

Shared Water Challenges

ลำดับ	Water Challenges from Stakeholders	Stakeholders	Operational Guidelines of Relevant Stakeholders	TCP Action Plans/Opportunities in Collaboration with Stakeholders	Implementers	Cost impact	Impact (1 = minor, 2 = moderate, 3 = major)	Proability (1 = unlikely, 2 = possible, 3 = likely)	Risk Value (Impact x Proability)
1	Impacts from climate change, such as flooding, increasingly severe storms, drought, and saltwater intrusion (Climate change impact on water source timeline, Climate change impact on disaster, and Climate change impact on water source quality)	Communities Bang Tean, Moo 1-13	1. Establish rain warning stations 2. Monitor water quality alerts 3. Select appropriate seeds 4. Increase water storage 5. Empower water user groups	1. Dredge channels affected by invasive plants (done by WWF) 2. Regular maintenance of sluice gates (done by WWF) 3. Support farmer registration	TCP SD Team / WWF	1,200,000	2	2	4
		Office of Agriculture, Ban Sang	1. Support farmer registration for damage relief 2. Collect information and communicate with farmers 3. Promote Alternate Wetting and Drying Methods rice farming	Support Rice Research Center in promoting Alternate Wetting and Drying Methods rice farming.	Office of Agriculture, Ban Sang	-	1	1	1
		Administrative Office, Bang Tean	1. Maintain water balance for local demands 2. Emergency flood aid distribution	1. Install water pumps at 10 key points to reduce flood damage to Bang Tan rice fields. 2. Bang Tean SAO pumps fresh water into branch canals for residents. 3. Form water user committee with leaders to inform about saltwater intrusion and flooding.	Administrative Office, Bang Tean/ TCP SD Team/ WWF	100,000	2	3	6
		Irrigation Office, Prachinburi Project for Water Delivery and Maintenance: Bang Pluang (Water Delivery and Maintenance Division 3)	1. Control sluice gates to prevent saltwater intrusion 2. Maintain flood management	1. Monitor weather forecasts to establish preparedness measures. 2. Check Navy tide information for water gate operation and water allocation, preventing saltwater damage. 3. Use headman meetings for flood warnings, evacuation notices, and coordinating with agencies.	Irrigation Office, Prachinburi Project for Water Delivery and Maintenance: Bang Pluang (Water Delivery and Maintenance Division 3)	-	2	3	6
		Ban Sang District	Coordinate various agencies to work smoothly in response to people's needs in Ban Sang District, an area affected by flooding, drought, and saltwater intrusion	1. Use subdistrict headman meetings to communicate with villagers for flood warnings, evacuation notices, and saltwater surge preparation in coordination with relevant agencies 2. Partner with TCP for canal dredging and aquatic conservation. 3. Survey flood-affected households for Interior Ministry compensation. 4. Assess water situations with communities to coordinate responses to flooding, drought, and saltwater.	Ban Sang District	-	2	3	6
2	Aquatic weeds (water hyacinth) obstructing waterways (Infrastructure and water flow)	Communities Bang Tean, Moo 1-13	1. Dredge and remove plants blocking water flow 2. Allocate budget for community water hyacinth removal twice yearly	1. Use both machinery and manual labor for removal 2. Establish groups to process water hyacinth into planting soil and woven products	TCP SD Team / WWF	Shared cost with 1.1.1-1.1.3	2	3	6
		Irrigation Office, Prachinburi Project for Water Delivery and Maintenance: Bang Pluang (Water Delivery and Maintenance Division 3)	Reducing waterway obstruction caused by aquatic weeds	Supporting water hyacinth removal equipment	Irrigation Office, Prachinburi Project for Water Delivery and Maintenance: Bang Pluang (Water Delivery and Maintenance Division 3)	600,000	2	3	6
		Office of Agriculture, Ban Sang	Promote beneficial uses of water hyacinth	Educate communities on making soil and fertilizer	Office of Agriculture, Ban Sang	-	2	3	6

