



Quality Standard and Assessment of Village Water Supply Systems

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Background



- Thailand has a population of 66 million, more than 60% rely on village water supply systems which are operated either by communities or local governments.
- In the National Water Resources Strategy Plan, the first strategy is to improve village water supply systems which corresponds to SDG 6.
- Department of Water Resources: Our aim is to establish a quality standard that ensures sufficient supply of safe drinking water in villages.
- It involves an assessment of rural water supply systems based on specific criteria. This tool identifies problems that could be solved so as to improve water supply efficiency and performance in a community.



Strategy

- To establish the tool, Department of Water Sources (DWR) set-up a working group comprising of representatives from water supply related agencies.
- They drafted the Quality Standard on assessing village water supply systems which is based on WHO Drinking Water Quality Guidelines.
- After approval by the Quality Standard and assessment of Village water supply systems will be distributed to 7,500 local governments.
- The village water supply system assessment form is a tool for collecting information of structural and non-structural components of village water supply systems that address problems and causes of water supply systems function and performance.



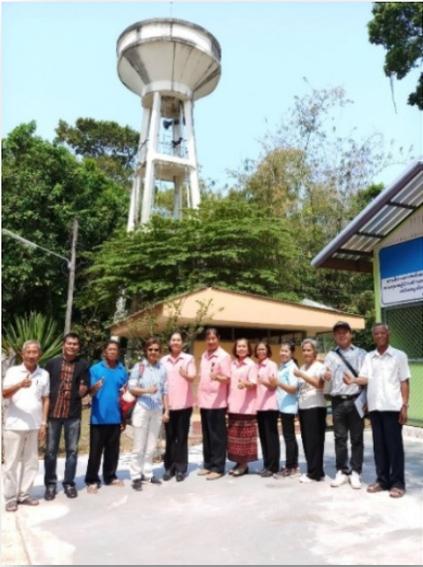
Results and Impact



- The village water supply system assessment form comprises of 86 questions designed to collect information on 5 major categories as follows:
 - i. Raw water source : quantity and quality
 - ii. Water supply system: intake, treatment and distribution system
 - iii. Operation and maintenance : operator and leakage
 - iv. Water supply : quantity, pressure and quality (DOH drinking water supply quality guideline 2010)
 - v. Management : finance and people participation
- i. There are 2 types of evaluation form: i) surface water and ii) ground water.
- Each category is weighted by experts with AHP (Analytic Hierarchy Process) method. The calculation uses weighting score method for all categories and is evaluated.



Challenges and lessons learned



- **Community Uptake:** Self-assessment should not be too complicated for local community personnel to understand and use in a context of nationwide application. In a process, the draft assessment form was tested in 220 villages in 42 provinces throughout Thailand.
- **Lessons Learnt:** It is important to create partnerships and welcome technical and practical knowledge from local communities and national ministries in the creation of standards. Their comments and suggestions are valuable.
- **Potential for Replication:** The quality standard and self-assessment approach can be replicated in other locations by adjusting the evaluation form related to their water supply system needs.





Thank you

