

POLICIES TO PROMOTE SUSTAINABLE WATER RESOURCES MANAGEMENT IN VIET NAM - AN IN-DEPTH ANALYSIS

Le Ngoc Cau

Viet Nam Institute of Meteorology, Hydrology and Climate change

Received: 16 June 2017; Accepted: 25 August 2017

Abstract: *The importance of water for sustaining country's growth while improving public health and the environment cannot be understated. While Viet Nam uses only about 10% of the volume of available water on a national basis, regional and especially seasonal shortages are major limiting factors for industrial and agricultural development. Vulnerable ecosystems such as the Mekong River Delta and Red River Delta are seeing lower flows, causing shortages of water supply and saline water intrusion, disrupting fisheries and impacting the quality of irrigation supplies. The delicate balance of upland ecosystems and crops is being affected to a greater extent by more severe weather patterns and flooding. These factors are clearly unfavorable for rural development and poverty reduction. The Government of Viet Nam (GoV) is committed to address these complex water sector issues. A series of water resources management related legal policies and documents have been promulgated and implemented in the past decade. This paper presents an overview of legal frameworks and policies promulgated and implemented by GoV to promote sustainable water resources management in Viet Nam. An in-depth analysis of the water resources management related legal framework and policies was conducted to get an insight into the coherence of the policies and impacts brought by the implementation of the promulgated policies.*

Keywords: *sustainable water resources management, water saving and efficiency, climate change resilience, Viet Nam.*

1. Introduction

Due to the rapid economic development and urbanization in Viet Nam, water resources are under risk due to several factors of which many are inter-connected: Rising demand for fresh and drinking water in the course of urbanization and industrialization, climate change impacts, upstream development and construction (hydroelectric dams, deforestation). Lower water flows and shrinking groundwater level are occurring in key river basins, such as Red River Delta and Mekong River Delta, causing shortage of water supplies and saline water intrusion and impacting agricultural production. The GoV has well recognized the importance of water in sustaining socio-development and maintaining public health. A series of water resources management legal-binding policies

has been developed and adopted to promote sustainable water consumption in Viet Nam.

The first Water Resources Law which came into force in 1998 has become obsolete under fast changing socio-economic development and climate change conditions. Recognizing that a comprehensive legal framework is of vital important to materialize a sustainable water resources management, the GoV has developed and enacted a new Water Resources Law 17/2012/QH13 in 2013, the highest legal document in the water resources management field. The law come into effect in January 1st, 2013 replacing the 1998 Water Resources Law and serving as a fundamental legal framework for the development and adoption of under-law documents and policies on water resources management. The Law is an important milestone and a legal document that promotes climate change resilience and adopts integrated water management approaches for sustainable water

*Correspondence to: Le Ngoc Cau
E-mail: caukttv@gmail.com*

resources management.

Following the adoption of the Water Resources Law, a series of legal documents and policies promoting sustainable water resources management have been issued to replace the previous documents which were not suitable in the current context, especially in the context of climate change. The scope of water resources management has been widened and economic tools are incorporated. Water resources management does not longer only focus on quality and quantity issues but includes issues such as the management of riverbeds, riversides and riverbanks, the development of economic tools and measures to promote effective water resources management and sustainable water use.

Water resources management plays an important role for economic growth, public health, environmental protection and the sustainable development of the country. Viet Nam uses only about 10% of its available water resources on the national level. However seasonal water shortages are a major barrier for industrial development and agricultural production. Vulnerable river basins such as the Mekong River Delta and Red River Delta are seeing lower flows, causing shortages of water supply and salt water intrusion, disrupting fisheries and impacting the quality of irrigation systems. Ecosystems and agricultural land will be seriously affected by the extend and severe extreme weather events such as flooding and prolonged draught. These factors are clearly unfavorable for rural development and poverty reduction.

The Government of Viet Nam is committed to address these complex water sector issues. A series of water resources management related legal documents and policies have been promulgated and implemented in the past decade. This paper presents an overview of legal framework and policies promulgated and implemented by GoV to promote sustainable water resources management in Viet Nam. An in-depth analysis of the water resources management related legal framework and policies was conducted to

get insight into the efficiency and positive impacts brought by the implementation of the promulgated policies.

2. Background information

In 2012, the GoV enacted the Water Resources Law 17/2012/QH13 to replace the Water Resources Law that has been implemented since 1998. The Water Resources Law 17/2012/QH13 is the highest legal document in the water resources field which takes effect in January 1st, 2013, laying out a fundamental foundation for legal documents on water resources management. The Law is a very important milestone, a policy response to climate change impacts and resilience programming which adopts integrated water management approaches and sustainable water resources management.

