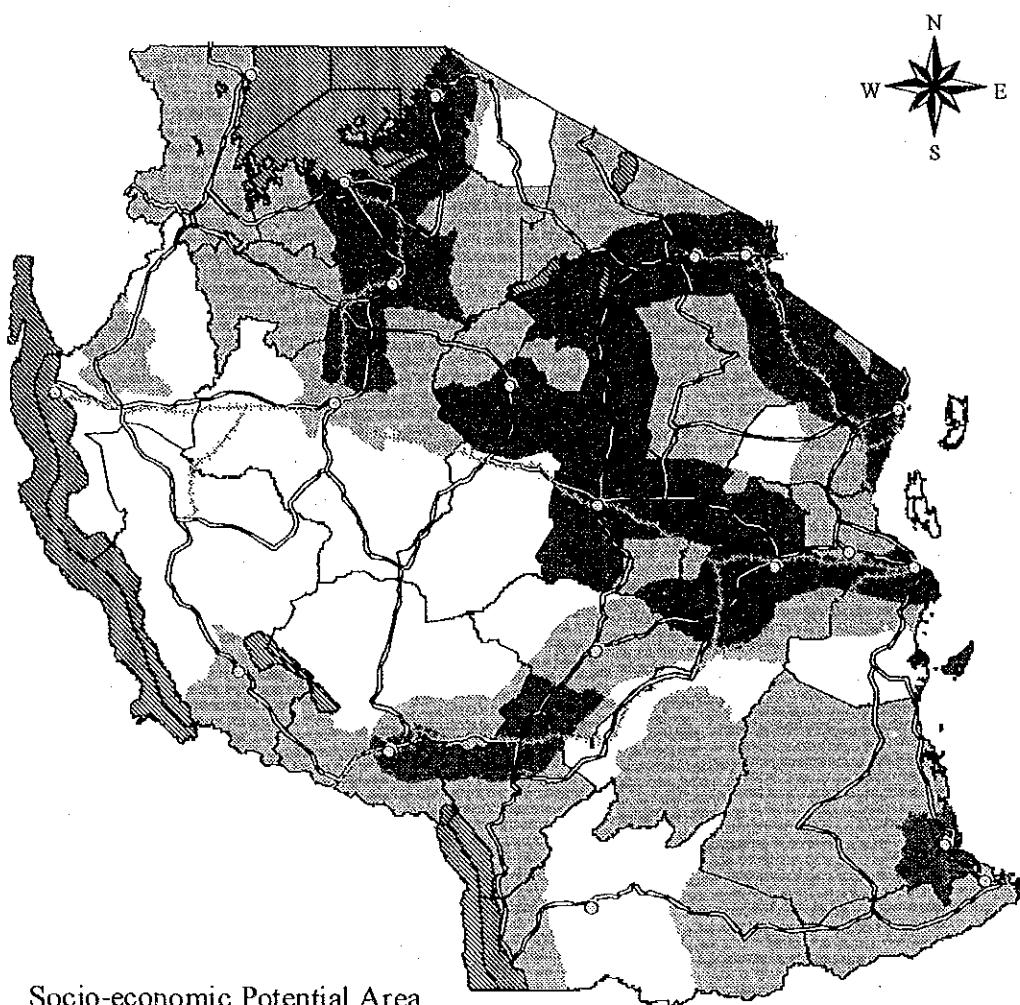
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**Figure 6.2.1
Distribution of Specific Run-off
in Tanzania**









Socio-economic Potential Area

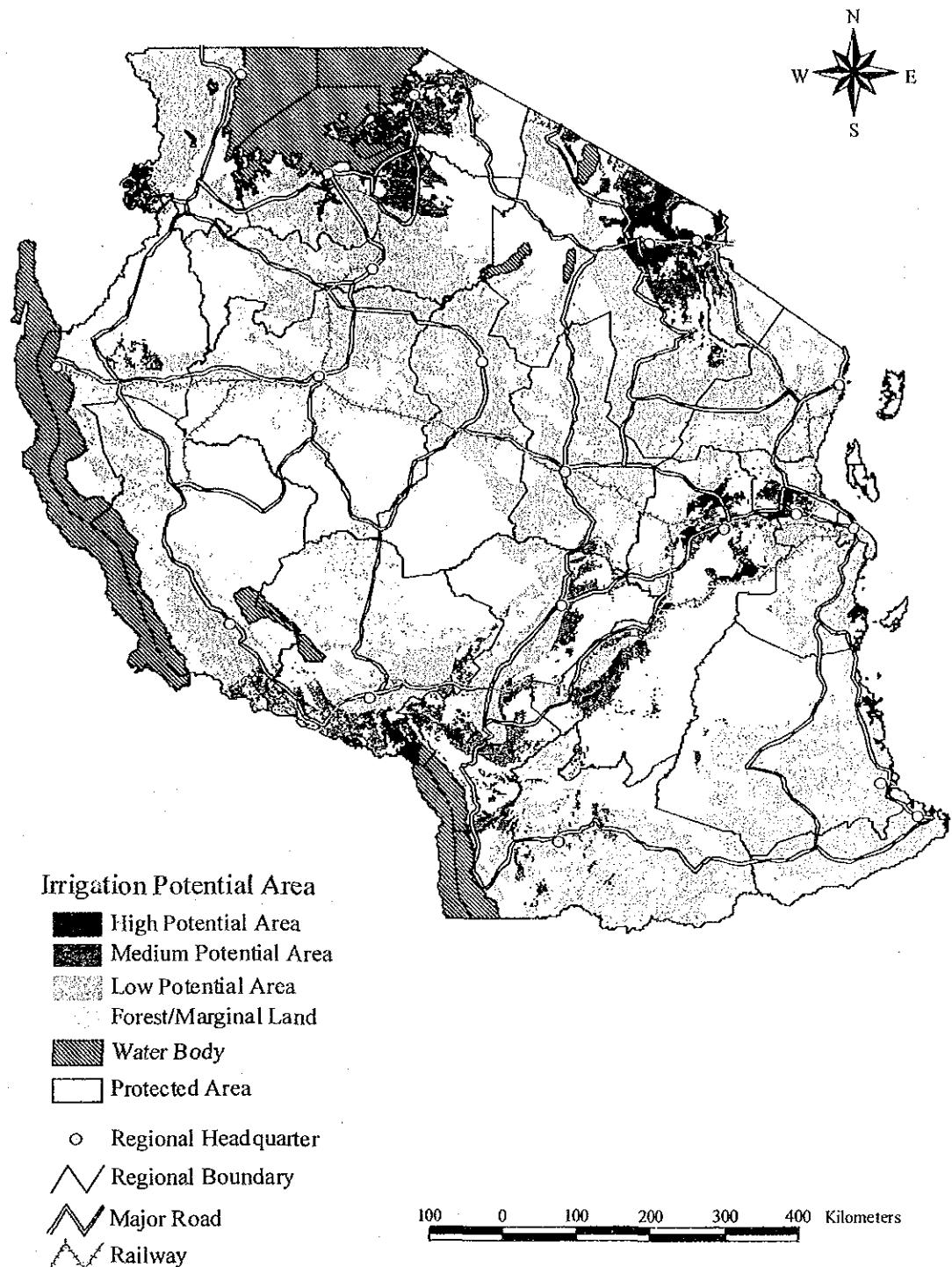
- High Potential Area
- Medium Potential Area
- Low Potential Area
- ▨ Water Body
- Regional Headquarter
- △ Regional Boundary
- Major Road
- Railway

