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الأمم المتحدة

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اللجنة الاقتصادية والاجتماعية  
لغربي آسيا - الإسكوا

gtz Partner für Perspektiven  
Weltweit  
German Technical  
Cooperation

**BGR** Federal Institute for Geosciences  
and Natural Resources

 Global Water  
Partnership  
Mediterranean

ندوة حول حكمة المياه: دور المعنيين  
بيروت، ١٤-١٥ تشرين الثاني/نوفمبر ٢٠٠٥

ترشيد استهلاك المياه في الخليج العربي: دراسة حالة من البحرين  
(Rationalizing Water Consumption in the Arabian Gulf  
Region: Case Study from Bahrain)

UN ECONOMIC AND SOCIAL COMMISSION  
FOR WESTERN ASIA

15-02-2005

LIBRARY & DOCUMENT SECTION

ملاحظة: طبعت هذه الوثيقة بالشكل التي قدمت به ودون تحرير رسمي. والآراء الواردة فيها هي آراء المؤلف، وليست بالضرورة، آراء الإسكوا.

05-0608



# Current and Potential Role of NGOs in Water Governance

**Khawla Al Muhannadi**  
Environment Friends Society  
BAHRAIN

[www.eef.org.bh](http://www.eef.org.bh)



## Outlines

- Bahrain as example of Arab world
  - Water status
  - NGO
- Water
- Water Management
- Water Governance

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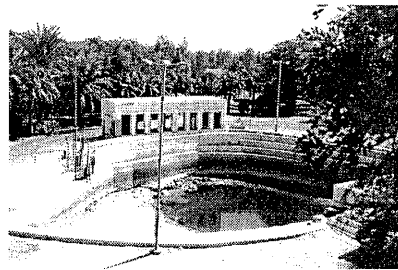
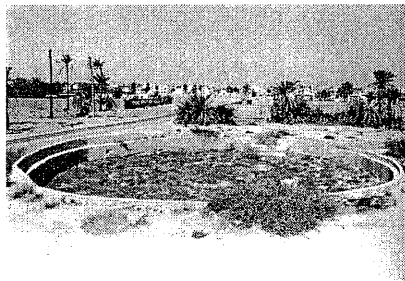
## water

- Sources
  - Underground /natural springs
  - Desalinated Sea and ground water
  - Treated Water
- Statistics
  - 60 in the 80s (land, marine) natural springs
  - 6.0 + 7.0 Mm<sup>3</sup> /y
  - 12 (1995) – 18% (2005) is treated
  - 75 M Gallon Desalinated

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## Current Water Status



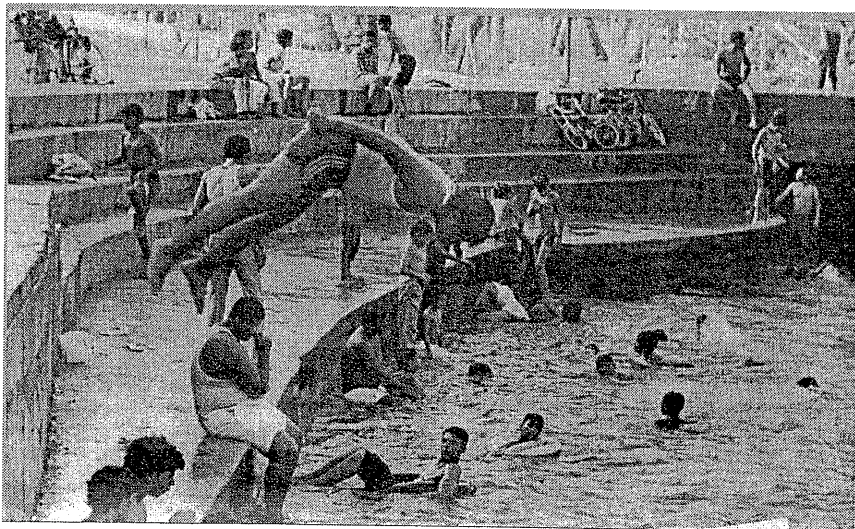
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# Adhari



