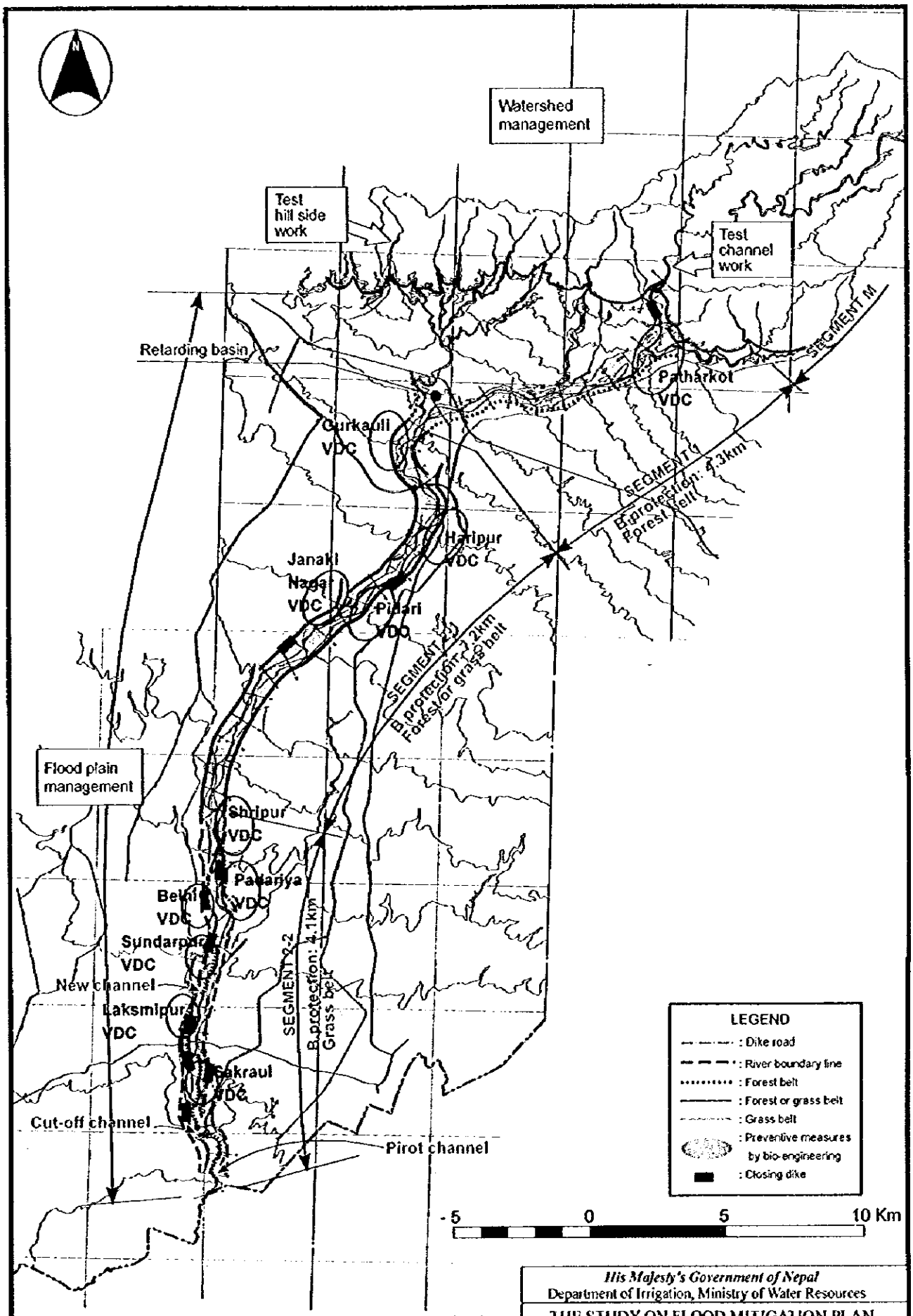
Fig. 7.1

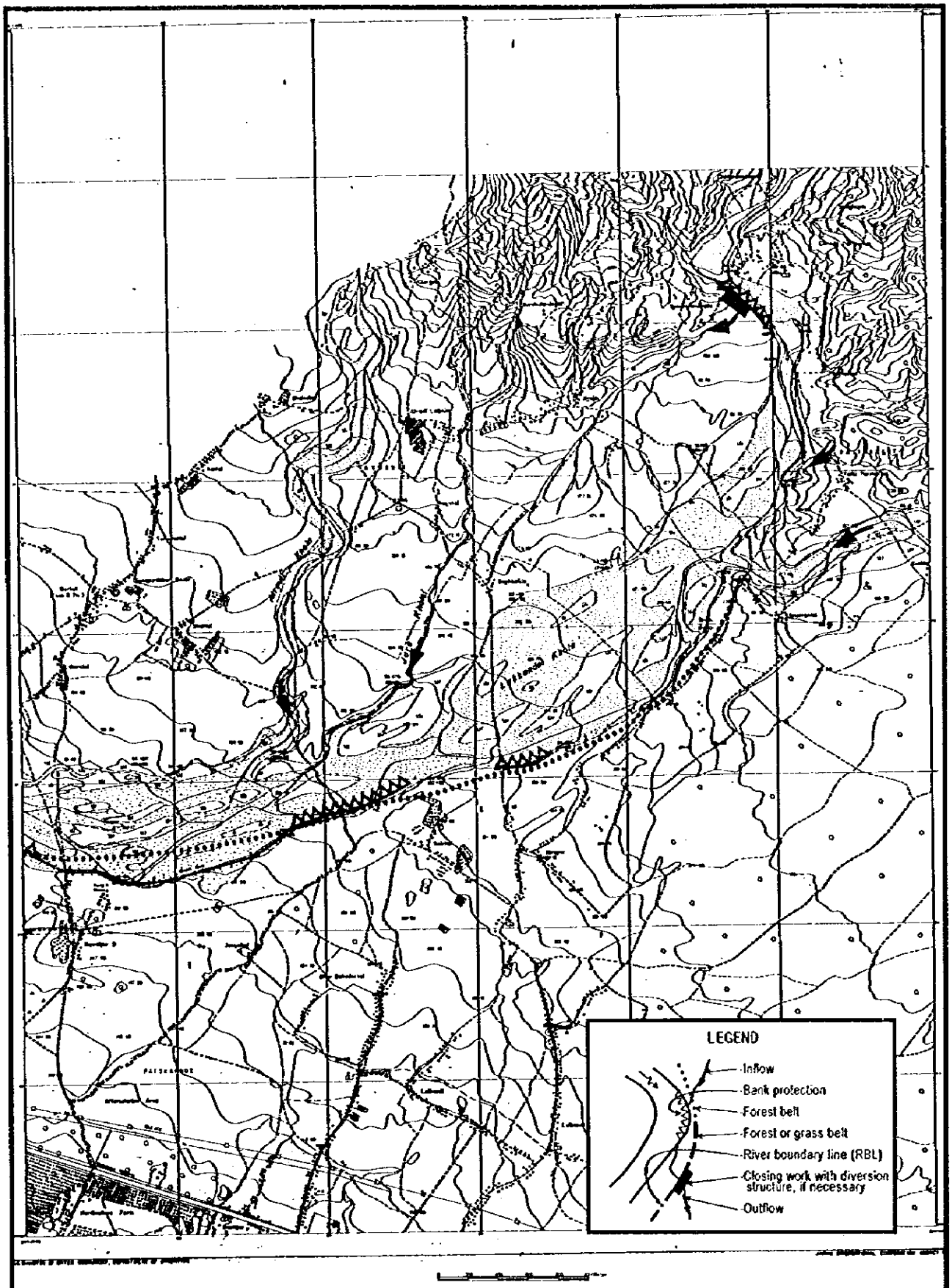


GENERAL LOCATION MAP: Lakhandei River

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources

THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL

JAPAN INTERNATIONAL COOPERATION AGENCY

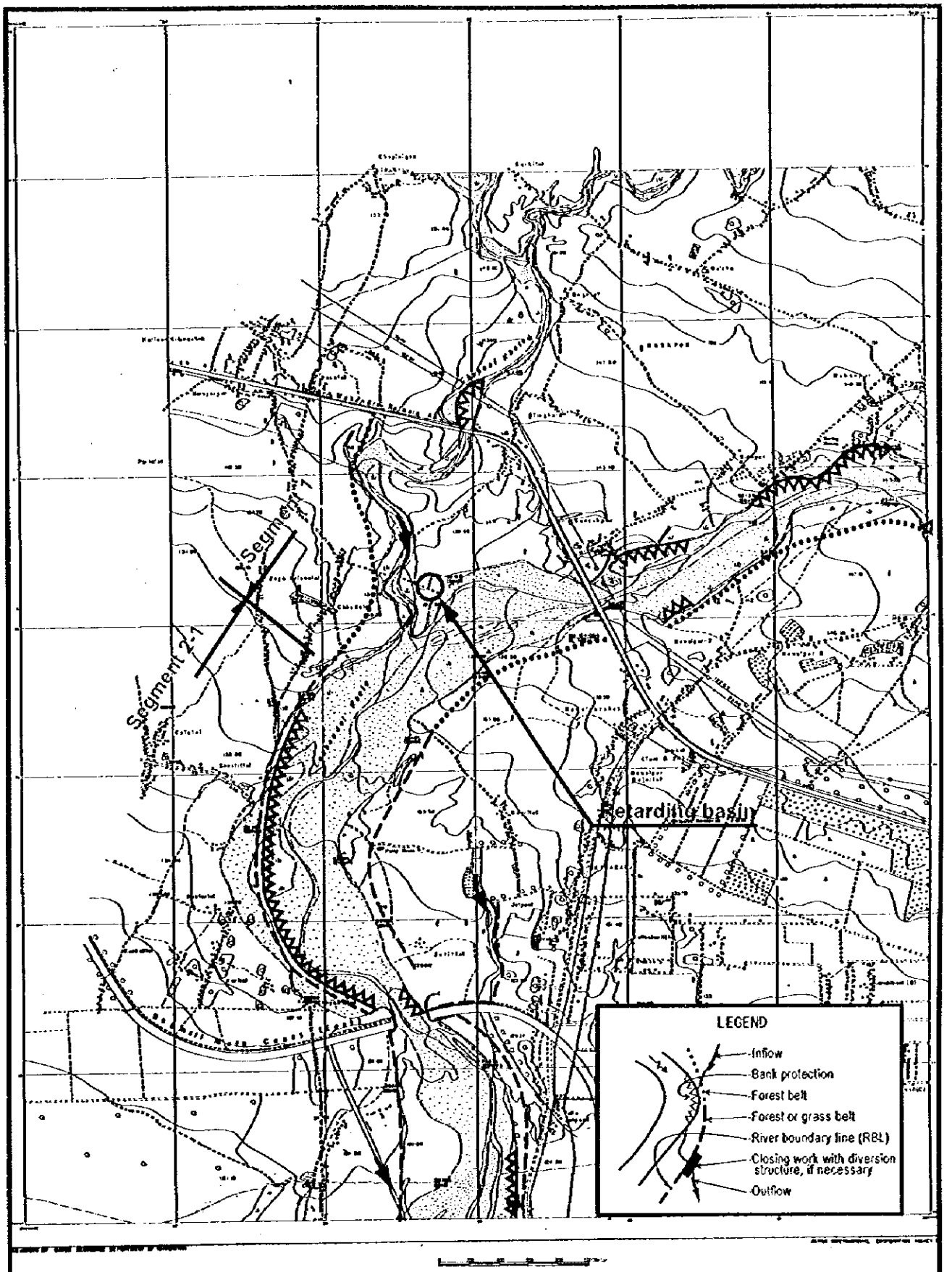


LAYOUT PLAN FOR FLOOD MITIGATION
Lakhandei River (1/6)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources

THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL

JAPAN INTERNATIONAL COOPERATION AGENCY

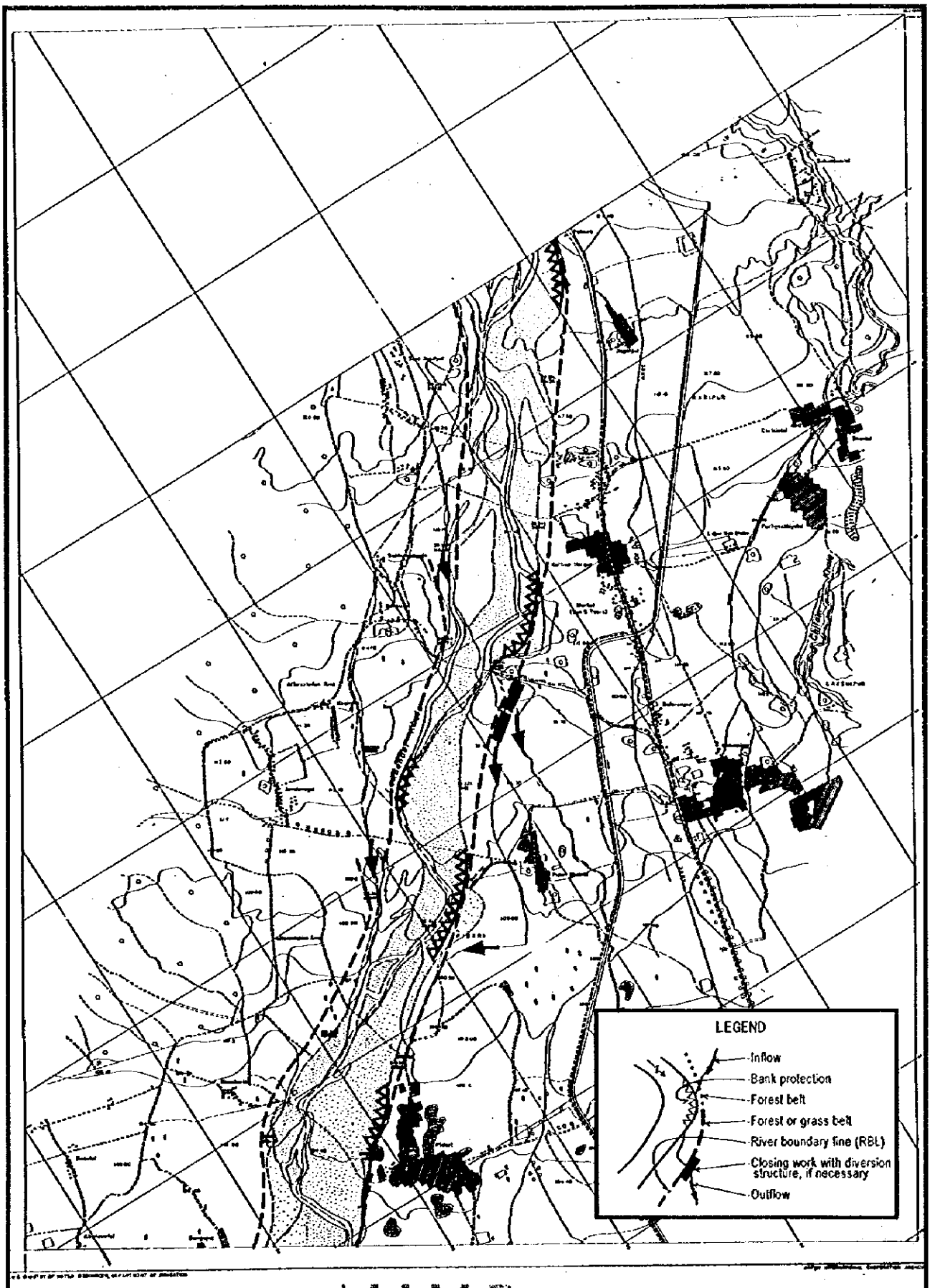


LAYOUT PLAN FOR FLOOD MITIGATION
Lakhandehi River (2/6)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources

THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL

JAPAN INTERNATIONAL COOPERATION AGENCY

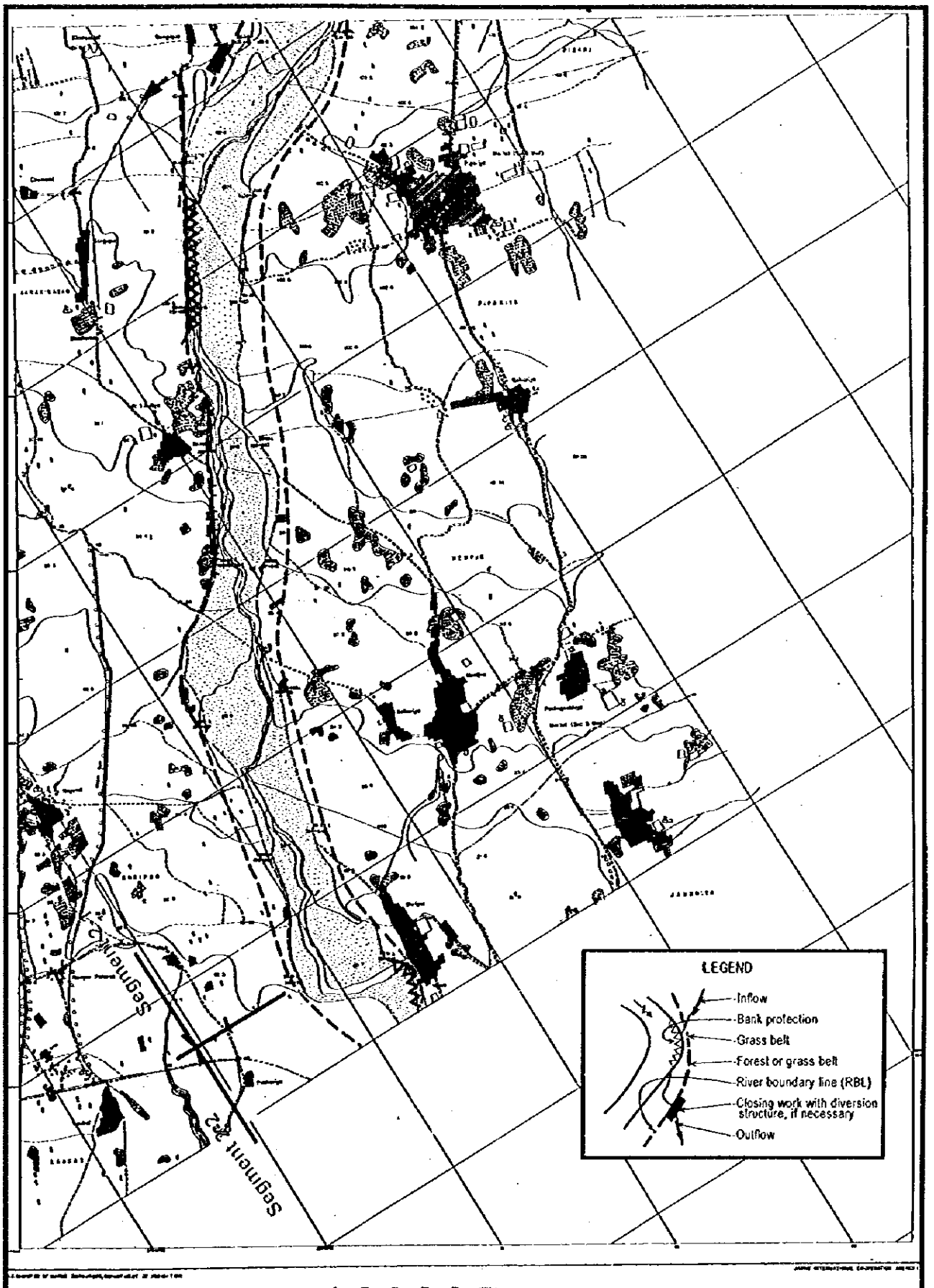


LAYOUT PLAN FOR FLOOD MITIGATION
Lakhandei River(3/6)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources

THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL

JAPAN INTERNATIONAL COOPERATION AGENCY

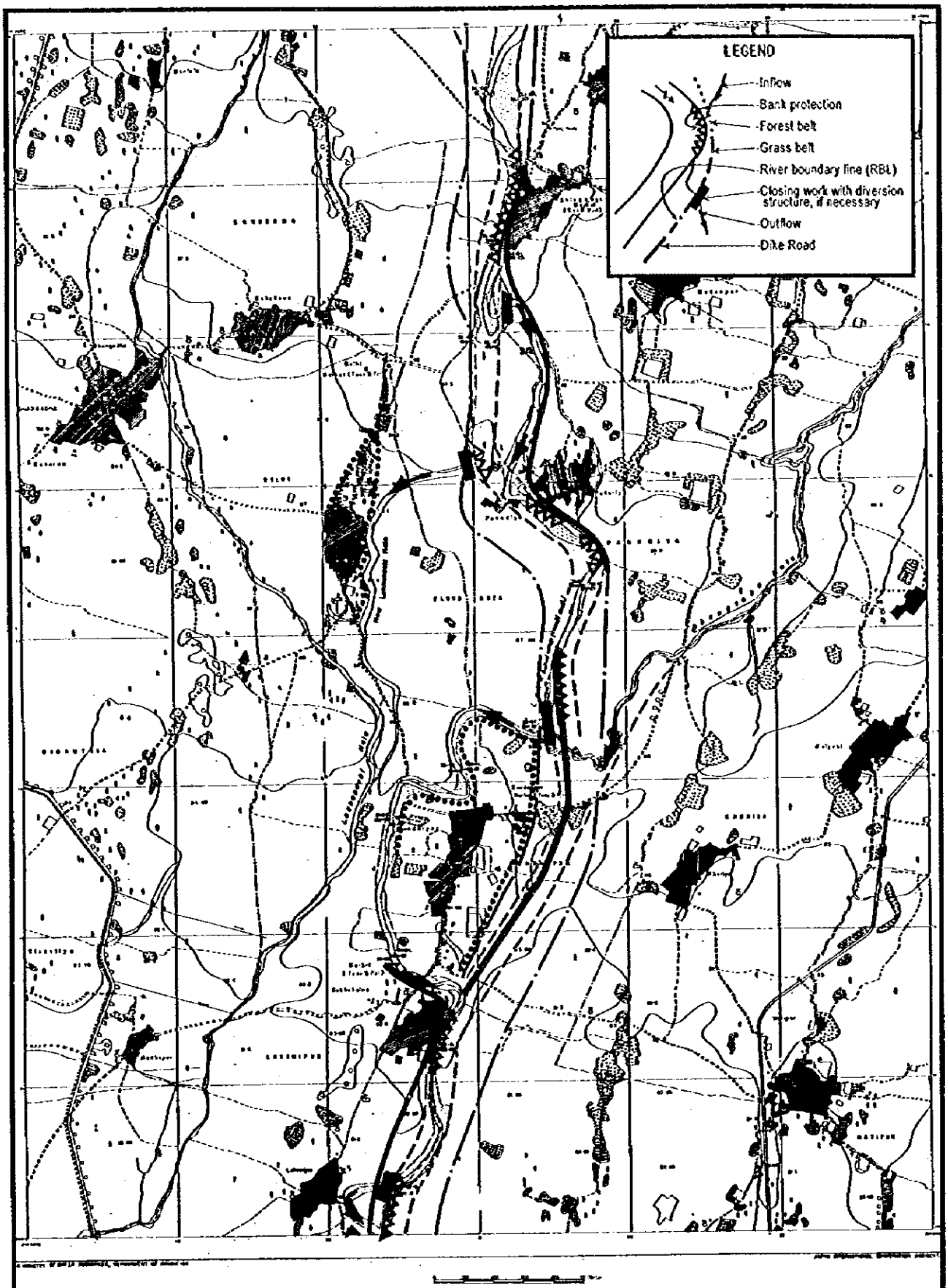


LAYOUT PLAN FOR FLOOD MITIGATION
Lakhandehi River (4/6)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources

THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL

JAPAN INTERNATIONAL COOPERATION AGENCY

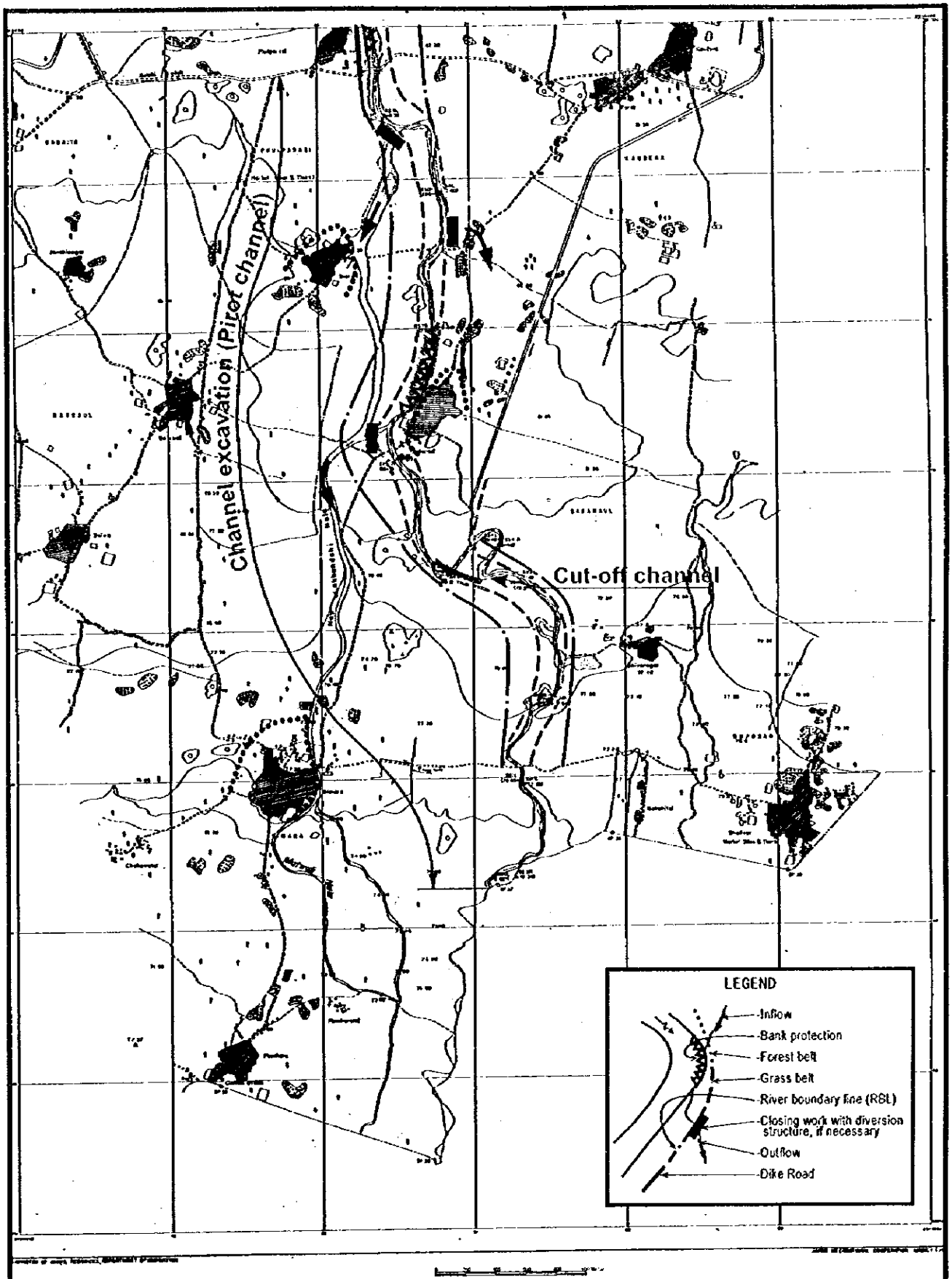


LAYOUT PLAN FOR FLOOD MITIGATION
Lakhandei River (5/6)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources

THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL

JAPAN INTERNATIONAL COOPERATION AGENCY

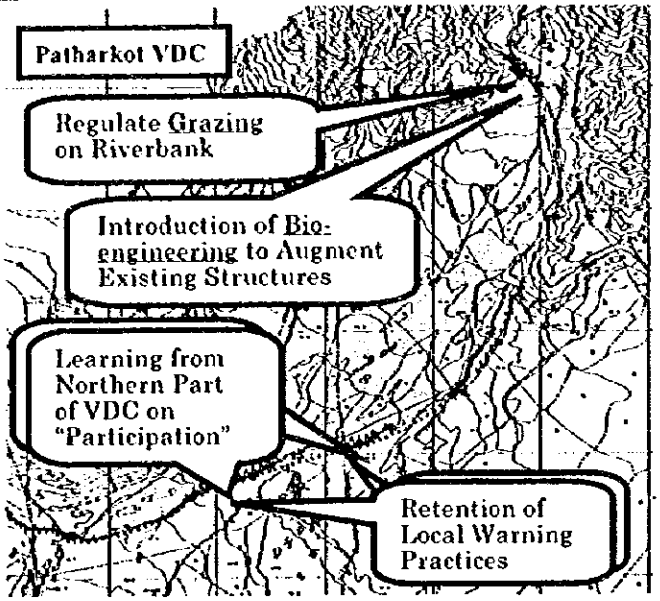


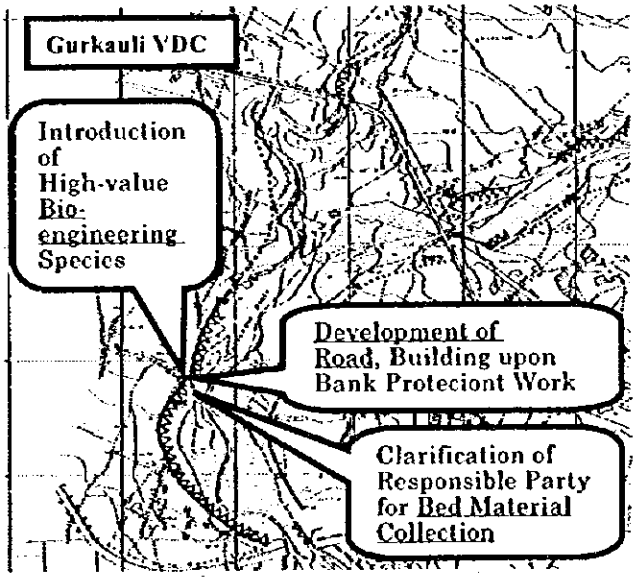
LAYOUT PLAN FOR FLOOD MITIGATION
Lakhandei River (6/6)

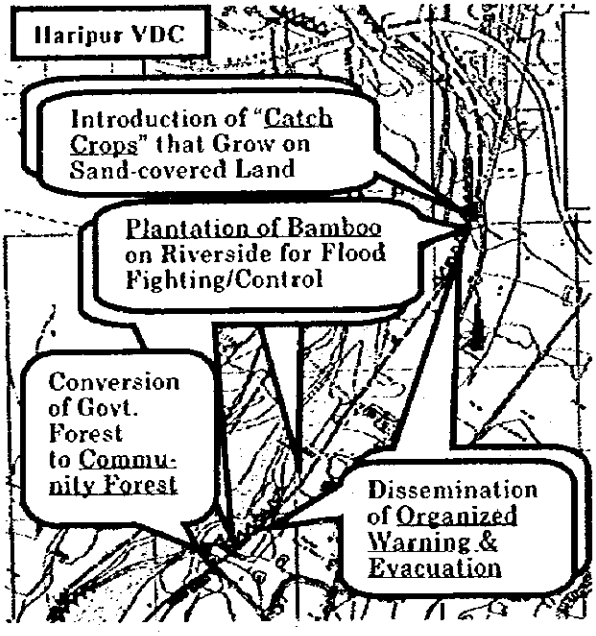
His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources

THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL

JAPAN INTERNATIONAL COOPERATION AGENCY

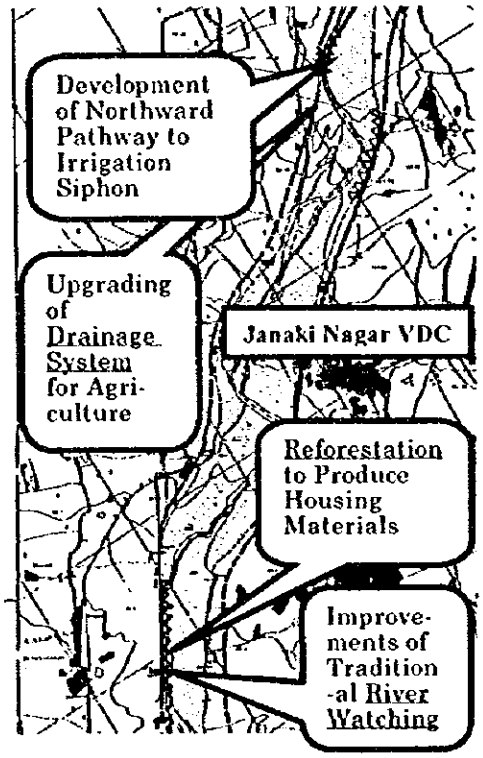


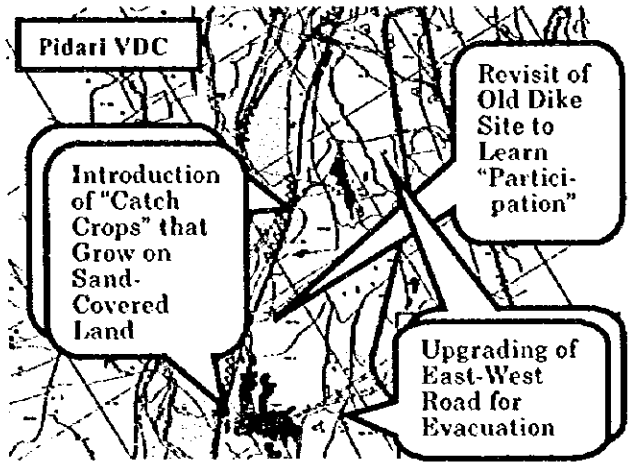


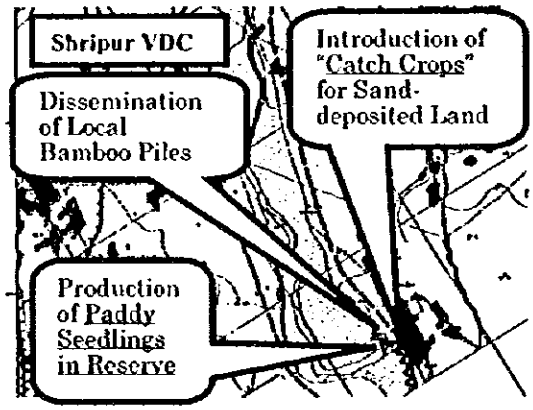


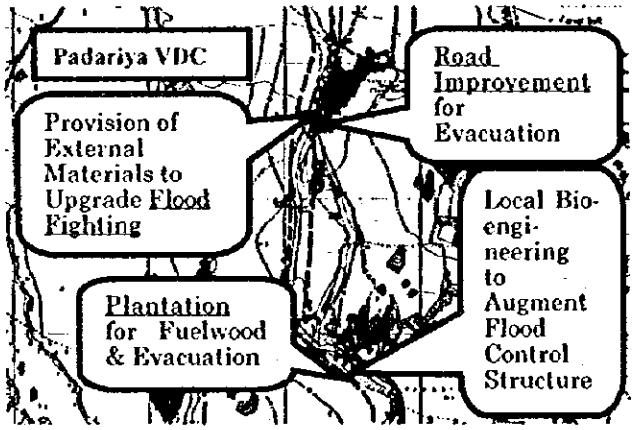
COMMUNITY DEVELOPMENT COMPONENT (LAKHANDEI R.)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources
THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL
JAPAN INTERNATIONAL COOPERATION AGENCY



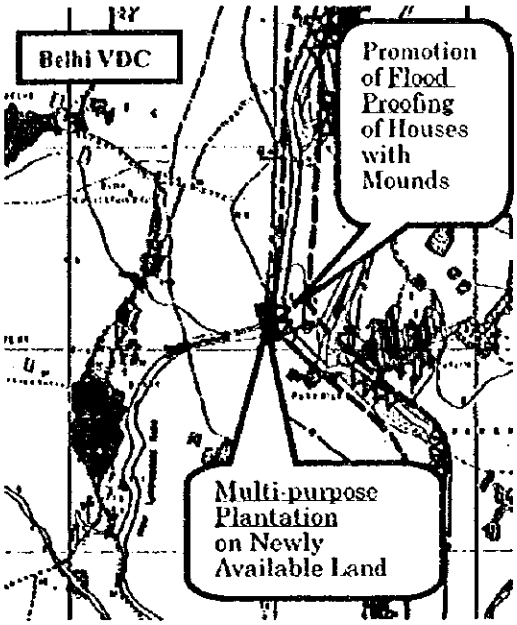


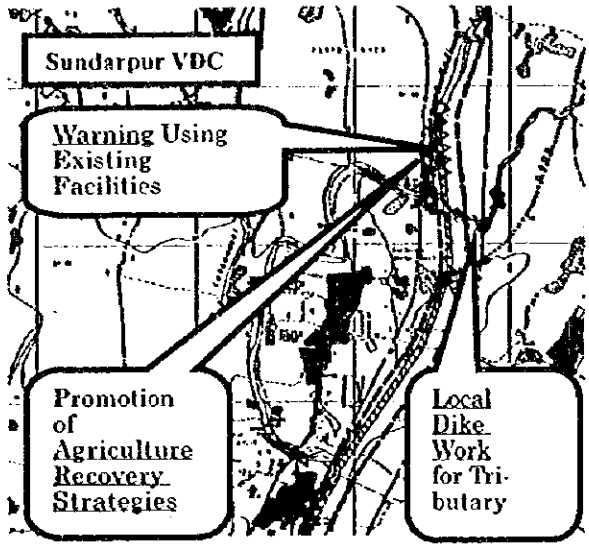


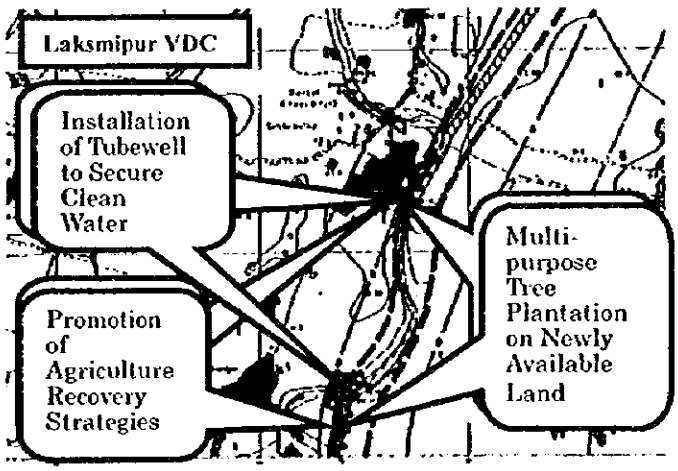


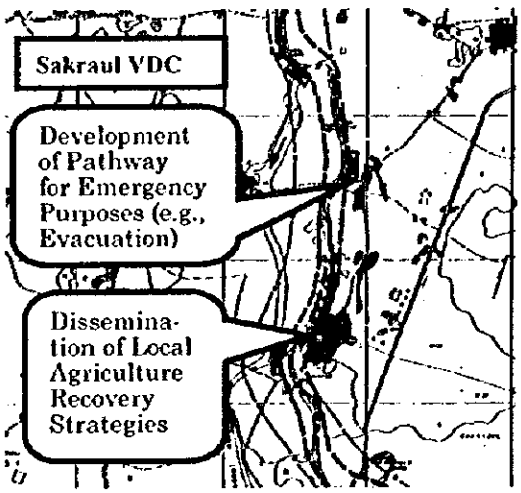
COMMUNITY DEVELOPMENT COMPONENT (LAKHANDEI R.)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources
THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL
JAPAN INTERNATIONAL COOPERATION AGENCY





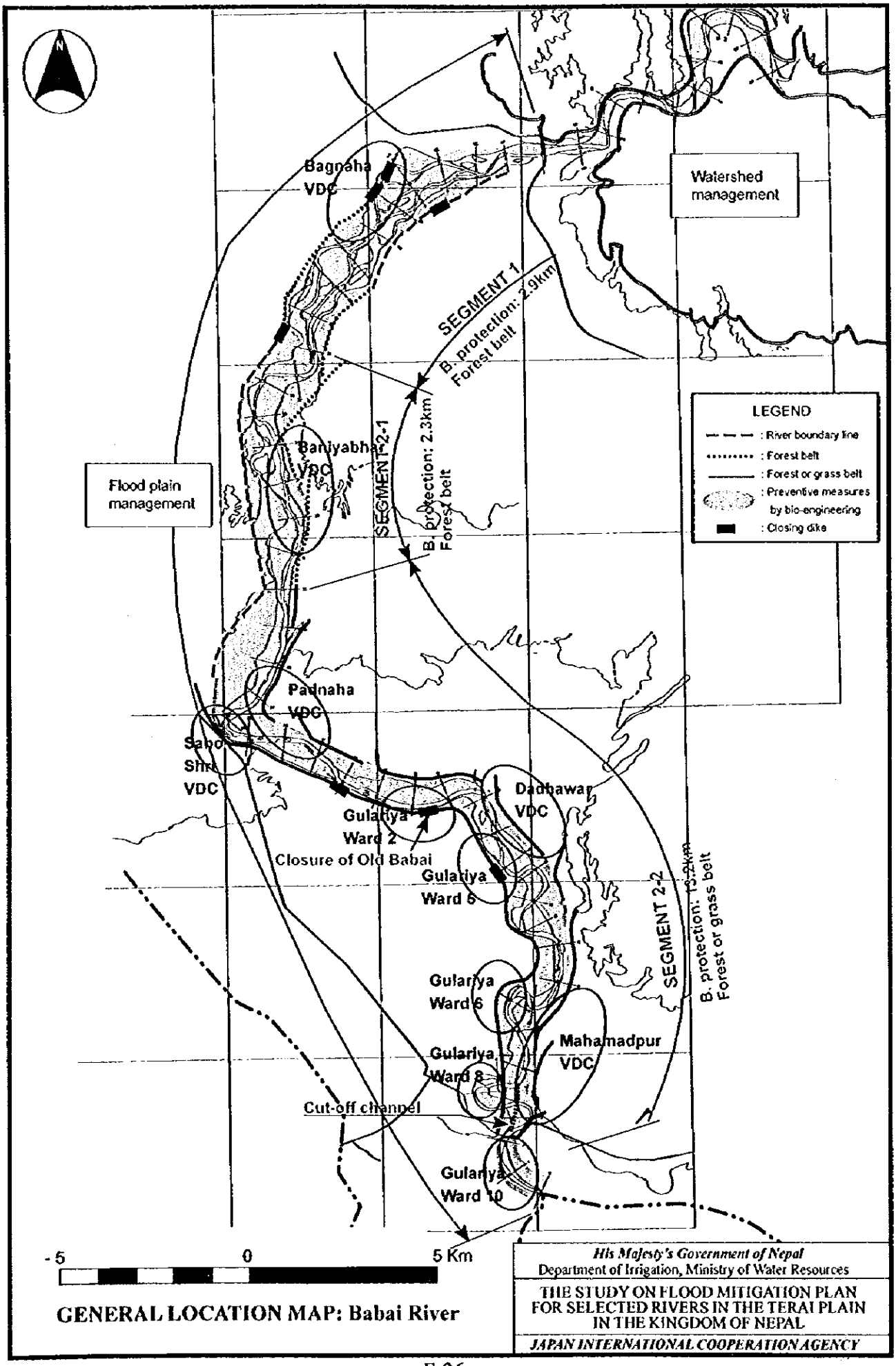




COMMUNITY DEVELOPMENT COMPONENT (LAKHANDEI R.)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources
THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig.7.4