100 0 100 200 300 400 Kilometers

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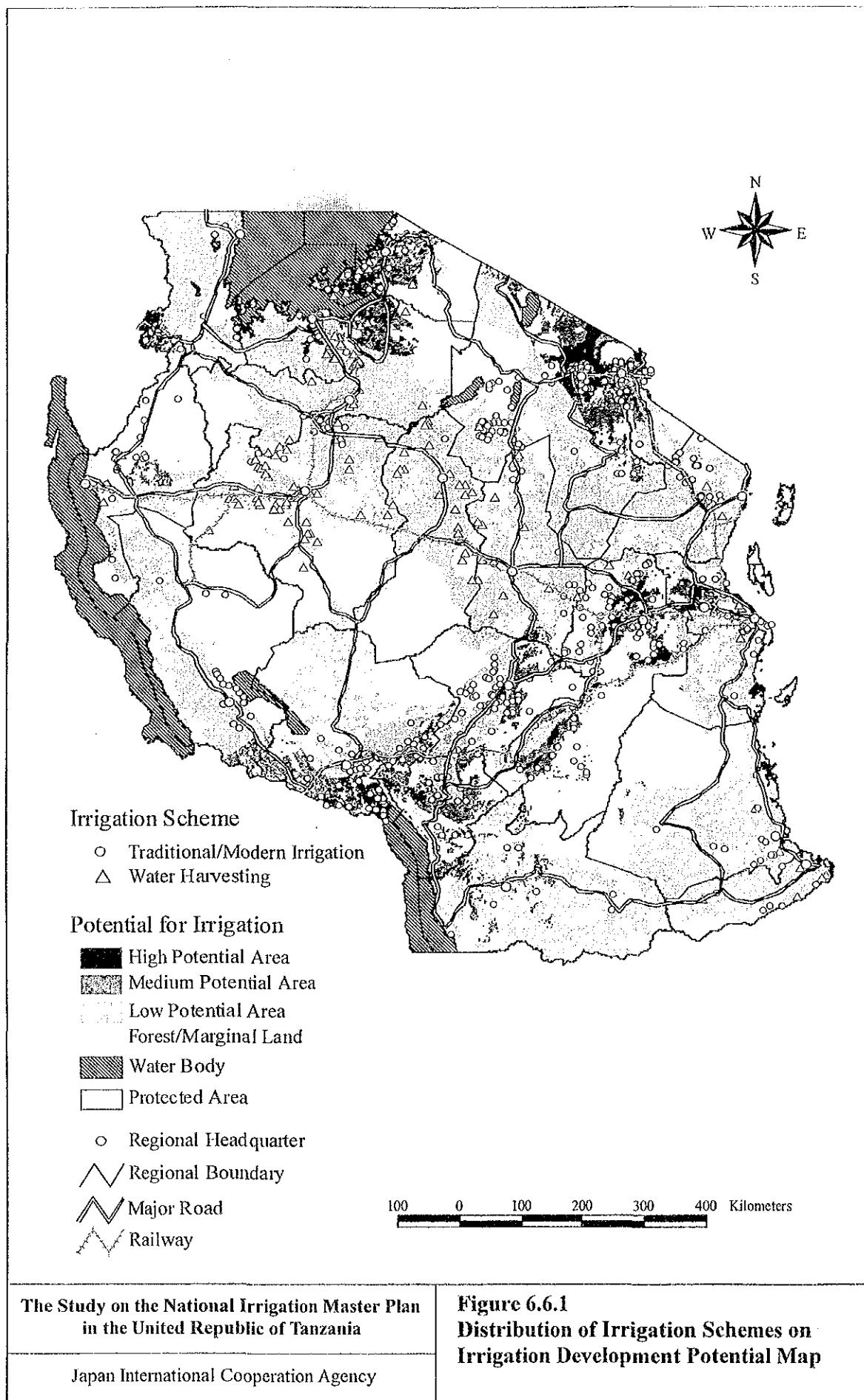
Figure 6.4.1
Socio-economic Potential Map