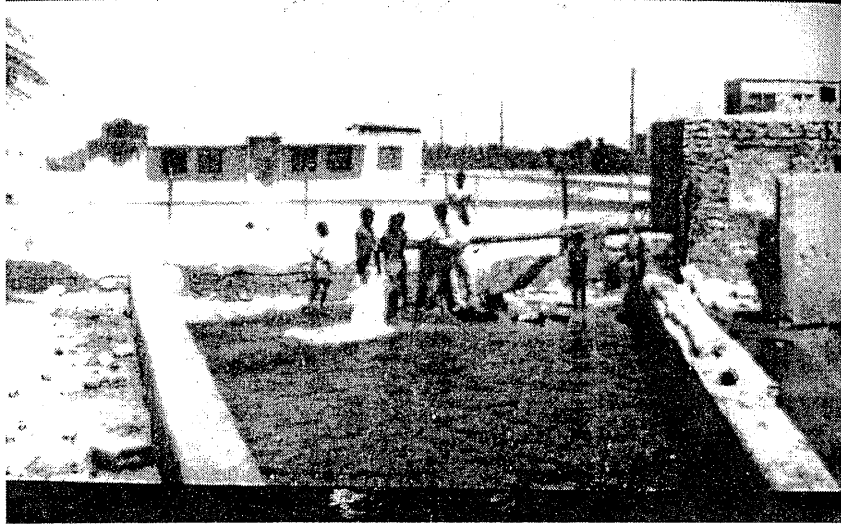
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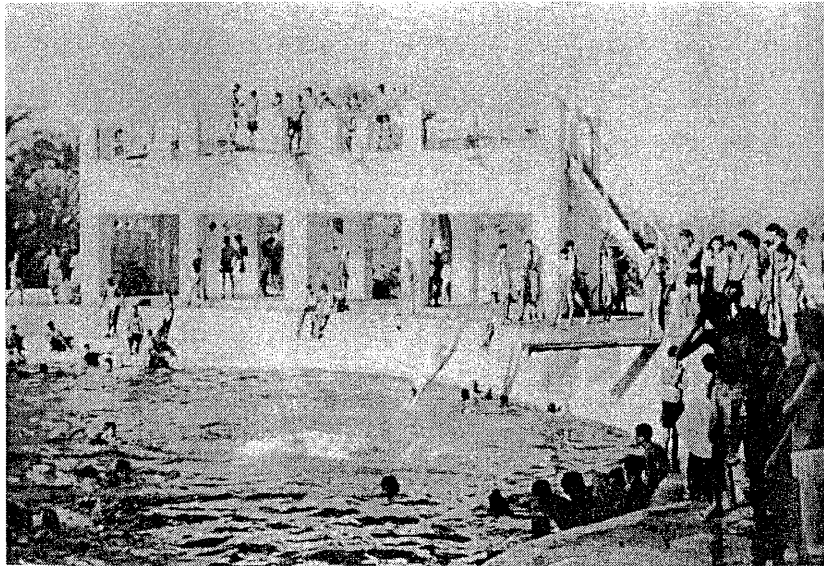
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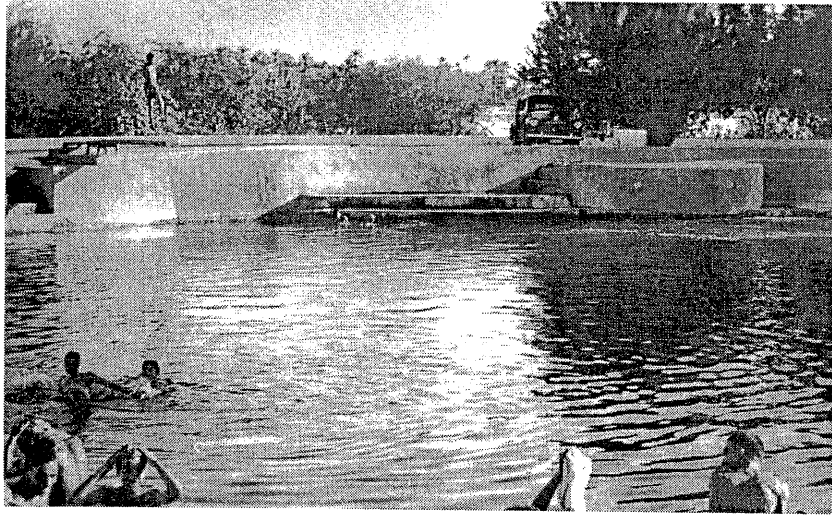