Pursuant to the new Water resources Law, a number of legal-binding documents and policies on water resources management have been issued to replace the preceding documents that have become unsuitable in ever-changing socio-economic development, especially in the context of climate change. A notable aspect of the current water resources management related policies is that the subjects of water resources management are expanded and economic tools are applied in water resources management. Most important perspective is that subjects of water resources management are no longer confined to only the quality and quantity of water in rivers, but that have been extended to the management of riverbeds, riversides and riverbanks, as well as setting up the economic tools and measures in water resources management with the ultimate goal of realizing a sustainable water resources management.

Integrated water resources management has become an overarching viewpoint of Viet Nam and has been shown throughout the National Strategy on Water Resources (Prime Minister Decision 81/2006/QĐ-TTg): *“Management of water resources must be implemented in an integrated and unified manner on a river basin basis. The water use structure must be consistent with the transformation of economic structure*



Figure 1. Legal framework of water resources management in Viet Nam

in the period of enhancement of national industrialization and modernization; water resources must be developed, exploited and used in sustainable, economically efficient, integrated and multi-purpose manner. Water in production must be considered as economic goods; subsidised system should be soon eliminated; activities in water resources protection and development and in water service provision should be performed with the participation of all social and economic sectors.”

National action plan on strengthening the integrated management, protection and use of water resources towards the 2014-2020 period was enacted with the Decision 182/QĐ-TTg dated January 23rd 2014 in order to make sure that water resources management, exploitation, use and protection shall be implemented in an integrated, comprehensive and long-term manner to ensure the social security and national defense under the pressure of climate change, sea level rise and water resources depletion.

As shown in Figure 1, after enacting the Water Resources Law 17/2012/QH13 in 2013, the GoV has been promulgated and implemented, a number of under-law policies guiding detail implementation of the law. Notably, the following policies have been issued to promote sustainable water resources management.

- Decree 201/2013/ND-CP dated November 27, 2013, detailing the implementation a number of articles of the Water Resources Law.

- Decree 142/2013/ND-CP on providing for sanction of administrative violations in domain of water resources and minerals exploitation.

- Decree 43/2015/ND-CP on the establishing and managing the water protection corridor.

- Decree 54/2015/ND-CP regulating incentives for water saving and efficient activities.

- Decree 60/2016/ND-CP regulating some conditions for trading investment in sector of natural resources and environment.

- Decree 154/2016/ND-CP on environmental protection fee for wastewater.

- Decree 33/2017/ND-CP regulating on sanctioning administrative violations in the field of water and mineral resources.

- Decree 82/2017/ND-CP regulating the method for calculating and charges for granting water entitlements.

Within its mandates, functions and responsibilities, MONRE has also issued a number of documents on guiding/detailing the implementation of the Water Resources Law. MONRE, at the same time, has been developing, and finalizing many legal documents and expects to complete a comprehensive legal framework in 2020 according to direction of Law on Water Resources 2012 and Resolution 24/NQ-TW of

Central Party Steering Committee on proactively responding to climate change, and strengthening natural resources management, and environmental protection. Notably, the following circulars have issued and implemented.

- Circular 27/2014/TT-BTNMT regulating registration for groundwater extraction, form of application, permit, contents of scheme and report in dossier for issue, extension, modification, re-issue of water resource permit.

- Circular 42/2015/TT-BTNMT regulating technique for water resources planning.

- Circular 24/2016/TT-BTNMT regulating the identification and public of protection zone of domestic intake source.

Besides the above-mentioned policies, the following circulars will be developed and adopted in between 2017-2020:

- Circular on protection of river bed, bank and plain.

- Circular regulating content, form of statistics and reports on water resources inventory

- Circular on content, forms for investigation, content of report and procedure for investigating actual conditions of water resources exploitation and use, wastewater discharge into river.

- Circular regulating contents, regulations of water resources monitoring.

- Circular regulating data sets, data formats on water resources.

- Guiding circular on artificial supply of groundwater for each regions.

- Circular on contents, forms for the statistic and report of water resources use.

- Guiding circular on artificial supplement of groundwater for each regions.

- Joint circular between MONRE and MOF giving guidance about the management and use of budget for the water resources investigation, planning, management and protection.

- Joint Circular between MONRE and MOF about revising decision 59/2006/QĐ-BTC regulating the regime of charge and fee to collect, remittance, management and use fee.