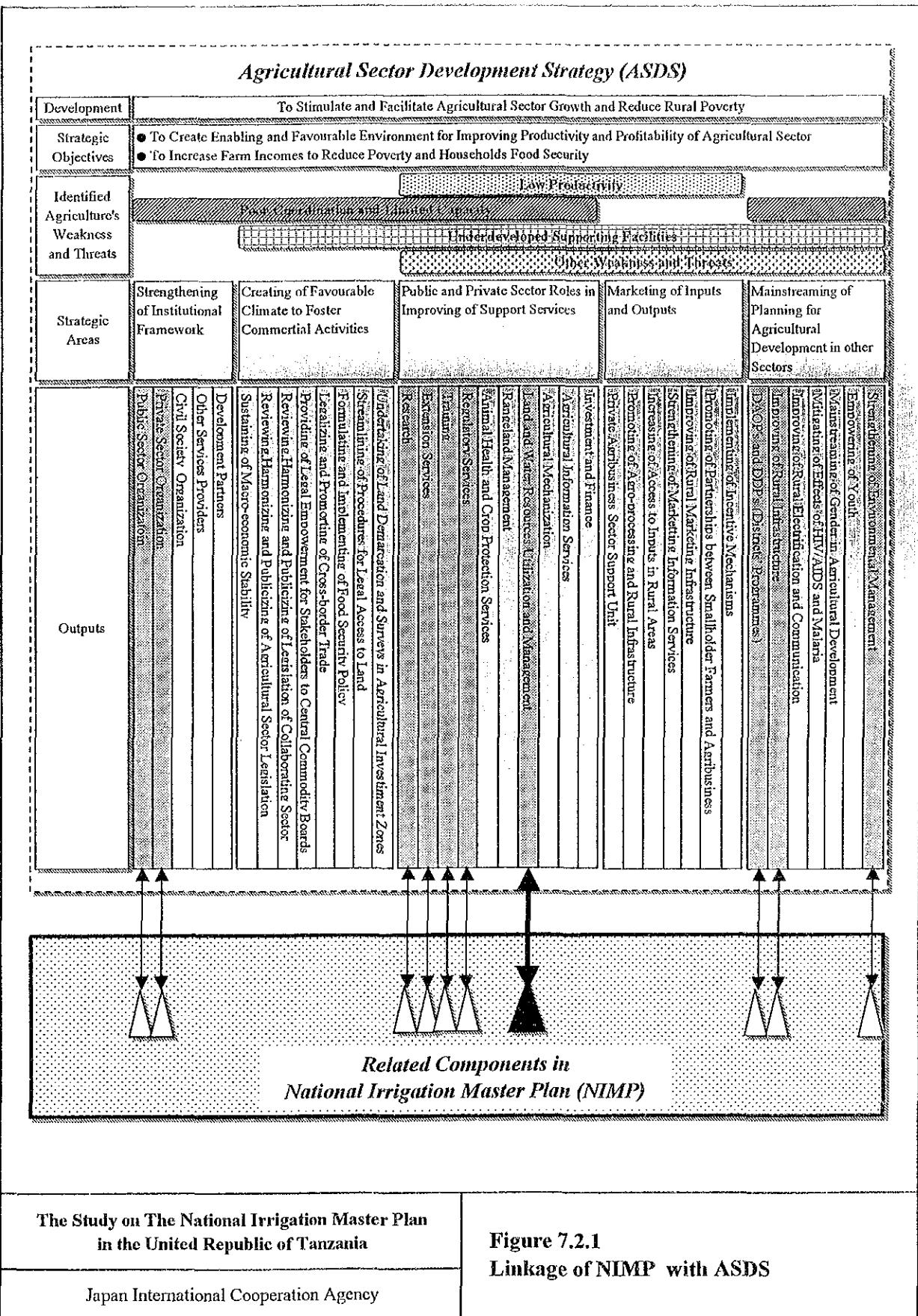


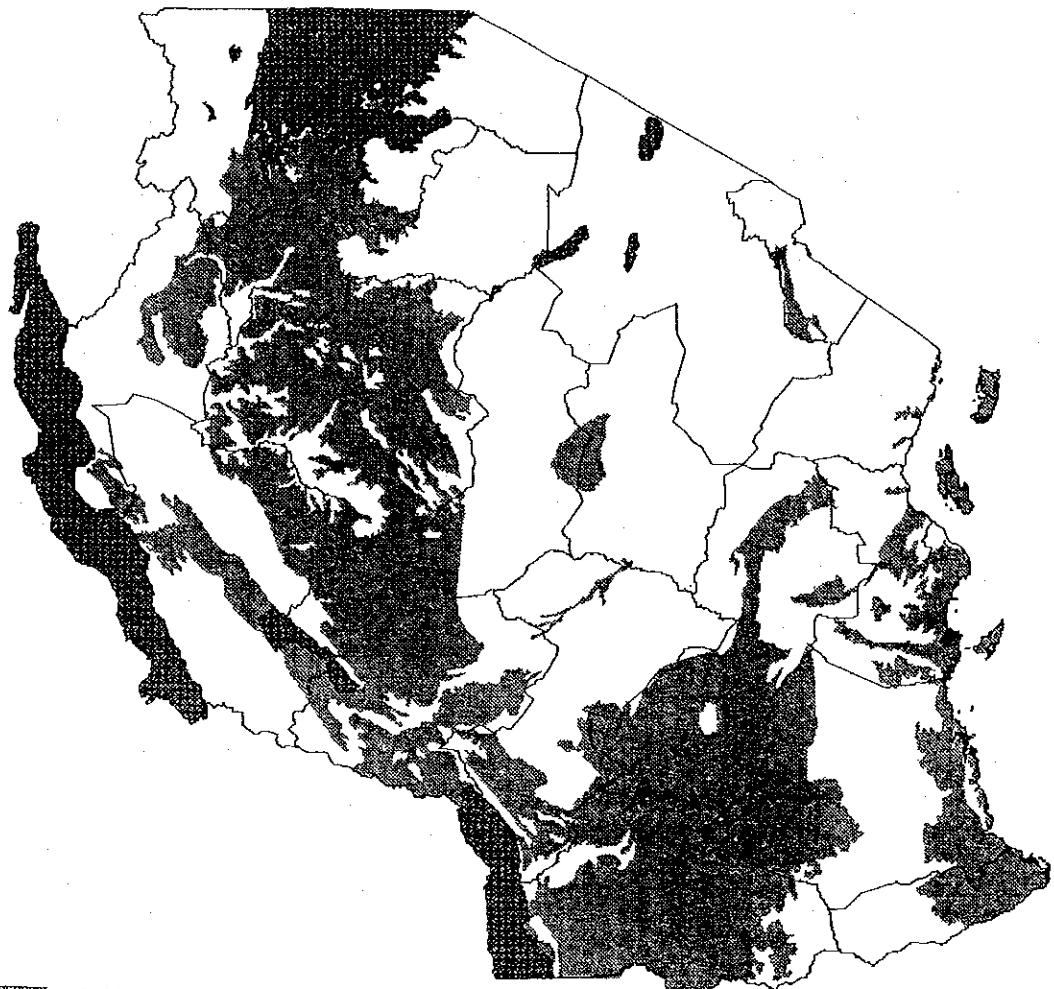
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Figure 6.5.1
Irrigation Development Potential Map