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		Administrative Office, Bang Tean	1. Facilitate water flow to agricultural areas 2. Allocate budget based on community leader reports	Implement joint activities with Bang Taen Subdistrict Administration	Administrative Office, Ban Tan	-	2	3	6
		Community Development Office	Promote water hyacinth products	Supporting activities of water hyacinth processing groups	Community Development Office	Shared cost	2	3	6
3	Shallow canals with low water levels (Infrastructure and water flow)	Communities Bang Tean, Moo 1-13	Dredge water canals to ensure sufficient water for agriculture	In the implementation plan	TCP SD Team / WWF	Shared cost with 1.1.1-1.1.3	2	3	6
		Administrative Office, Bang Tean	1. Include dredging areas in subdistrict development plans 2. Coordinate with Provincial Administrative Organization for budget	In the implementation plan	TCP SD Team / WWF	Shared cost with 1.1.1-1.1.3	2	3	6
		Irrigation Office, Prachinburi Project for Water Delivery and Maintenance: Bang Pluang (Water Delivery and Maintenance Division 3)	Creating a plan for canal dredging in the area	In the implementation plan	TCP SD Team / WWF	Shared cost with 1.1.1-1.1.3	2	3	6
4	Some water gates are damaged (Infrastructure and water flow)	Communities Bang Tean, Moo 1-13	1. Repair damaged water gates for efficient operation 2. Request additional budget for maintenance of gates damaged by saltwater or long-term use	In the implementation plan	Administrative Office, Bang Tean	4,000,000	2	3	6
		Irrigation Office, Prachinburi Project for Water Delivery and Maintenance: Bang Pluang (Water Delivery and Maintenance Division 3)	Close all three water gates during saltwater surges and pump water from upper Hor Thong Canal to Bang Taen Subdistrict.	Publicize information and educate communities on water management	Irrigation Office, Prachinburi Project for Water Delivery and Maintenance: Bang Pluang (Water Delivery and Maintenance Division 3)	-	2	3	6
		Administrative Office, Bang Tean	Create a plan for repairing water gates in the sub-district area	Support water system development according to operational plans	Administrative Office, Bang Tean		2	3	6
5	Requirements for Sufficient Water Supply (Uncertainty of supply availability)	Communities Bang Tean, Moo 1-13	1. Allocate budget for cleaning the water supply system 2. Develop adequate water storage sources to meet demand 3. Develop knowledge for water system caretakers	Clean the water system (Already implemented) by changing the water filter systems in Village 5 Ban Plai Klong, Village 6 Ban Pak Tamru, Village 7 Ban Koh Loy, Village 9 Ban Bang Ton Jik, once per location	TCP SD Team / WWF	450,000	3	2	6
		Administrative Office, Bang Tean	1. Supply freshwater to Bang Taen sub-district to maintain sufficient freshwater levels for villagers' needs 2. Allocate budget for maintaining the sub-district water system	support the SAO by having factory engineers provide knowledge on community water system maintenance	Administrative Office, Bang Tean	-	3	2	6
6	River Water Quality (Uncertainty of Supply availability)	Communities Bang Tean, Moo 1-13	Need for good water quality in the river, especially during November	Waste Bank Project to reduce contamination in the river	TCP SD Team	100,000	3	2	6
		Ban Sang District	Use village headmen meetings to communicate with villagers, such as announcing warnings about water releases from upstream	Help publicize news to community members	Ban Sang District	-	2	3	6

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7	Chemical Use (Pest and disease attack)	Office of Agriculture, Ban Sang	Campaign to reduce chemical use in rice farming	Support the Rice Research Center in promoting wet and dry rice farming.	Office of Agriculture, Ban Sang	-	3	1	3
8	Increasing Aquatic Life (Biodiversity)	Fisheries Department	Increase river prawn population in Prachin Buri River	Release fish on World Water Day to increase fish population in the river	Fisheries Department	-	3	2	6
9	Saltwater Issues (Climate change impact on water source quality)	Prachinburi Glass Industry Co., Ltd.	1. Providing knowledge or prevention of agricultural damage from saltwater problems 2. Supporting the development of water delivery systems to agricultural plots at schools	1. Providing knowledge or prevention of agricultural damage from saltwater problems 2. Supporting the development of water delivery systems to agricultural plots at schools	Prachinburi Glass Industry Co., Ltd.	-	2	2	4

IMPACT	Proability		
	1	2	3
1			
2			
3			

Impact	1 = minor, 2 = moderate, 3 = major
Proability	1 = unlikely, 2 = possible, 3 = likely

Risk Value	Impact x Proability
	Risk value = 1 - 3
	Risk value = 4, 6
	Risks value = 9