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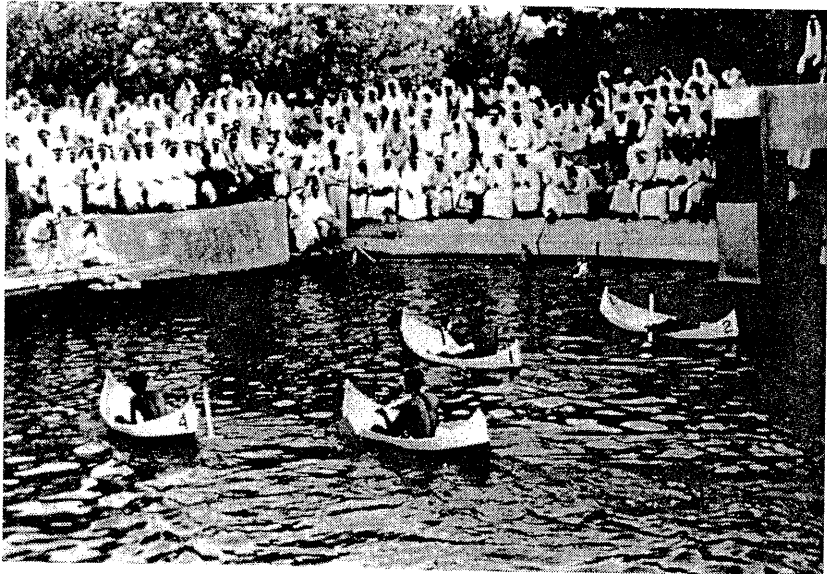
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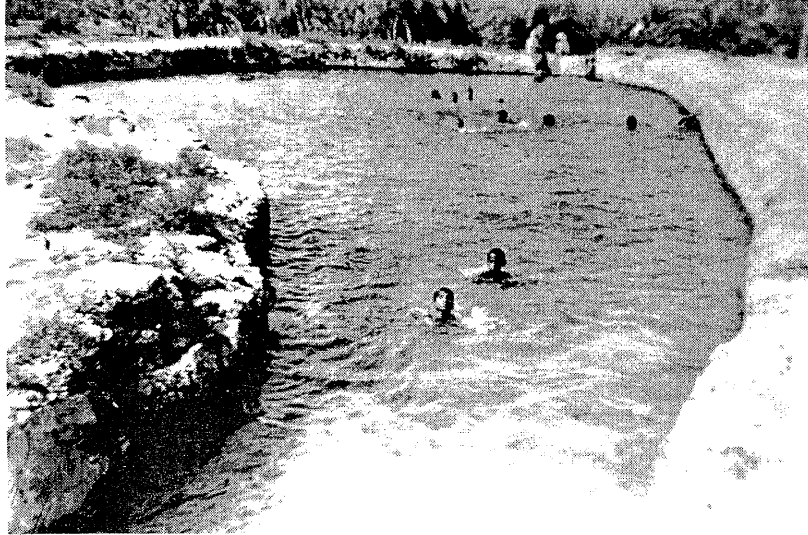