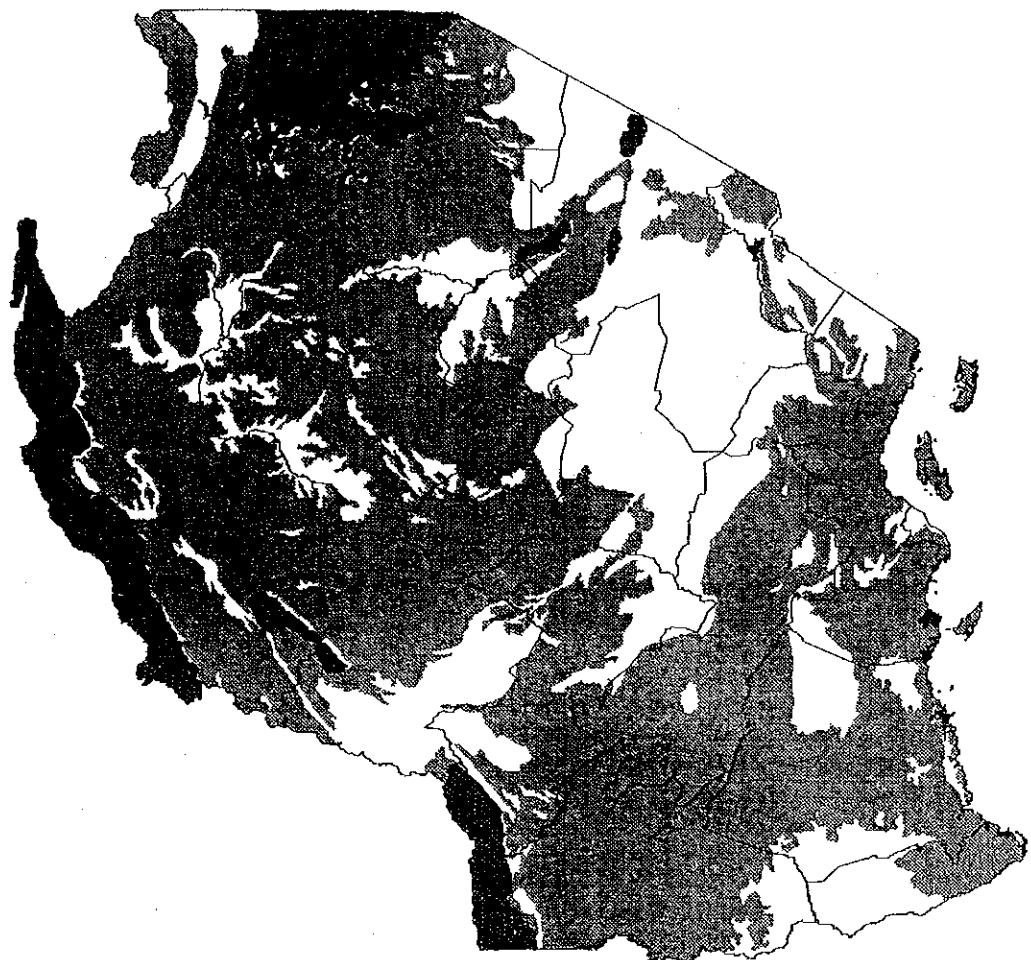


■ Suitable Agro-ecological Zone for Paddy

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Figure 7.6.1
Distribution of Suitable Agro-ecological
Zone for Paddy

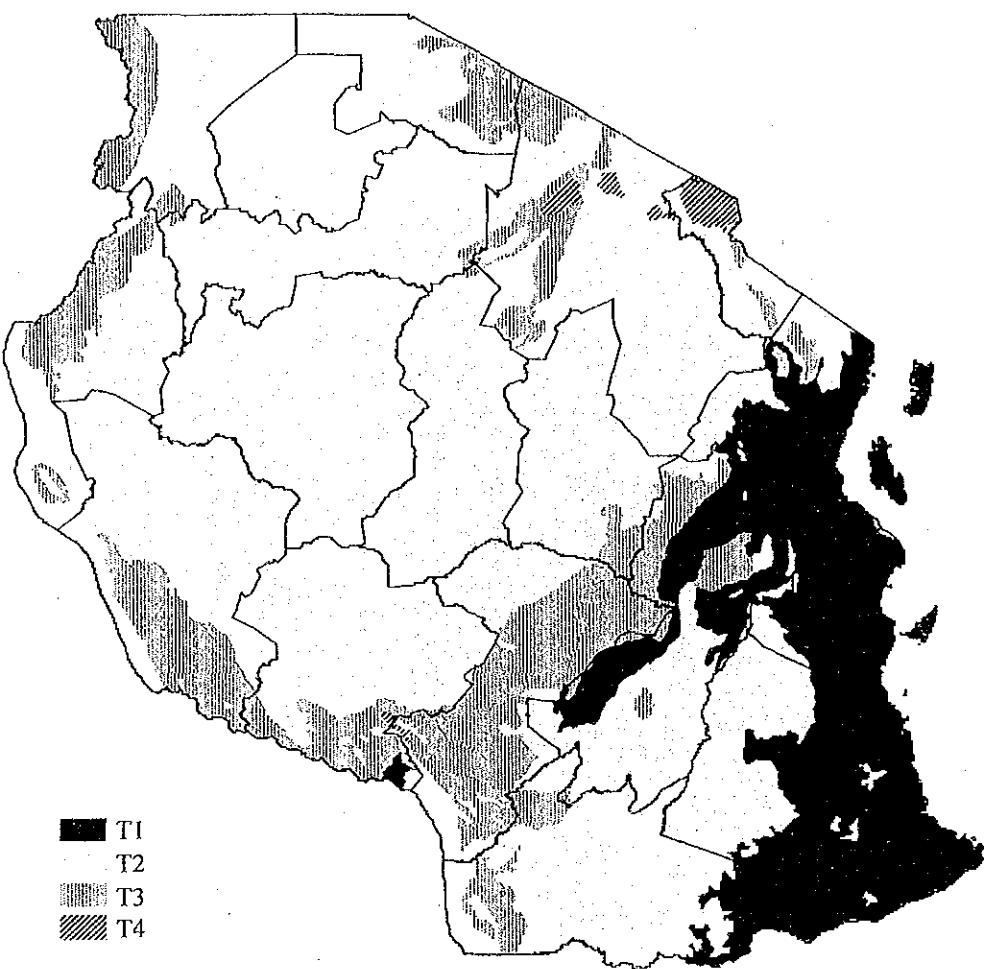


■ Suitable Agro-ecological Zone for Maize

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Figure 7.6.2
Distribution of Suitable Agro-ecological
Zone for Maize