In addition to the policies that directly address water resources management and water environment protection, the GoV also prepared and adopted inter-reservoir operation

procedures for large river basins. Until now, the inter-reservoir operation procedures have been developed and put into operation for most of the 11 river basins that are required to have the inter-reservoir operation procedures. With the policy promulgated, the rules for operating reservoirs are established, and different interests, e.g. electricity generation from hydropower plants and irrigation for agricultural production, are adequately taken into consideration.

3. Discussion

The discussion will focus on the following aspects of the policies that have been developed and adopted by the GoV: (i) institutional framework of water resources management in Viet Nam; and (ii) sustainable water consumption promotion.

Institution arrangement for water resources management was explicitly stipulated at the Water Resources Law. The state management of water resources is uniformly done by the Government. The Ministry of Natural Resources and Environment (MONRE) takes responsibility in implementation of state management on water resources, management on river basin in nationwide. In terms of sustainable water resources management, MONRE's key responsibilities, as stipulated under Water Resources Law, are: (i) development of water efficacy and saving models, promotion of water saving technologies; (ii) coordination of water resources uses in inter-provincial river basins; (iii) monitoring and inspecting the quantities and quality of water resources, water resources exploitation and use, and discharge of wastewater into inter-provincial water resources.

With regards to the promotion of sustainable water consumption, it is notable that relevant policies promulgated by the GoV are coherent and converging on this issue. First, a policy incentivizing water saving and water recycling activities have been issued in 2015 (Decree 54/2015/ND-CP). For the first time, a legal-binding policy regulating incentives for water saving and efficiency was issued and implemented. The Decree defines a wide range in potential water savings activities, including water reuse/

recycling, reduction in water consumption, rainwater harvesting, and desalination of brackish and salt water. Potential incentives include preferential loans, tax reductions and tax waivers. Organizations that could benefit from incentives include large industrial enterprises, small businesses, farmers, and individual households.

In addition to policies and incentive mechanisms that promote water efficiency in industrial and commercial uses, the GoV has also taken concrete action promoting development of small irrigation systems, infield irrigation, and more advanced and efficient irrigation systems with the ultimate goal of promoting sustainable water resources consumption for agricultural activities. At ministerial level, MARD minister in May 2015 issued Decision 1788/QĐ/BNN-TCLL approving Action Plan of Advanced and Efficient Upland Plant Irrigation. The Action

Plan summarizes numerous steps that should be taken to advance more effective irrigation, in particular for upland crop irrigation. It calls for improving policy and institutional frameworks, launching pilot projects, advancing scientific understanding, providing training and outreach, encouraging international cooperation, and other topics.

To foster water saving and efficient in irrigation, a Prime Minister Decree is planned to be issued in 2017, setting the stage for actions to advance more efficient irrigation in a manner that supports the objectives of Decree 54 within the context of the Government's program on agricultural restructuring and rural development. The Decision is expected to establish basic financial incentives (e.g. subsidized equipment purchase or favorable interest rates on loans), eligibility criteria, and program structures for applicants and the Government.

References

1. Circular 27/2014/TT-BTNMT regulating registration for groundwater extraction, form of application, permit, contents of scheme and report in dossier for issue, extension, modification, re-issue of water resource permit (In Vietnamese).
2. Circular 42/2015/TT-BTNMT regulating technique for water resources planning (In Vietnamese).
3. Circular 24/2016/TT-BTNMT regulating the identification and public of protection zone of domestic intake source (In Vietnamese).
4. Decision 81/2006/QĐ-TTg approving the national strategy on water resources to 2020 (In Vietnamese).
5. Decision 1788/QĐ/BNN-TCLL approving action plan of advanced and efficient upland plant irrigation (In Vietnamese).
6. Decree 201/2013/ND-CP detailing the implementation a number of articles of the Law on Water Resources (In Vietnamese).
7. Decree 142/2013/ND-CP regulating sanction of administrative violations in domain of water resources and minerals exploitation (In Vietnamese).
8. Decree 43/2015/ND-CP on the establishing and managing the water protection corridor (In Vietnamese).
9. Decree 54/2015/ND-CP regulating incentives for water saving and efficient activities. (In Vietnamese)
10. Decree 60/2016/ND-CP regulating some conditions for trading investment in sector of natural resources and environment (In Vietnamese).
11. Decree 154/2016/ND-CP on environmental protection fee for wastewater (In Vietnamese).
12. Decree 33/2017/ND-CP regulating on sanctioning administrative violations in the field of water and mineral resources (In Vietnamese).
13. Decree 82/2017/ND-CP regulating the method for calculating and charges for granting water entitlements (In Vietnamese).
14. LawNo. 17/2012/QH13: Law on Water Resources (In Vietnamese).