

Under the High Patronage of His Majesty King Mohammed VI



XIX WORLD WATER CONGRESS
International Water Resources Association (IWRA)
Marrakech, Morocco | 1-5 December 2025

Kingdom of Morocco



Ministry of
Equipment and Water

Success factors for the inclusion of community-based water organisations in the provision of the nationally granted right to drinking water

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Introduction



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- UN Resolutions 64/292 (2010)
 - Recognized the right to safe and clean drinking water and sanitation as a human right
- Sustainable Development Goals
 - SDG 6.1. By 2030, achieve universal and equitable access to safe and affordable drinking water for all.



United Nations





Introduction to CBDWP

- Drinking Water can be supplied by:
 - Public entities
 - Private companies
 - Community-based providers
- **Community-Based Drinking Water Provision (CBDWP)**
 - Non-profit organization for member's water supply
 - Ownership, decision-making authority, and responsibility lie with the user community
 - Decisions are taken in assemblies
 - Elected volunteers for representation

(Harvey and Reed, 2007; Nicolas-Artero, 2016)



Introduction to CBDWP

- CBDWP rarely completely autonomous
- Hybrid arrangements are common
- Drinking water provision requires expertise
- Volunteer work is limited by time, financial and capacity restraints





Advantages of CBDWP

- Advantages recognized in international discourse
 - Social and political benefits
 - Effective water management
- Advantages for the state
 - Indirectly improved drinking water accessibility
 - Less economic dependencies, no need for public installations
 - Place-based partners for public planning and environmental authorities increasing governance
- Advantages for the communities
 - Lower financial tariffs than public and private suppliers
 - Control over application of their own norms for system management
 - Recognition of collective rights, pluralism of rights and desire for autonomy



(Nicolas-Artero, 2016; Dobbin and Sarathy, 2015, Acevedo Guerrero et al., 2016; Cleaver, 2000; Boelens and Vos, 2014)

Methods



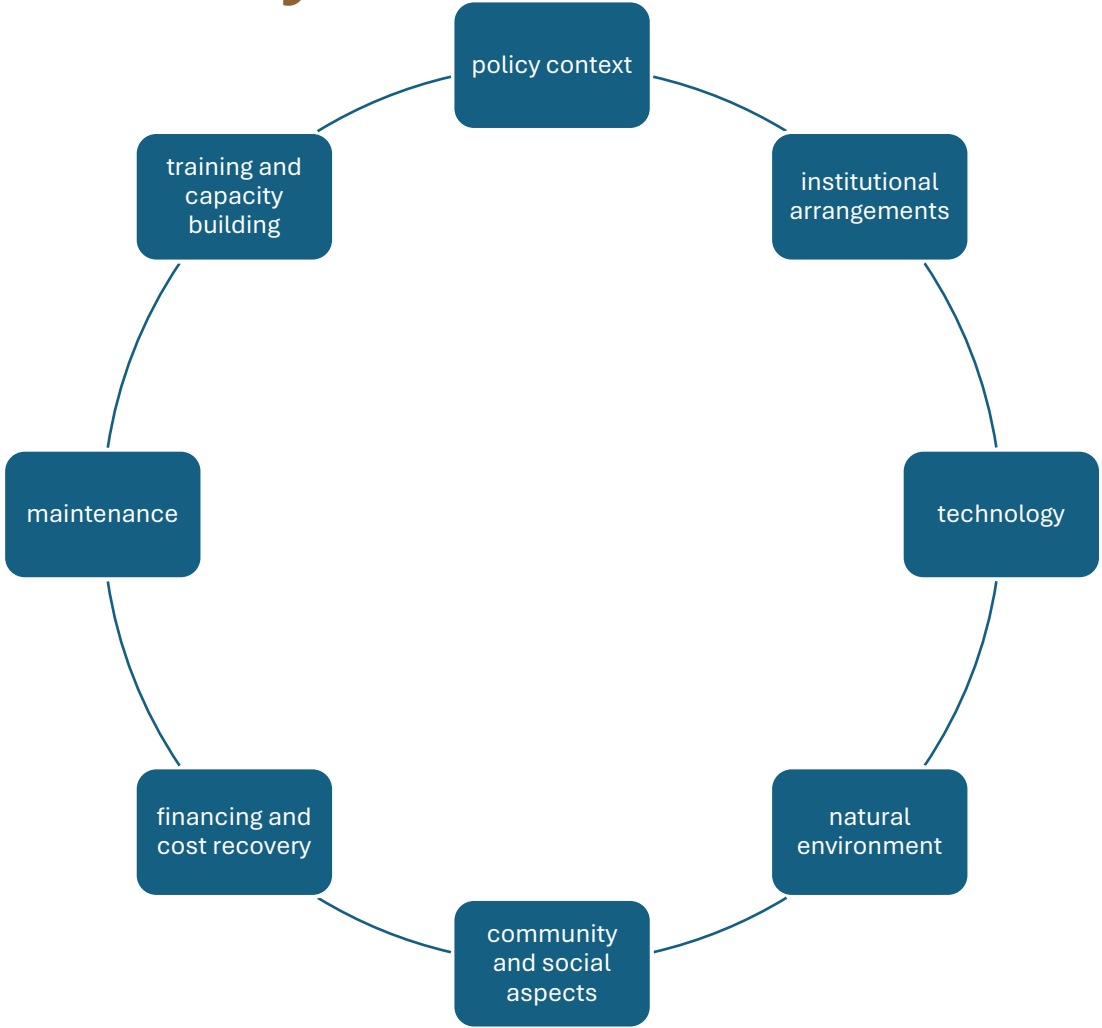
Country	CBDWS	Climate	Drinking Water Supply	Raw Water Source	Legal recognition of CBDWS	Public cooperation with Association
Austria	6.000	humid temperate	x	ground	x	x
Colombia	12.000	tropical highland	-	surface	x	-
Ireland	400	temperate maritime	x	surface	x	x
Oman	(3.000)	hyper arid	(x)	ground	x	-