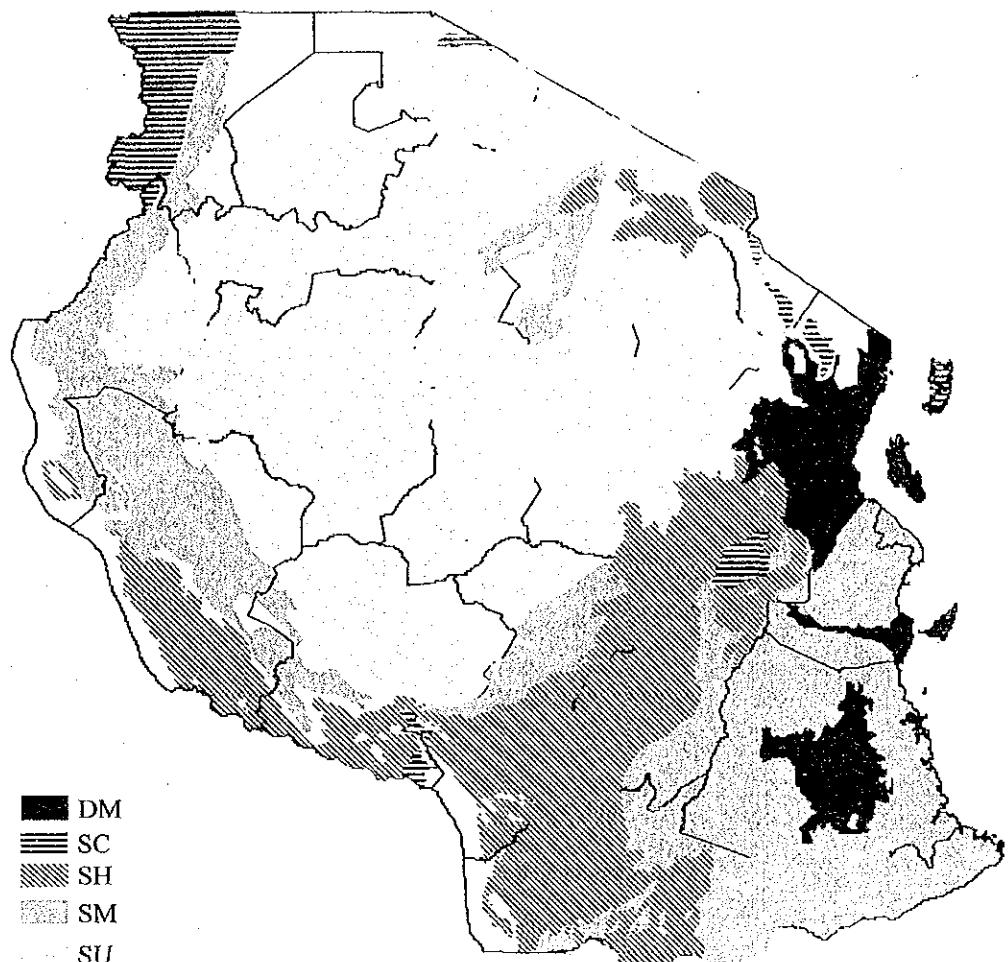


Temperature regime	Altitude range	Temperature range			Major crops
		Mean annual max.	Mean annual min.	Range	
T1	0-750	29-31	19-23	9	cotton, rice, sugarcane, groundnuts, cowpeas, cassava, Bananas, citrus, soya, sisal, maize, sorghum, sweet potatoes, millet
T2	750-1,500	27-30	15-18	12	cotton, rice, sugarcane, 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, pyrethrum

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Figure 7.6.3
Distribution of Temperature Regime

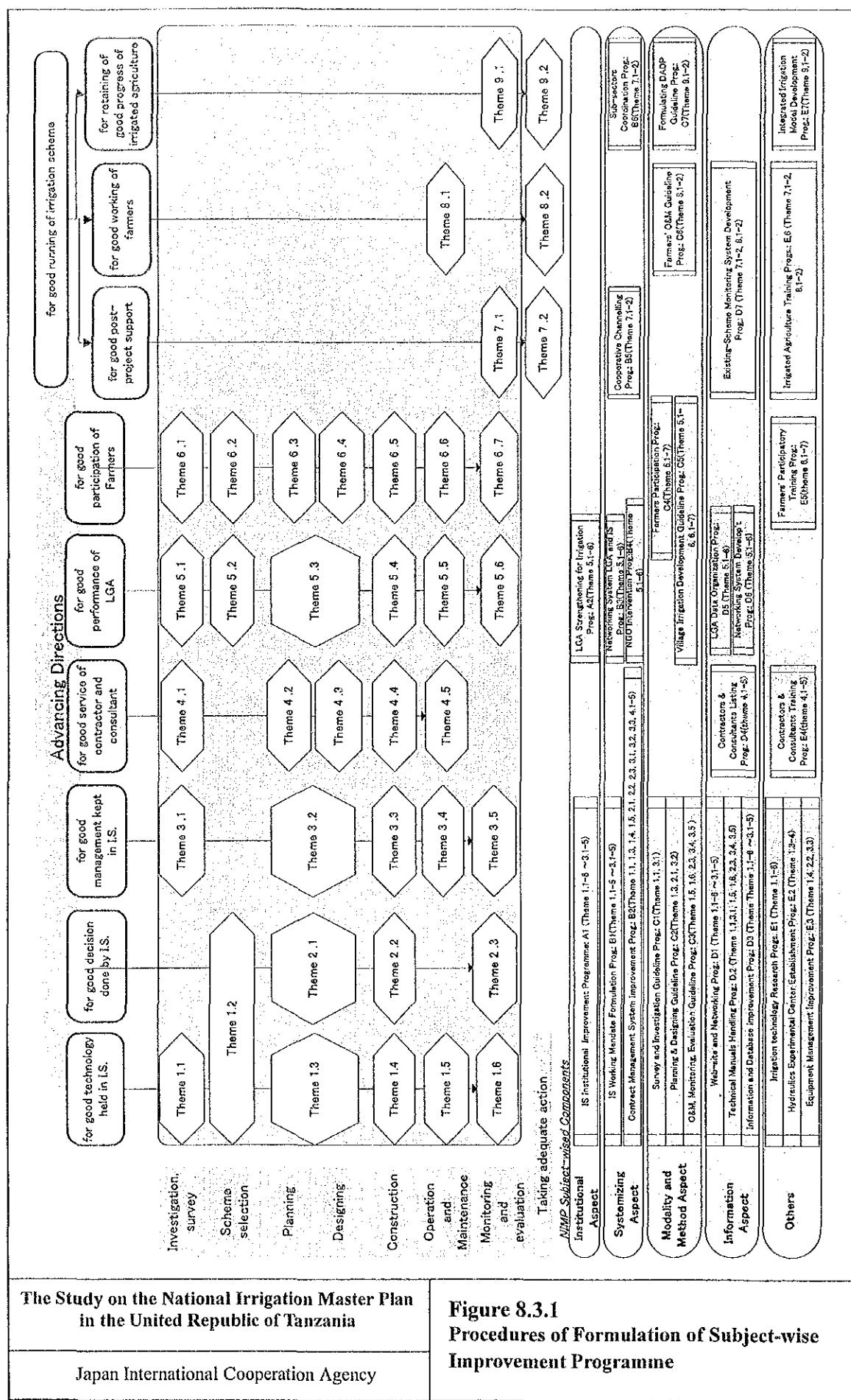


Moisture Zones	Growing period characteristics
DM	Areas with double cropping period
SC	Areas with single, often continuous growing period
SH	Areas with single growing period, highly responsive to moisture storage capacity
SM	Areas with single growing period, moderately responsive to moisture storage capacity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

