Strategies	Activities	Timeline (year)	Stakeholders	Indicators
	local administrative organizations to connect the community water sources to the irrigation waterways		- Communities	
	A10. Encouraging collaboration between government agencies and educational institutes to develop research works and technology to support water structure management, water traffic maps, and databases	3-5	- Government agencies - Educational institutes	- Number of research and technologies that support water structure management
Policy and law	**A11**. Reducing duplicate work between governmental agencies by reviewing missions and duties and clearly describing responsibilities	3-5	- Central agencies - Local authorities	- Performance evaluation
	A12. Clearly describing the legal rights and duties of the local administration on community water management	3-5	- Thailand Local Administration - Communities	- Duty description
	A13. Preparing a water structure maintenance calendar	3-5	- Central agencies - Local authorities	- Maintenance calendar

4.1.2 Technology action plan for seasonal climate prediction

The capability development of seasonal climate prediction highlights increasing the number of programmers, model developers, and mathematicians. The major investment in this technology group is on training programs (which includes the user manuals), not on advancing the technology. Policywise, an adjustment is required on the tax waiver criteria for modeling instruments and databases. The technology action plans for seasonal climate prediction is summarized in Table 48.

Table 48 Technology action plans for seasonal climate prediction

Strategies	Activities	Timeline (year)	Stakeholders	Indicators
Capability Development	**B1.** Providing scholarships for students in the fields of surveying, data calibration, data completion, climate model development, computing mathematics, and mainframe computing resource management	1-3	- educational institutes - central agency	- Number of scholarship recipients
	B2. Increasing human resources in the field of model development and data analysis	1-3	- educational institutes - central agencies	-Number of experts in model development and data analysis
	B3. providing cross-agencies agency with seasonal weather forecasting scholarships/seminars/training programs on seasonal weather forecasting both domestically and internationally	1-3	- educational institutes - central agencies	- the number of researches scholarships/seminars - the number of seminars/trainings participants
	B4. Organizing focus groups or brainstorm meetings to discuss or bring up new ideas on improving forecast and warning models	1-3	- the media - civil society - warning agency - central agency - research agency - educational institutes	-Number of participants/agencies
	B5. Arranging training programs and preparing a manual for forecast and warning data users	1-3	- the media - civil society - warning agency - central agency - research agency	- user manual - user evaluation questionnaire -number of trainings and participants
	B6. Preparing data interpretation standards or manuals to increase the accuracy of the outcomes	3-5	- educational institutes - relevant agencies/ organisations	- Accuracy of the outcomes from the model
	B7. Increasing the number of mathematicians and physicists	3-5	- educational institutes - relevant agencies/ organisations	- Number of students in mathematics and physics program
	B8. Providing training programs in the field of meteorology	3-5	- educational institutes - the Meteorological	- Number of experts in meteorology

Strategies	Activities	Timeline (year)	Stakeholders	Indicators
			Department - research agency	
	B9. Encouraging research collaboration and data exchange	1-3	- educational institutes - relevant agencies	- Number of research collaborations
Investment	**B10.** Obtaining and developing devices, instruments, and software for data modification and completion	1-3	- relevant agencies/ organizations - educational institutes	- progress in data system
	B11. Assessing the needs of high-performance computers required in calculating/processing the models	3-5	- central agencies - educational institutes	- the number of needs assessment reports for high-performance computers
	B12. Obtaining high-performance computing systems and creating an infrastructure network to facilitate collaboration among the relevant agencies	3-5	-central agencies	- the number of high-performance computing systems
Organizational structure development	**B13.** Encouraging collaboration among relevant agencies to develop collaborative research and exchange knowledge	1-3	- central agencies - educational institutes - foreign agencies	- the amount of research work - the number of agencies
	B14. Waiving/reducing expenses on data, devices, and instruments used in research work	1-3	- relevant agencies - educational institutes	- percentage of expenses spent on data, devices, and instruments used for research
Policy and regulation	**B15.** Driving further research on imported devices, instruments, and models so that they are suitable for and applicable in Thailand	3-5	- educational institutes - central agencies	- the amount of research work being utilized and referred to
	B16. Waiving/reducing taxes on research devices and instruments developed domestically	3-5	- relevant agencies/ organizations	- percentage of tax reduction on domestically-developed devices, instruments, and research