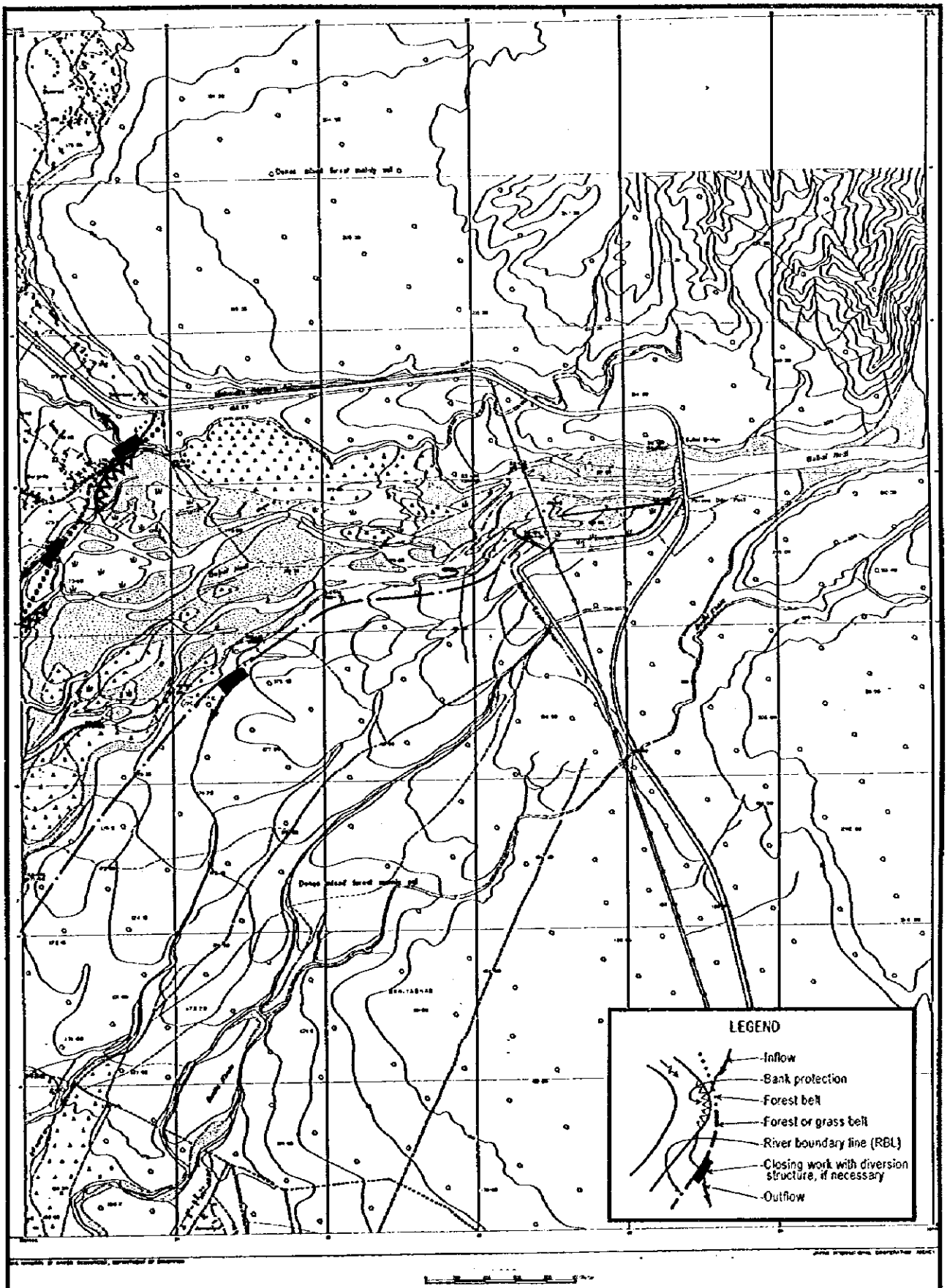


GENERAL LOCATION MAP: Babai River

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources

THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL

JAPAN INTERNATIONAL COOPERATION AGENCY

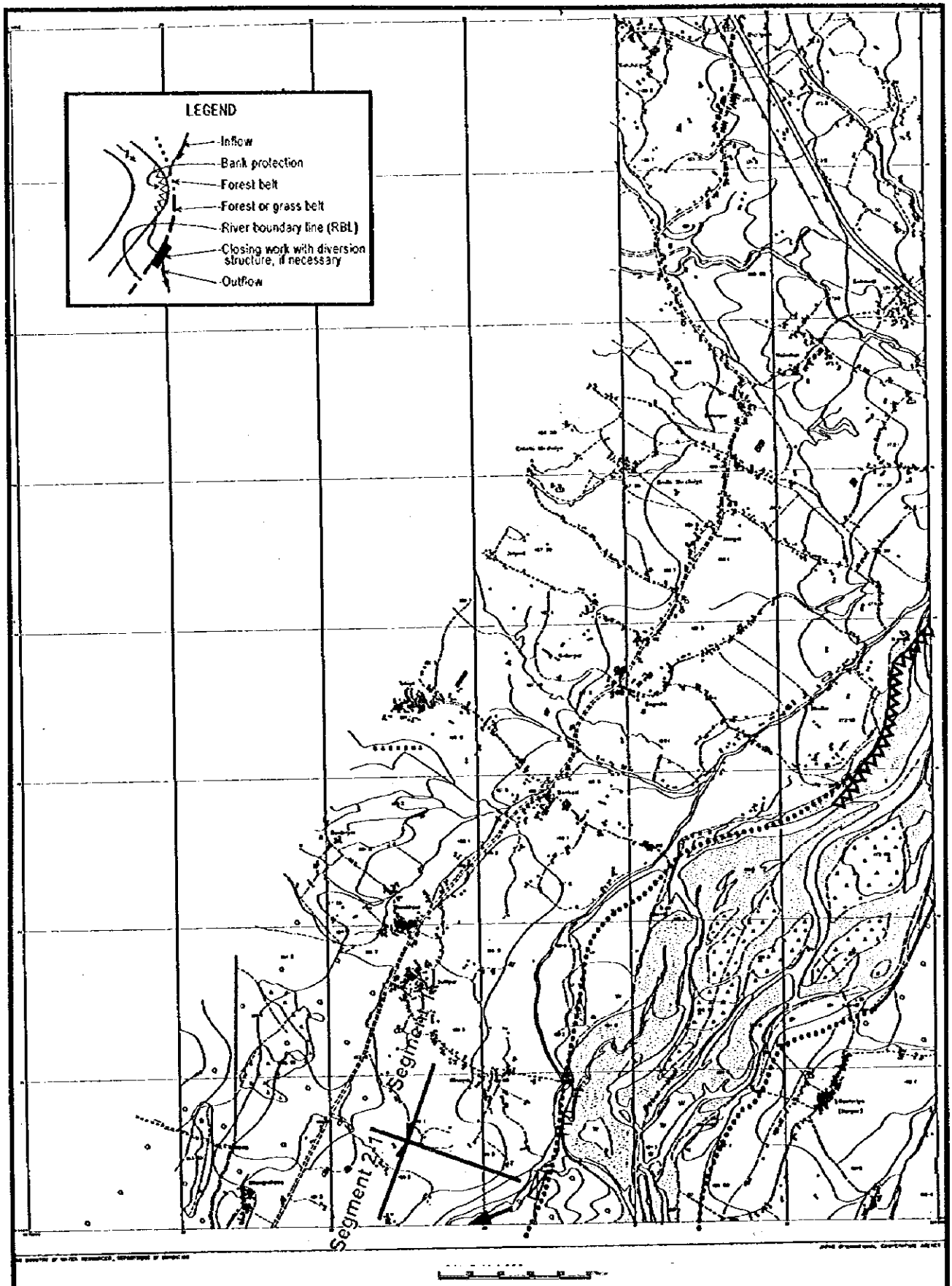


LAYOUT PLAN FOR FLOOD MITIGATION
Babai River (1/7)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources

THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL

JAPAN INTERNATIONAL COOPERATION AGENCY

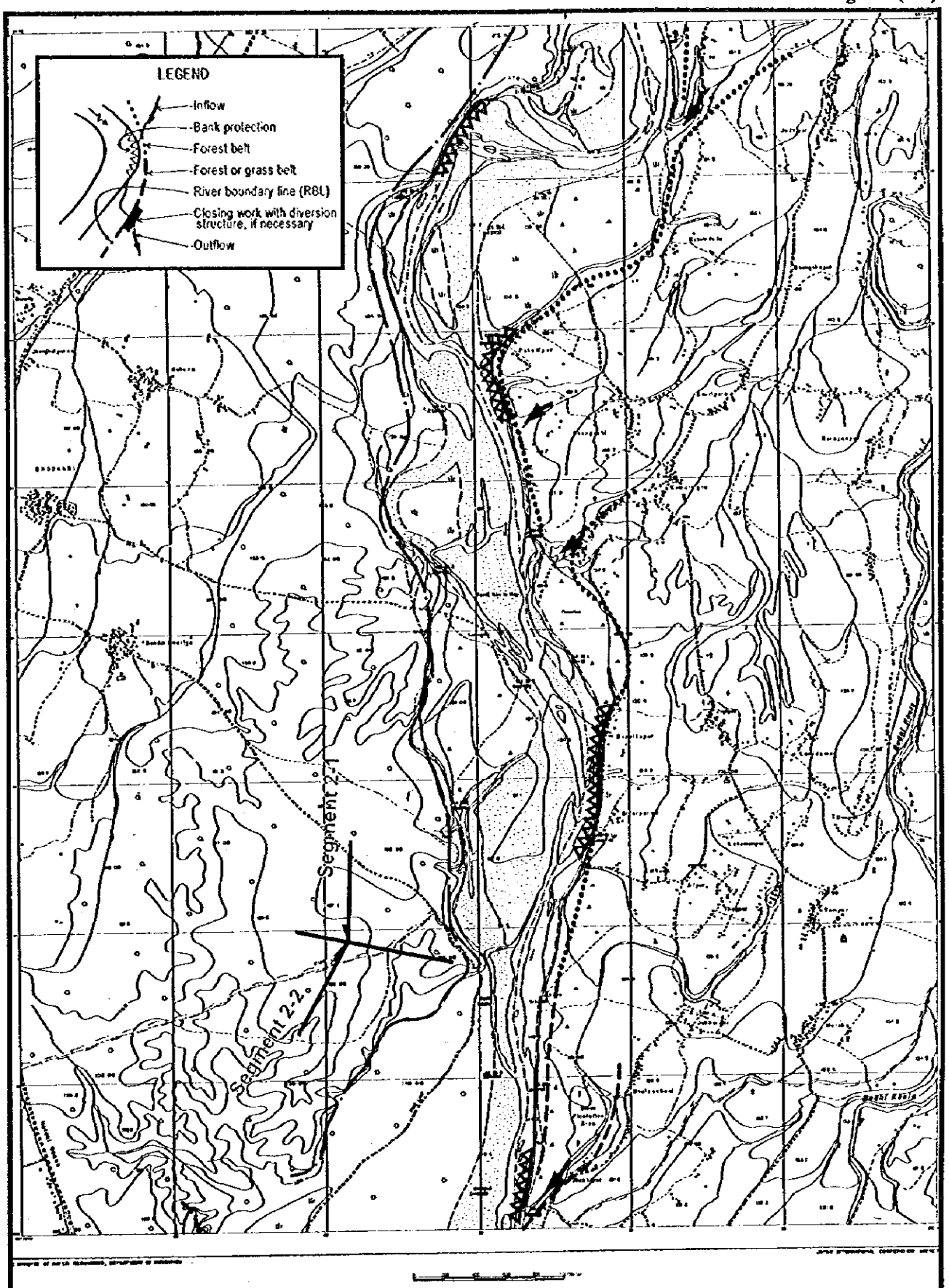


LAYOUT PLAN FOR FLOOD MITIGATION
Babai River (2/7)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources

THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL

JAPAN INTERNATIONAL COOPERATION AGENCY

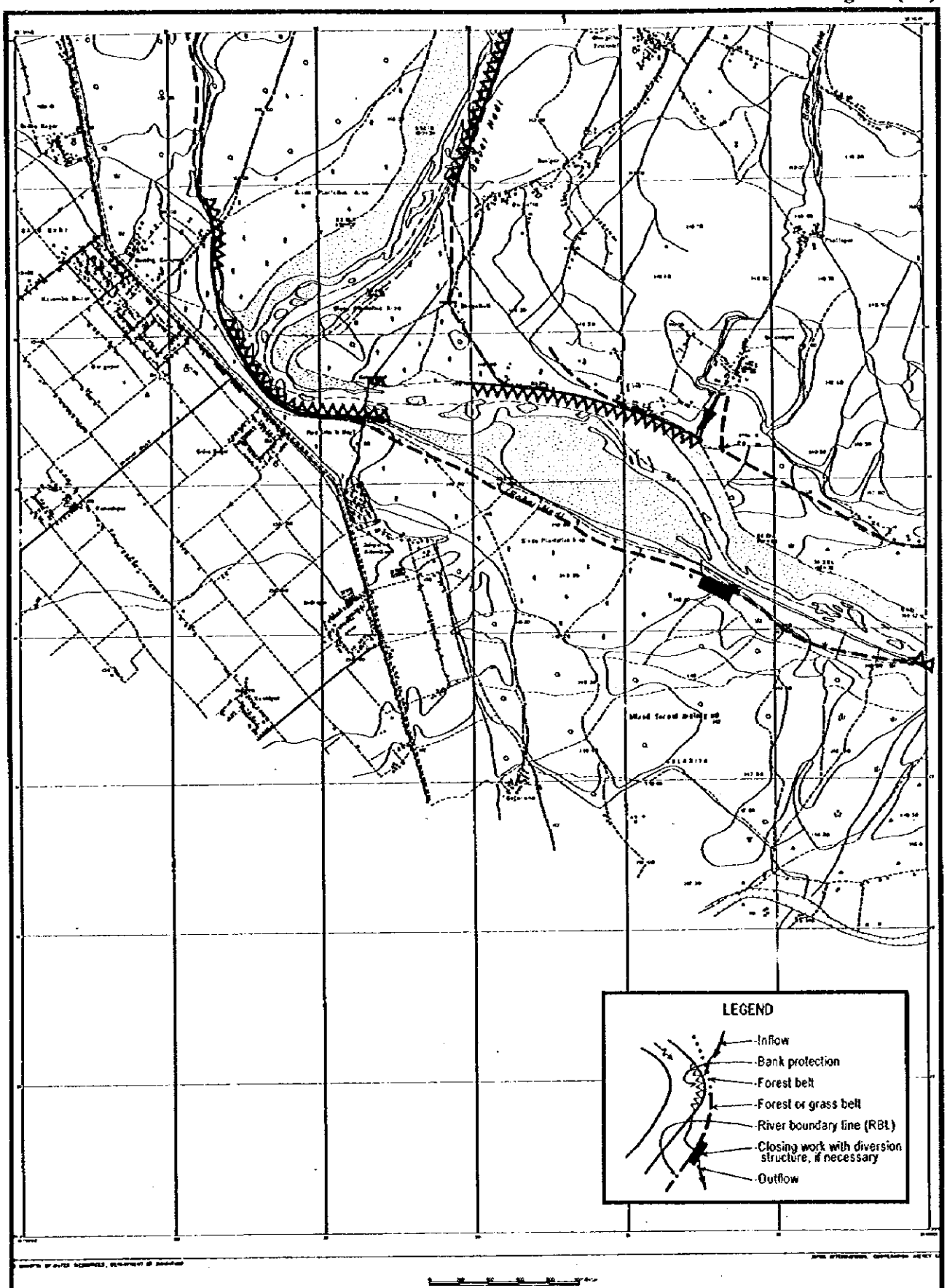


LAYOUT PLAN FOR FLOOD MITIGATION
Babai River (3/7)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources

THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL

JAPAN INTERNATIONAL COOPERATION AGENCY

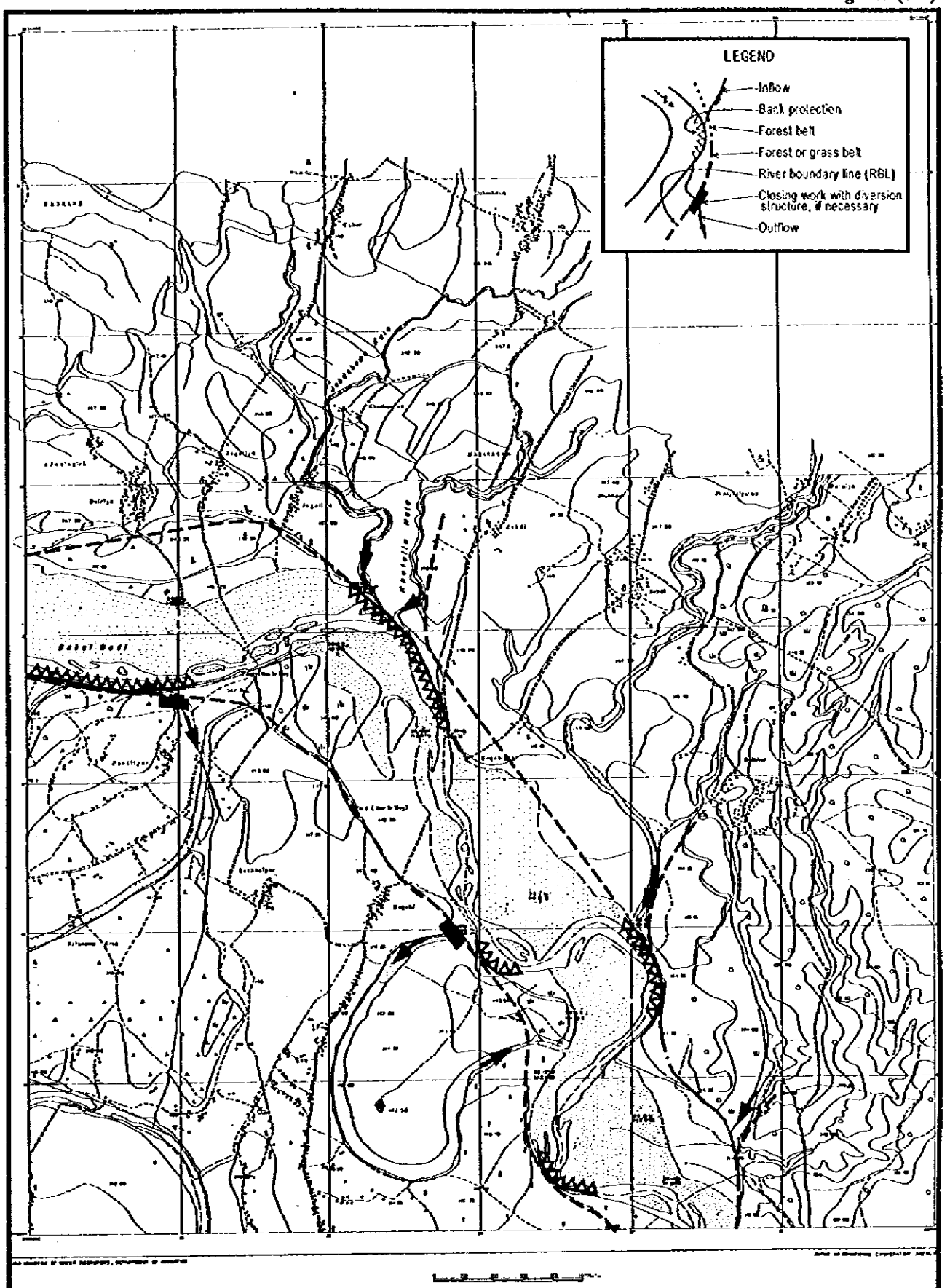


LAYOUT PLAN FOR FLOOD MITIGATION
Babai River (4/7)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources

THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL

JAPAN INTERNATIONAL COOPERATION AGENCY

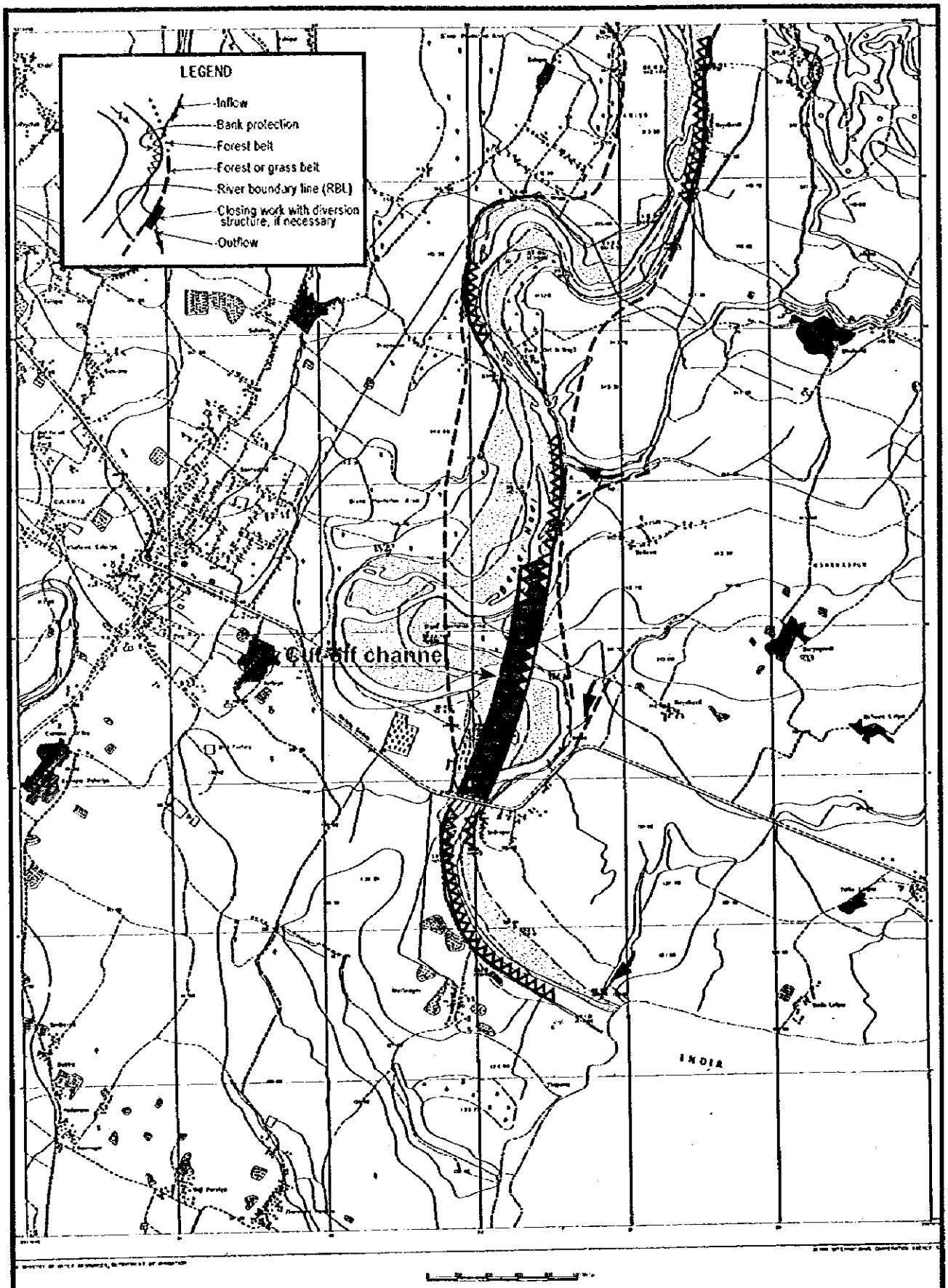


LAYOUT PLAN FOR FLOOD MITIGATION
Babai River (5/7)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources

THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL

JAPAN INTERNATIONAL COOPERATION AGENCY

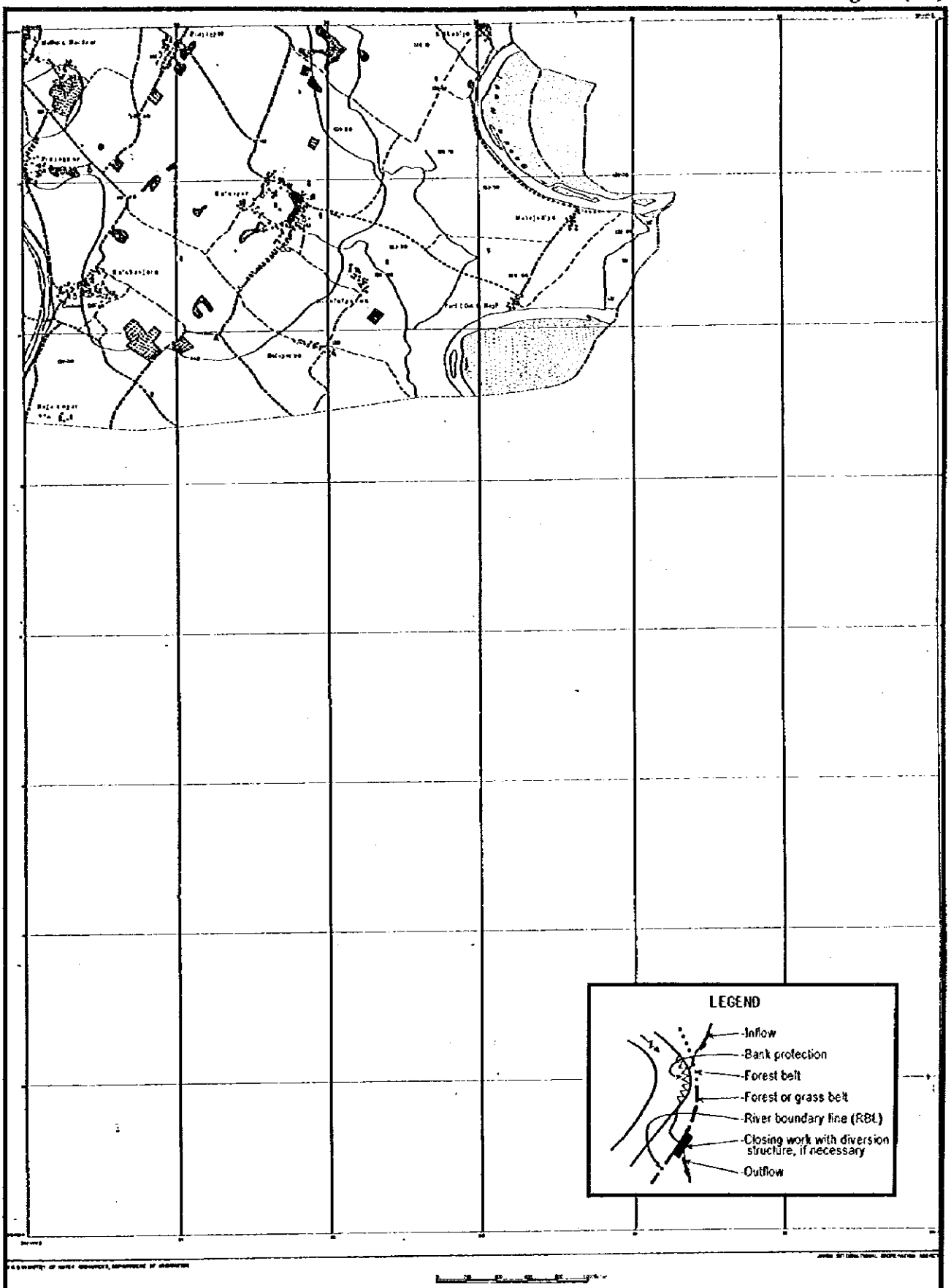


LAYOUT PLAN FOR FLOOD MITIGATION
Babai River (6/7)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources

THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL

JAPAN INTERNATIONAL COOPERATION AGENCY

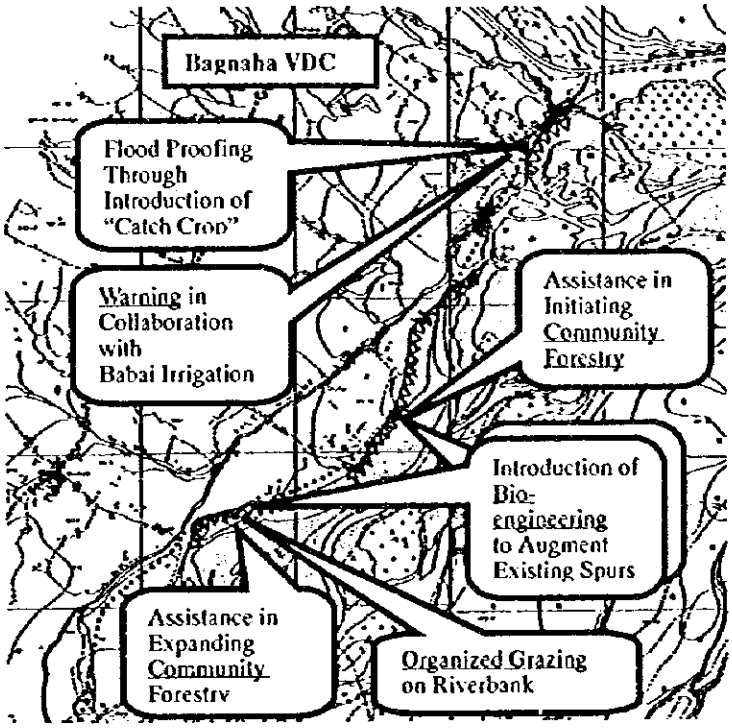


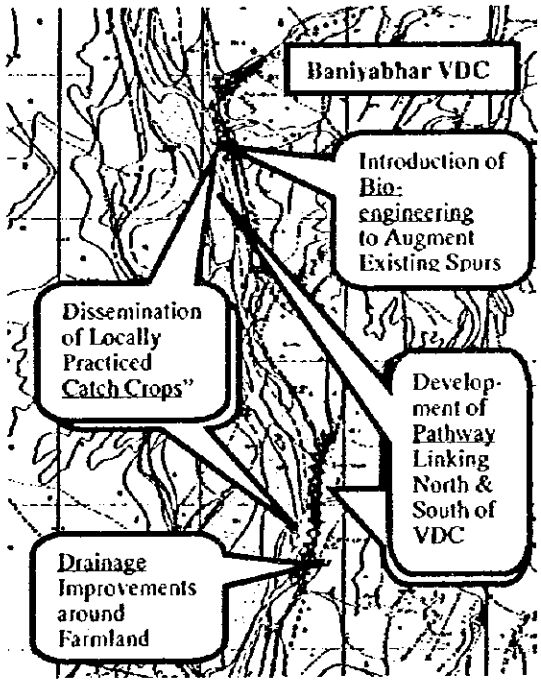
LAYOUT PLAN FOR FLOOD MITIGATION
Babai River (7/7)

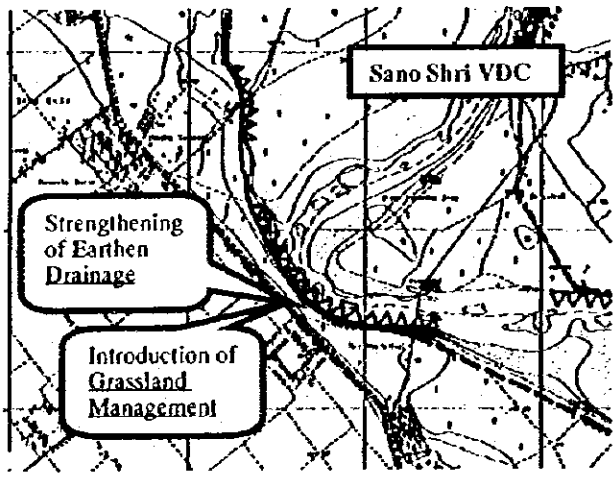
His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources

THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL

JAPAN INTERNATIONAL COOPERATION AGENCY







COMMUNITY DEVELOPMENT COMPONENT (BABAI R.)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources
THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL
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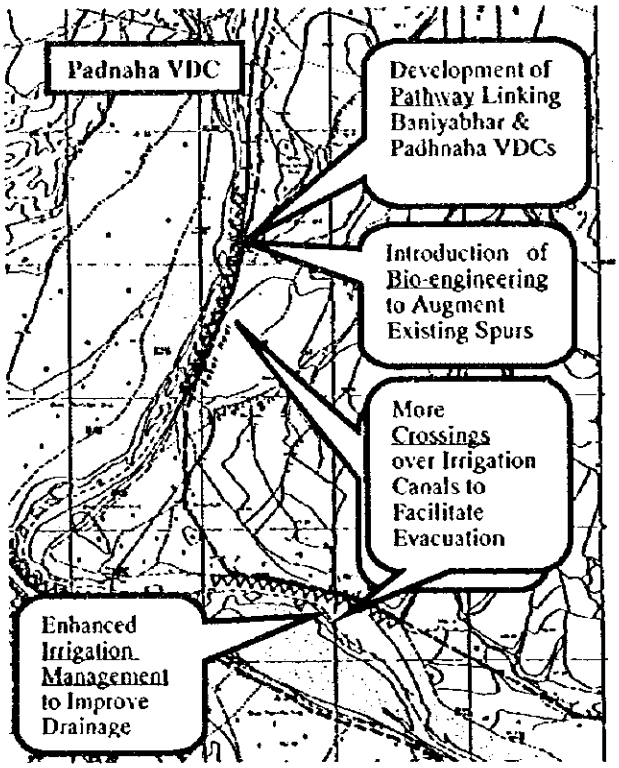

