

### Outline

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# 1. Objective

To examine the potential of integrating rural women's traditional knowledge into environmental education and empowering them for environmental conservation (Bangladesh Women Development Policy, art. 36)





## 2. Rationale

### Background

- Nearly 82% of women live in rural areas in Bangladesh (Khan, 1995:60);
- These women constitute 45.6% of the farming population;
- They engage in garden farms, forestry, fishery and livestock production;

### Theoretical Approaches

- Gender: Rural women's perspectives help better understand environmental conservation in Bangladesh;
- Agency: Women are not always victims, but active agents of conservation;
- Governance: They are recognized as the best manager of food security (e.g., microcredit programs).

#### Methodology



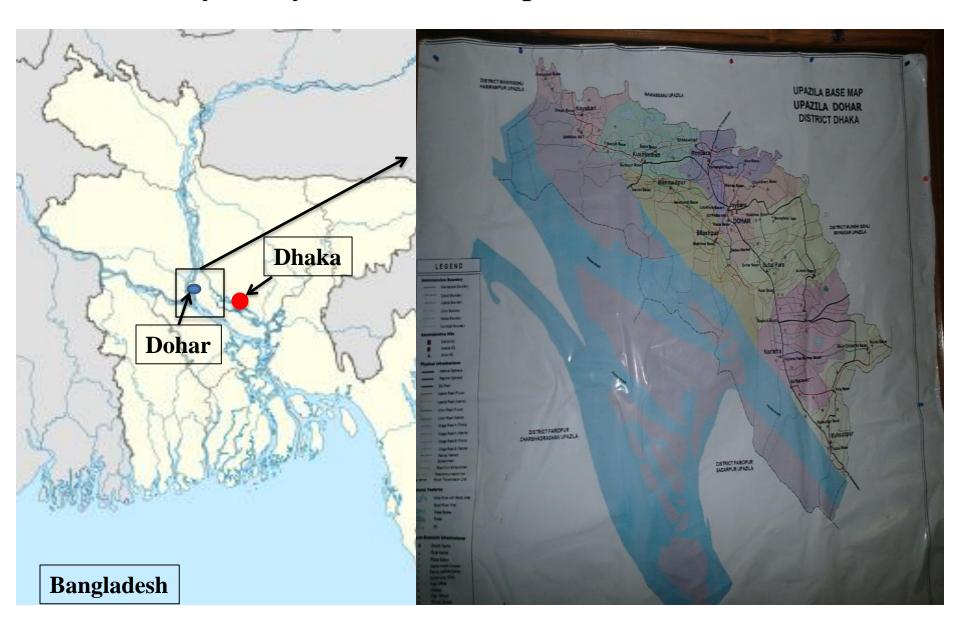
#### Data Collection:

- ➤ Three villages of Dohar: (1) "Char Bilashpur"; (2) Kutubpur, the coast of the Padma, (3) Arial Beel;
- ➤ (1) Observation, (2) Documents, (3) interviews through local guides, and (4)group discussion.

### **Data Analysis:** To find out:

- 1. Rural women in natural resource governance;
- 2. Role of traditional knowledge to face present environmental challenges;
- 3. What aspects of environmental education can empower women in environmental conservation.

### My study area: Dohar upazila(subdistrict)



### 3.2 About Upazila Dohar: Facts

- Dohar sub district; 30,001.20 acre;
- <u>Total population</u>: 2,26,439 (male: 1,07,041, female:1,19,398);
- <u>Literacy rate</u>: male: 56.9%, female: 58%
- <u>Population density</u>: 3,632/sq.km
- Main agricultural activities: garden crops, grain, livestock;
- <u>Main agricultural products</u>: rice, ground nuts, wheat, jute, mustard, potatoes, vegetables, chili peppers;
- River erosion is the most severe natural disaster.



# 3.3 About Upazila Dohar: Migration

• A high level of international male out-migration has resulted into the predominance of the female population and female-headed households

Number of migrant workers of Dohar upazila

| year | Dhaka  | Dohar |
|------|--------|-------|
| 2010 | 18,639 | 2,604 |
| 2011 | 22,566 | 4,066 |

source: Ministry of Expatriate Welfare and Overseas Employees; 2012

# 3.2 About Upazila: Gender Division

- My research confirmed that in poor households, clearly demarcated gender divisions of labour do not exist.
- Because of extreme poverty and food crisis, social norms and traditions are changing and women are working in the commercial farming fields as well (Shirin, 1995).



#### 4. Roles of Rural Women for environmental conservation

# Natural Resource Management activities:

- Subsistence kitchen gardening and commercial vegetable gardening, seed preservation, use of natural fertilizer;
- Traditional knowledge on NRM activities;
- Coping with Natural disasters;



## 3.4 About Upazila Dohar: Environmental Problems

- Monoculture of HYV rice IRRI consumes more water;
- Excessive use of agrochemicals has led to the disappearance of local fish, frogs, and insects;
- Over-irrigation (shallow tube wells-1109, pumps-12; out of 19,300.58 acres cultivable land, 12,189.45 acres are irrigated);
- Mechanized cultivation (i.e. power tiller-142); reduction of bullocks causing shortage of cow dungs-source of natural fertilizer
- Monoculture of commercial vegetables
- Arsenic contamination (only 3,518 tube wells are arsenic free out of total 24,178);
- Cooking by firewood;
- Brick kilns;
- River erosion and flood;

# 3.5 Some environmental problems









### Research Findings: TEK

- GOs and NGOs do not include environmental education or awareness in their development programs for women;
- Rural women still possess and practice traditional ecological knowledge;
- They preserve local varieties of seeds of lentils, fruits and vegetables and exchange (strong network);
- Cattle owners use manures to produce natural fertilizer; try to use twigs, dry leaves, cow dung as fuel;



## Research Findings: Potential and Challenge

- Although rural women's TEK
  contributes to env. conservation,
  they still face the present
  environmental problems caused
  by population problem,
  mechanization of agriculture,
  development projects, natural
  disasters like river erosion, flood,
  arsenic, climate change;
- Rural women are subordinated by the patriarchal sociocultural system;

- What aspects of TK and EE help women's environmental governance should be identified carefully;
- Rural women have strong network and strength of collective action;
- Integration of TK and EE will empower rural women's effort for environmental conservation.

# 6. Future Research Direction

• To find out what aspects of TK and EE should be considered for environmental conservation and empowerment;



• To find out *how* the *integration* of TK and EE can lead to empowering rural women for environmental conservation





Thank you for your kind attention

Please help me by asking questions!!!!