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Figure 7.6.4
Distribution of Moisture Zones



Subject-wise Programmes:

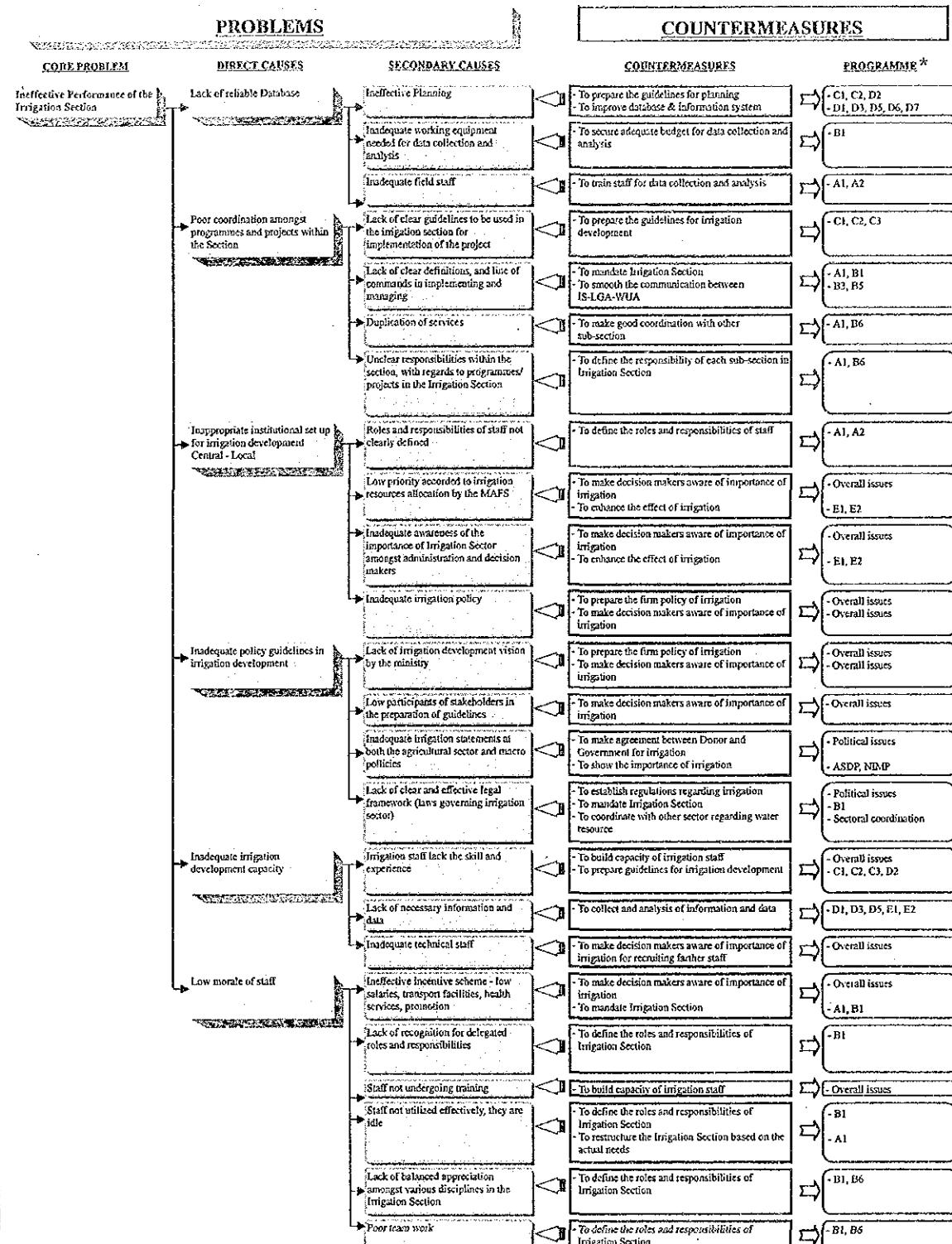
Institutional Aspects (A)	Categories of Subject-wise Components			
	Systemizing Aspects (B)	Maturity and Method Aspects (C)	Information Aspects (D)	Others (E)
IS Institutional Improvement :A1	IS Working Mandate Formulation :B1	Survey and Investigation Guideline :C1	Web-site and Networking :D1	Irrigation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

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

IRRIGATION SECTION (MAFS)