- Qualitative research of case studies in different countries
 - Interviews, participant observation of meetings
 - Inspection of technical installations
 - Analysis of provided documentation





Community-internal Sustainability factors



(Harvey and Reed, 2004)





Successful External Support Incentives

Ranking of empirically most influential support factors

1. Financial support and provision of materials
2. Capacity building on technical skills
3. Capacity building on management
4. Advice on technical issues
5. Advice on management and finance
6. Loans and microfinance
7. Access to supply chain of spare parts and services
8. Decentralised system/regulatory framework which includes monitoring and evaluation

(Hutchings et al., 2015)





Financing and Cost Recovery

- 1. Financial support in various forms, initial cost coverage and partial financing of operation and maintenance
- 5. Advice on management and finance
- 6. Possibility of taking out microcredit loans
- Low-interest long-term financing and liability insurance that shields individual members
- Particular topic-related investment programs





Training and Capacity Building

- 2. Capacity building on technical skills
- 3. Capacity building on management
- Access to advice on different aspects of drinking water provision
- Build capacity, not dependency: tasks taken over only in coordination with community





Technology and Maintenance

- 4. Advice on technical issues
- 7. Access to supply chain of spare parts and services
 - Purchasing & modernization advice
 - Centralized bulk procurement
- Advice on resilience adaptations, storage sizing, and redundancies
- Support for water treatment plant design and operation
- Risk based drinking water quality monitoring
- Attention to socio-technical factors: human and time constraints
- Adjusted modernization that considers group needs and pace



Policy Context



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- 8. Regulatory framework which includes monitoring and evaluation
- Gapless assignment of responsibilities in the public sector
- Co-design instead of co-implementation
 - Institutionalised platform for communities to voice concerns and feedback
- (Human) right to drinking water as *a priori* entitlement
- Recognition of
 - Communities in constitutional or national law
 - Collective and / or ethnic rights & legal pluralism
 - Federations / associations as their representative body





Institutional Arrangements

- 8. Decentralised system: local public institutions
 - Clear information on public contacts and available services
- Recognition of CBDWP as socio-technical system
 - Separate advisory and oversight functions to build trust
 - Clear rules for data sharing
- Adapting executive and administrative functions at all state levels to community needs and limited resources of volunteers
 - Make administrative tasks as simple as possible or provide support



Natural Environment



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- Central:
 - Groundwater / climate monitoring and information sharing with communities
 - Development of strategies to safeguard water-supply security (e.g., tanks, ring mains) and long-term planning (reservoirs, drilling depth)
 - Management for issues affecting multiple communities (e.g., storm surges, drought)
- Drinking-water protection zones around sources, independent of land ownership (including groundwater levels)
- Environmental educational offers for communities
- Participation in environmental projects such as reforestation and CO₂ services as a secondary source of income





Community and Social Aspects

- Public acknowledgement: Making communities' work visible and valued
- Support networking and strengthen existing networks
- Provide institutions for mediation or advisory support in case of conflicts with local residents
- Monitor and confront marginalization (gender and minority groups)
- Respect communities' need for autonomy
 - Preserve community autonomy internally; only outward-facing matters are subject to review
- Federation-led lobbying/advocacy



Best Practice Example



Central association with (partially) publicly funded community-based experts



- Approachable partners for questions, conflict mediation
- Trainings offered, important information are spread
- Clear demarcation of width of information sharing
- Enables close cooperation between association, public authorities, and communities

■ Political advantages:

- Representation of CBDWP concerns by experts

■ Legal advantages:

- Increases qualifications of volunteers
- Secures flow of new / relevant information (both ways)

■ Economic advantages:

- Most cost-effective way of expert support
- Allows for individually planned risk-based water quality control and treatment

(<https://redacueductoscomunitarios.co/>; <https://www.ooewasser.at/de/>; <https://nfgws.ie/>)



Literature



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Thank you!

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