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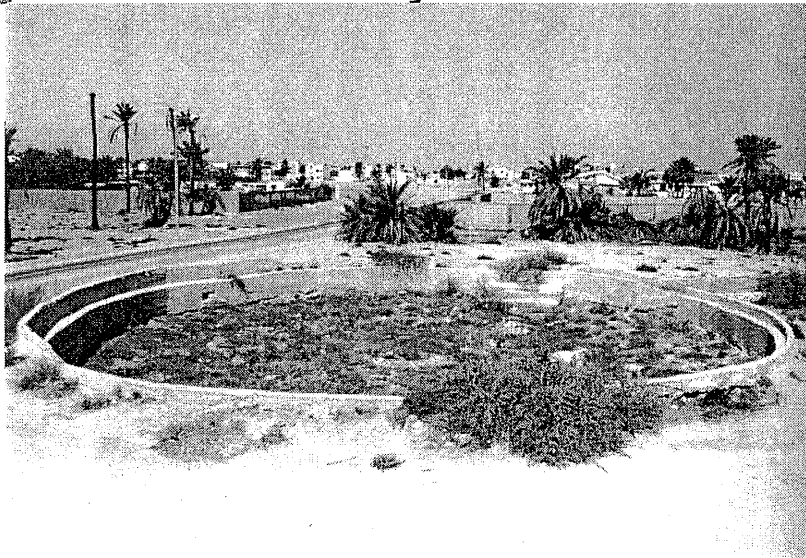
## Safaheya 50s



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## Safaheya 89

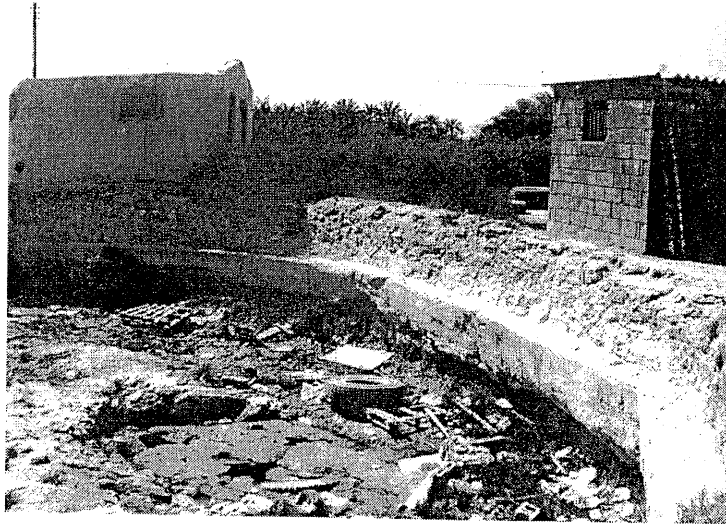


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# Al Raha



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# Al Raha







# Raha



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# Qassari



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## Qassari



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## Water Management

- Supply
- Natural water status
- Population Increase Pressure
- Development

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## Nabeeh Saleh Island



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## Population Development

- 159650 1950
- 337463 1980
- 724645 2005

Annual Increase 2.6 %

Surface Land Area >700 KM<sup>2</sup>

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## Water Management

### Accessibility/Availability

- Pressure to supply Vs necessity

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## Pressure On Water

- **Current Boom speculative** projects
- Increase pressure on supply
- Amwaj
- Durrat
- Al Areen SPA (The only one not requiring R&D)
- From where? Who pays for it?

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## Adhari and Tobli (Wetland)



Tubli 1964



Tubli 2003



## Pressure On Water

### **GOLF Courses**

- 3 (Rifa, Awali, Safria) & 4
- Big demands for water
- Fertilizers & pesticides → drain system
- Changing the use of land
- Huge area in a small Country!
- Exclusive!

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## Water Management

- **Desalination plants**
- Hidd plant : Hidd industrial area and new port
- Ras Abujarjur : Askar Industrial Area
- Door Jetti and Durrat Al Bahrain

Intake contamination

Disturbing sediment that has been pull from drain of heavy metals

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## Water Management

- Desalination marine water (R&D)
  - Industrial waste
  - Domestic waste
  - Lack of awareness
  - Waste management

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# Water Governance

- **CASE STUDY:**  
**Water Conservation Survey**

GO reaction

Test for our awareness

Learning through Crises

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# Case Study

- **Water survey**
  - New experience
  - Gains:
    - Enhancing research skills
    - Learning about water status
  - Help:
    - Contacts including members
    - Good name
    - Concerned individuals
  - Limitation
    - Volunteers (working hours)
    - Not supporting environment
    - No obligation for support