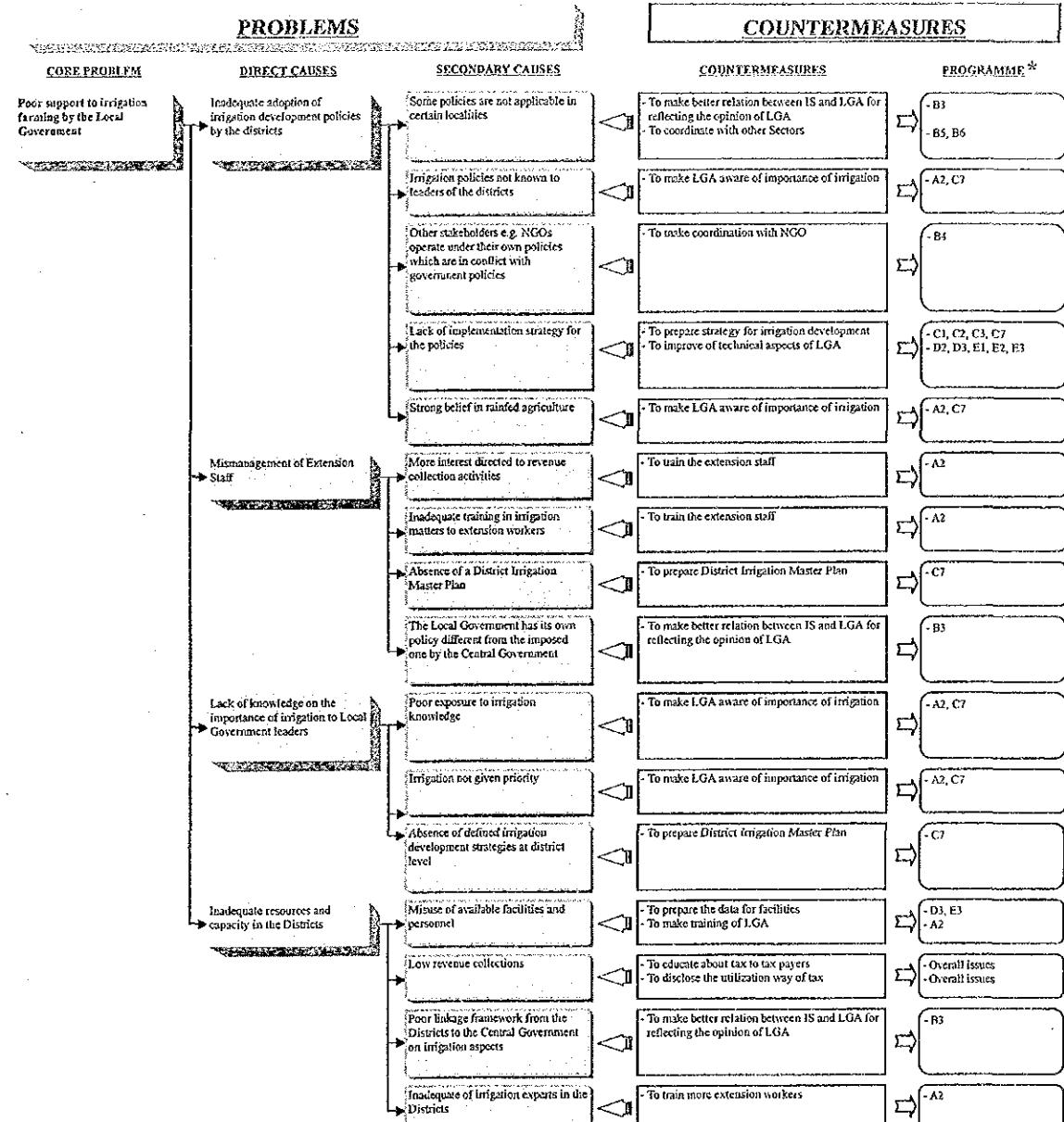


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Figure 8.3.3
Linkage between PCM Workshop Results and Subject-wise Improvement Programme
(1/4)

LOCAL GOVERNMENT

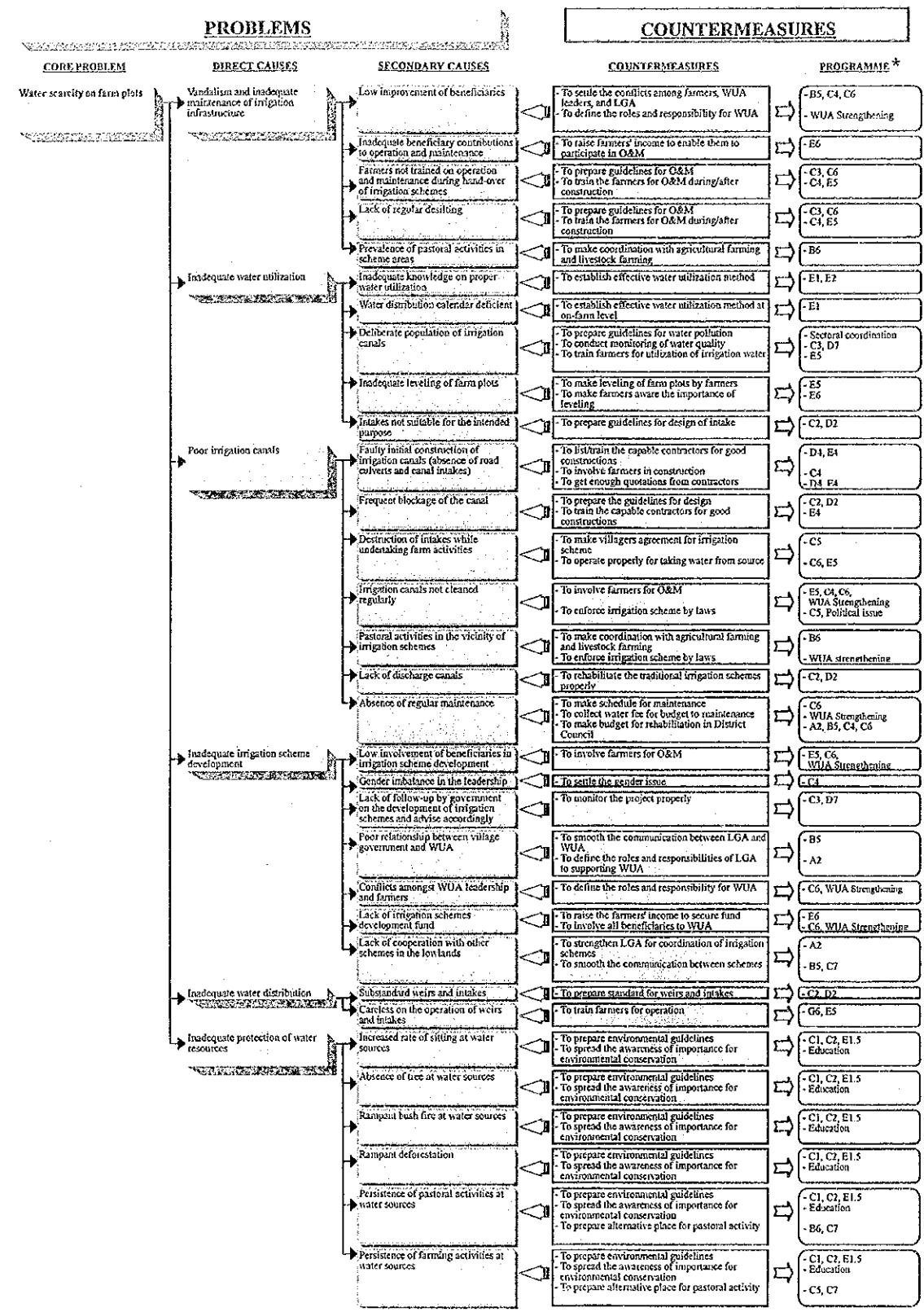


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Figure 8.3.3
Linkage between PCM Workshop Results and Subject-wise Improvement Programme
(2/4)