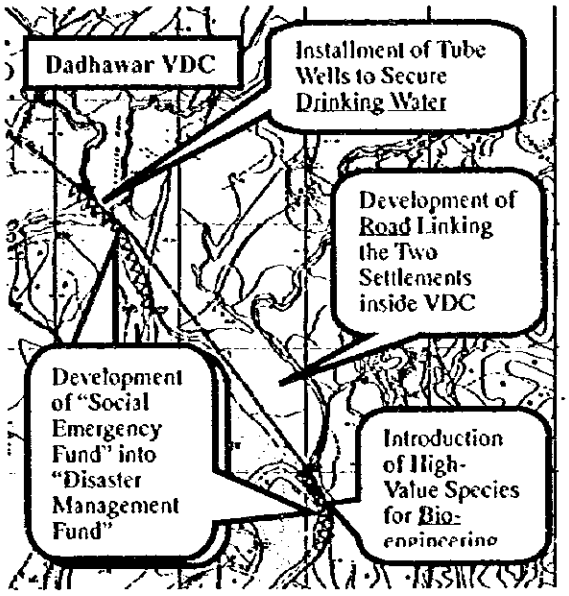

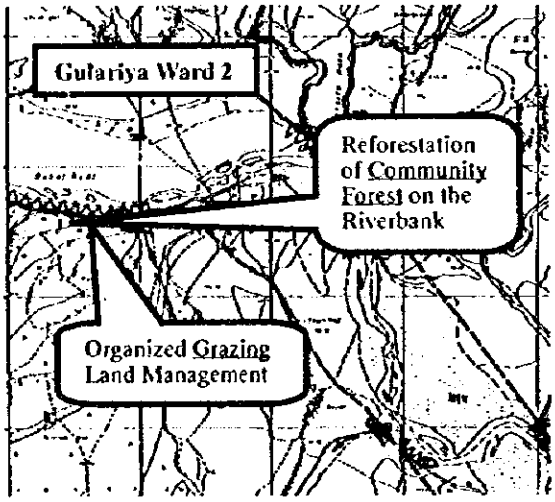

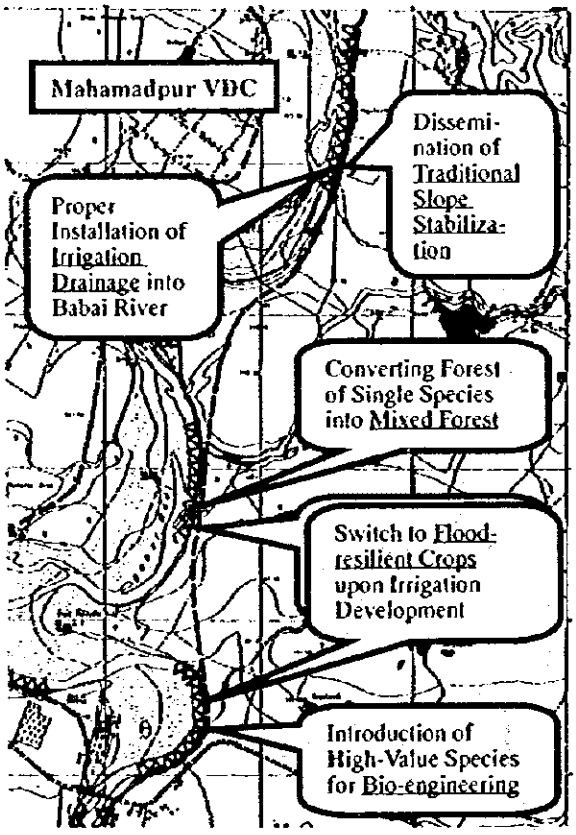

COMMUNITY DEVELOPMENT COMPONENT (BABAI R.)

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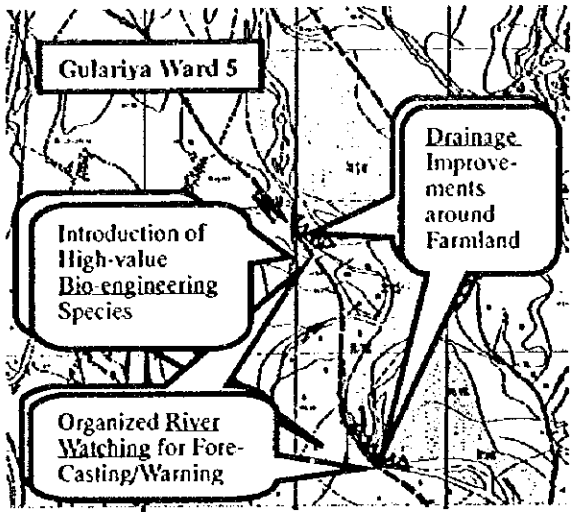
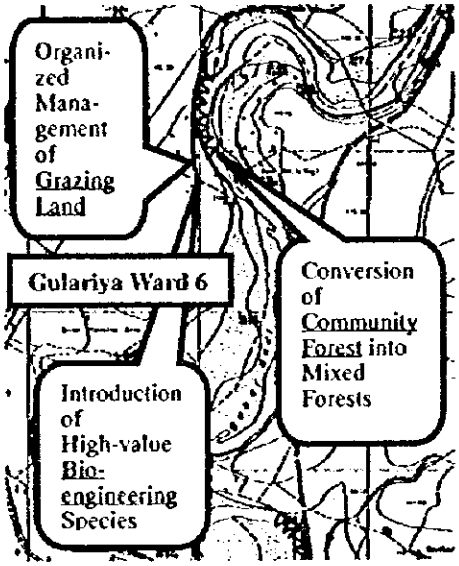
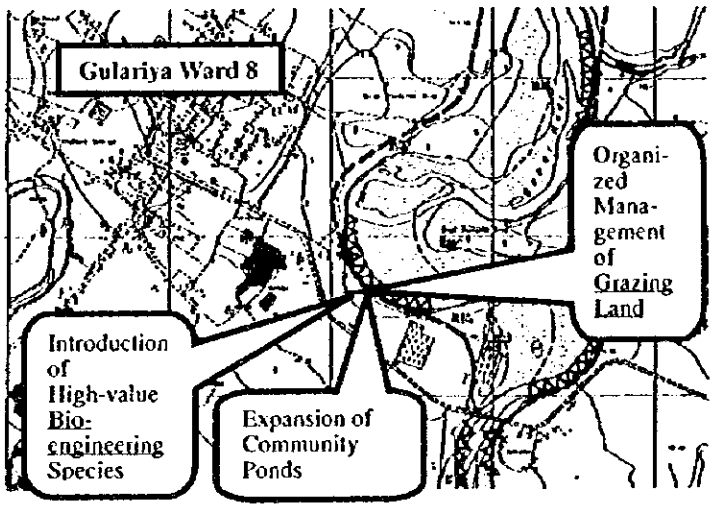
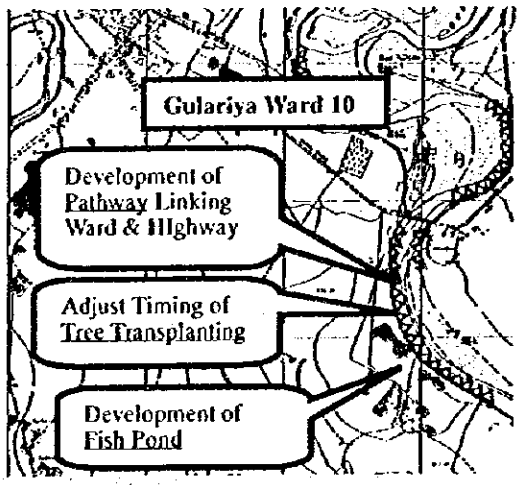
Department of Irrigation, Ministry of Water Resources
THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL
JAPAN INTERNATIONAL COOPERATION AGENCY









COMMUNITY DEVELOPMENT COMPONENT (BABAI R.)

His Majesty's Government of Nepal
Department of Irrigation, Ministry of Water Resources
THE STUDY ON FLOOD MITIGATION PLAN FOR SELECTED RIVERS IN THE TERAI PLAIN IN THE KINGDOM OF NEPAL
JAPAN INTERNATIONAL COOPERATION AGENCY

Work Component and Items	1st.Phase(9th plan) (1997-2002)					2nd.Phase(10th plan) (2002-2007)					3rd.Phase (11-12th plan) (2007-2017)
	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	
PREPARATORY WORKS											
Master plan/ feasibility study											
Fund arrangement											
Definite plan/detailed design, etc											
Preservation of land											
Coordination among agencies/communities											
WATERSHED MANAGEMENT COMPONENT											
Afforestation and Land use Regulation											
Publicity activities											
RIVER CONTROL COMPONENT											
Channel treatment works:											
Branch/anabranch works											
Bank protection works:											
Groyne/revetment works											
Dike works:											
Forest/grass belt works											
Cut-off channel works											
Land use regulation:											
Flood hazard map											
Conservation of channel storage											
COMMUNITY DEVELOPMENT COMPONENT											
Community mobilization:											
Workshop for local government leaders											
Formation of COs											
Formation of inter-CO groups											
Disaster relief fund/ group saving											
Promotion of public awareness											
Local coping measures:											
Land use regulation											
Flood proofing											
Flood forecasting and warning											
Evacuation											
Flood fighting											
Community-based sustainable mesures:											
Bank protection works:											
- Preventive bank protection works											
Dike works:											
- Forest/grass belt works											
Channel excavation works:											
- Bed material collection											
Opration & maintenance of F.M. facilities											
ASSOCIATE ACTIVITIES											
Research/investigation:											
Technical guidance:											

IMPLEMENTATION SCHEDULE: BABAI RIVER

Work Component and Items	1st.Phase(9th plan) (1997-2002)					2nd.Phase(10th plan) (2002-2007)					3rd.Phase (11-12th plan) (2007-2017)
	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	
PREPARATORY WORKS											
Master plan/ feasibility study	■	■									
Fund arrangement			■	■							
Definite plan/detailed design, etc				■	■						
Preservation of land					■	■					
Coordination among agencies/communities			■	■	■	■	■	■	■	■	■
WATERSHED MANAGEMENT COMPONENT											
Erosion control works:											
Erosion control test works						■	■	■	■	■	■ ■ ■ ■ ■ ■
Afforestation and Land use Regulation			■	■	■	■	■	■	■	■	■
Publicity activities			■	■	■	■	■	■	■	■	■
RIVER CONTROL COMPONENT											
Channel treatment works:											
Branch/anabranch works						■	■	■			
Re-alignment of river channel						■	■	■			
Bank protection works:											
Groyne/revetment works						■	■	■			
Dike works:											
Forest/grass belt pilot works						■	■	■			
Dike road works						■	■	■			
Ring dike works						■	■	■			
Channel excavation works:											
Pilot channel works						■	■	■			
Land use regulation:											
Flood hazard map				■							
Conservation of channel storage						■	■	■	■	■	■
COMMUNITY DEVELOPMENT COMPONENT											
Community mobilization:											
Workshop for local government leaders				■							
Formation of COs				■							
Formation of inter-CO groups				■							
Disaster relief fund/ group saving				■	■	■	■	■	■	■	■ ■ ■ ■ ■ ■
Promotion of public awareness				■	■	■	■	■	■	■	■ ■ ■ ■ ■ ■
Local coping measures:											
Land use regulation				■	■	■	■	■	■	■	■ ■ ■ ■ ■ ■
Flood proofing				■	■	■	■	■	■	■	■ ■ ■ ■ ■ ■
Flood forecasting and warning				■	■	■	■	■	■	■	■ ■ ■ ■ ■ ■
Evacuation				■	■	■	■	■	■	■	■ ■ ■ ■ ■ ■
Flood fighting				■	■	■	■	■	■	■	■ ■ ■ ■ ■ ■
Community-based sustainable measures:											
Bank protection works:											
- Preventive bank protection works					■	■	■	■	■	■	■ ■ ■ ■ ■ ■
Dike works:											
- Forest/grass belt works					■	■	■	■	■	■	■ ■ ■ ■ ■ ■
Channel excavation works:											
- Bed material collection					■	■	■	■	■	■	■ ■ ■ ■ ■ ■
Opration & maintenance of F.M. facilities					■	■	■	■	■	■	■
ASSOCIATE ACTIVITIES											
Research/investigation:			■	■	■	■	■	■	■	■	■
Technical guidance:			■	■	■	■	■	■	■	■	■

IMPLEMENTATION SCHEDULE: LAKHANDEI RIVER

JICA