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## Awareness

- **CASE STUDY:**  
**Water Conservation Survey**

People : We are paying for what should be free

Water Desalination: cost per m<sup>3</sup>: 45 Fills,  
300 Fills (90% Subsidy)

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## Awareness

- In the wholly qura'an  
"ولاتسرفوا"
- In HADEETH  
"لا تسرف ولو كنت على نهر جار"
- Al Saa' Wal Modd (sh. Moh'd galaboon )

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## Awareness

- **CASE STUDY:**  
**Green Built Conservation**

GO reaction

Test for our awareness

Learnt from farmers about treated water  
and from technicians

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## Water Governance

- **CASE STUDY:**  
**Treated Water**

Officials and Specialists

Farmers are the best advocate

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## NGO Interest

- **Accessibility/Availability**
- **Sustainability**
- **Awareness**
- **Partnership**

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## Function of NGOs

- **Pressure groups?**  
Classical example EFS Fasht Al Adhim, Green Built
- **Body of expertise?**
- **Partners?**  
Cover / uncover facts  
mistrust  
competitors/ potential extended force  
threats and embarrassment  
Speed Vs Resources  
one – top P.O.V / Collective opinion

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**Pressure groups?**  
**Classical example EFS Fasht Al Adhim, Green Built**



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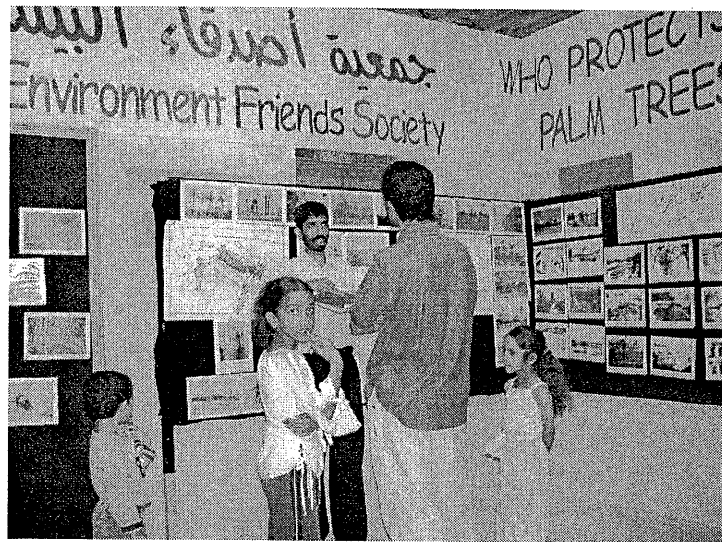
**Pressure groups?    Body of expertise?    Partners?**



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## Partners ?



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## Classical example EFS, Green Built



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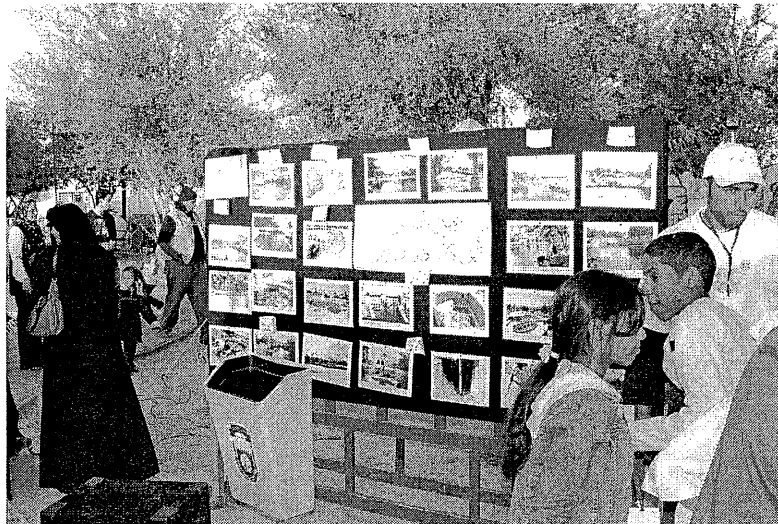
## Public Seminars