WATER USERS ASSOCIATION



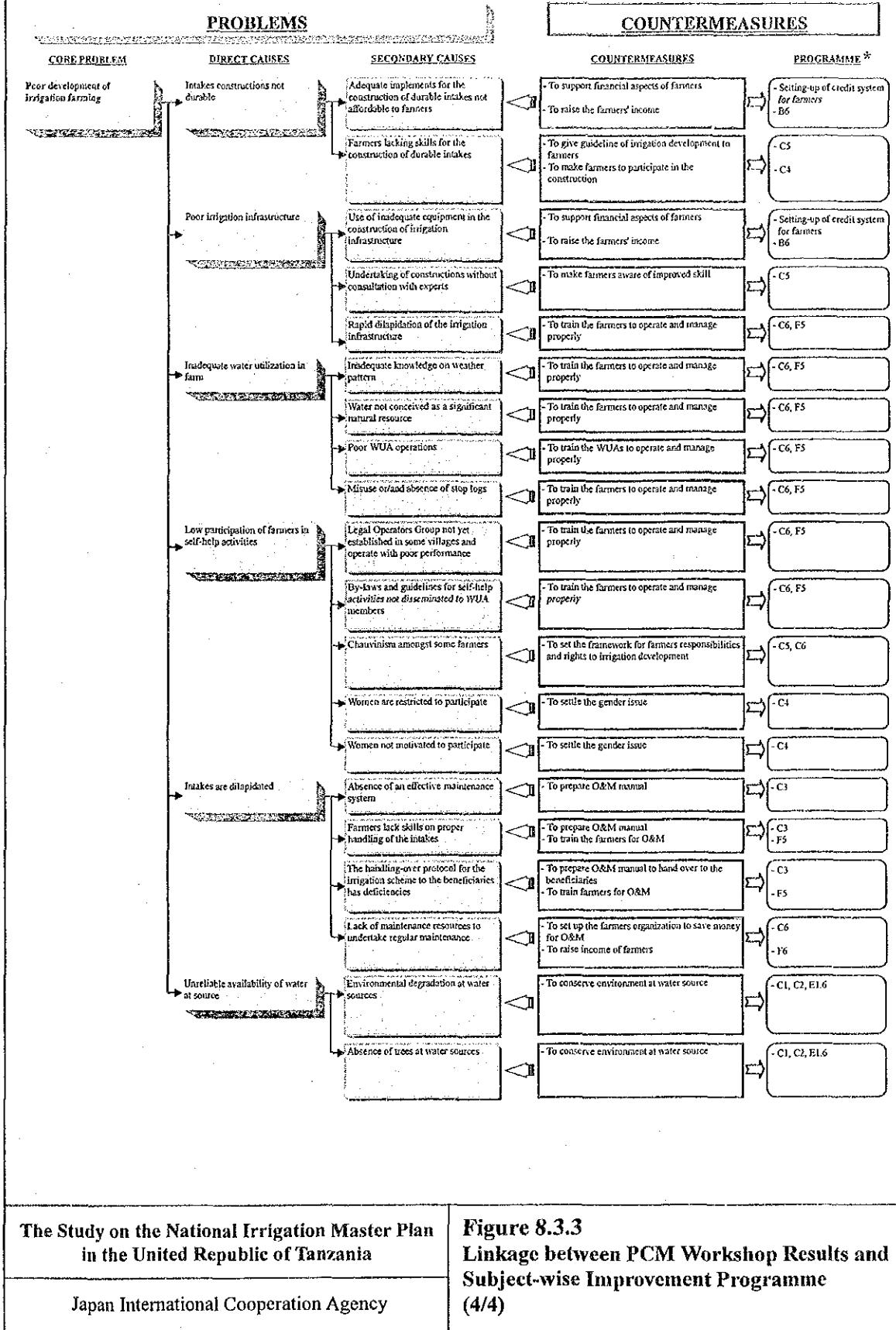
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Figure 8.3.3
Linkage between PCM Workshop Results and Subject-wise Improvement Programme

(3/4)

IRRIGATION FARMING



Reference No.	Component Title	Implementation period	Key Word in Stage-wise Development Programme												Remarks			
			2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Short-term by 2007 Medium-term by 2012 Decentralization Reform																		
A1	IS Institutional Improvement Programme	2.0																
A2	ICA 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 IGA's and IS	1.0																
B4	NGO's Intervention in Irrigation Development Encourage Programme	1.0																
B5	Cooperation Channelling within Irrigation Sector Establishment Programme	1.0																
B6	Sub-sectors Coordination System Establishment	1.0																
C1	Survey and Investigation Guideline Establishment Programme	1.0																
C2	Planning Guideline Establishment Programme	1.0																
C2.1	Designing Guideline Establishment Programme	1.0																
C3	O&M Guidelines Establishment Programme	1.0																
C3.1	O&M Guidelines Establishment Programme	1.0																
C3.2	Monitoring & Evaluation Guideline Establishment Programme	1.0																
C4	Farmers' Participation in Irrigation Development Programme	1.0																
C5	Village Irrigation Development Guideline Establishment Programme	1.0																
C6	Farmers' O&M Manual Establishment Programme	1.0																
C7	Establishment of DADE Formulation Guidance for Integrated Agriculture Development	1.0																
D1	Web-site and Networks Establishment Programme	1.0																
D2	Technical Manuals Handling Guideline Establishment Programme	0.5																
D3	Information and Database Improvement Programme	1.5																
D4	Irrigation Development Conditions and Constraints Listing Programme	1.0																
D5	IGAS' Data Organization Programme	1.5																
D6	ICA Networking System Establishment Programme	1.0																
D7	Existing Scheme Monitoring System Establishment Programme	3.0																
E1.1	Irrigation Technology Research Center Establishment Programme	2.0																
E1.1.1	Periodical Irrigation Method Improvement Programme	1.5																
E1.1.2	Periodical Irrigation Method Improvement Programme	1.5																
E1.2	Flood Irrigation Development Programme	2.0																
E1.3	Small Dam Technology for Irrigation Development Programme	2.0																
E1.3.1	Environmental Assessment Study for Irrigation Practice in Tanzania	2.0																
E1.4	Study of River Basin Appropriate Irrigation Development	1.0																
E2	Hydraulic Experimental Center Establishment Programme	2.5																
E3	ISs Equipment Management System and Contractors Management System	1.5																
E4	Irrigation Development Contractors and Contractors Training Programme	1.5																
E5	Farmers' Participation Training Programme	1.0																
E5.1	Integrated Agriculture Training Programme for Rice Production Increase	3.0																
E5.2	Integrated Agriculture Training Programme for Cereals Production Increase	2.0																
E7	Integrated Irrigation Development Model Establishment Programme	3.0																
Long-term by 2017 Self-reliance																		
Similar studies were prepared so far in RBN, ASPS and PDP. Similar studies were prepared so far in RBN, ASPS and PDP.																		
Similar studies were prepared so far in RBN, ASPS and PDP. Similar studies have been taken in SVA and DDS.																		
Useful database have been prepared in SVA and DDS. Similar activities have been taken in RBN and ASPS.																		
Similar activities have been taken in RBN and ASPS.																		
Similar project has been implemented.																		
Scheme implementation by Central Government Scheme implementation in ECA-oriented 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