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## Water Governance





## GO & NGO

- Appointments (connections)
- For life
  - Efficiency
    - Evaluation ?
    - Qualifications ?
    - Motive to excel
- NGOs : open new members and ideas
  - Rotational leadership

**Classical example:** entomologist : overqualified!  
NGOs welcomed his expertise, hiring?!!

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## GO & NGO

- **Theoretically:** NGOs has ability to use the best skills available local/ foreign
- **NGOs** Strategy towards subject matters broad and realistic, genuine concern → best player in inspection (natural monitors)

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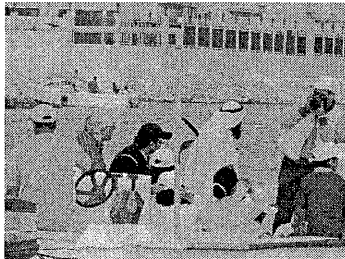
## International Cooperation

- **Current situation**
- No partnership : No feedback
- Few water experts: employed by the government.
- No obligations to help NGOs
  - E.g. analyze water quality
- NGOs financially unable

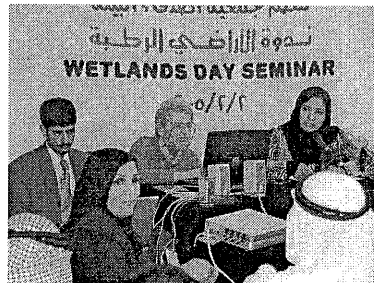
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**you join us  
we assign you a job  
in our project**



Classical example : RAMSAR



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## International Cooperation

I am here today because Bahrain's  
NGOs work in this field is in need  
of international Cooperation

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## Water Governance

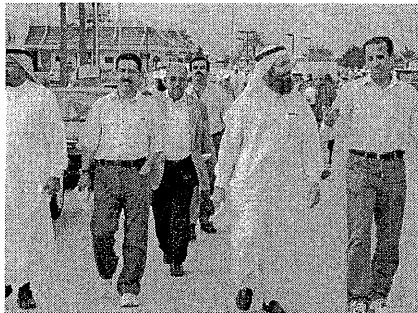
- **Recognition**
  - Independent
  - AS IMPORTANT
- **Knowledge**
  - Accessibility
  - Update / Sharing
- **Partnership**

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## Water Governance

- **Support**
  - Capacity Building
  - Ways of financing

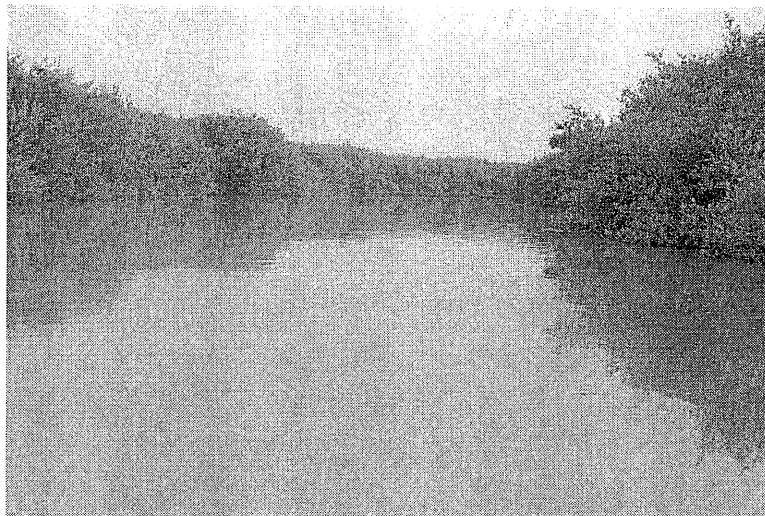


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## Water Governance

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## **References:**

### Statistics:

- The ministry of electricity and water
- The ministry of municipalities affairs and agriculture

### Pictures:

- Ms. Hind Al Qusaibi
- Mr. Abdulhameed Abdulgafaar
- Geomatics/BCSR
- Environment Friends Society

