

Farmer Rationales and Water-Saving in Khorezm, Uzbekistan

A Lifeworld Analysis



by Lisa Oberkircher

@ ZEF, Bonn & ILÖK, Münster
E-mail: lisa.oberkircher@uni-bonn.de



- Expansion of irrigated (cotton) areas in Central Asia under Soviet rule went along with large scale diversions of the rivers Amu Darya and Syr Darya → Aral Sea crisis
- Irrigation water use in Khorezm, a province of Uzbekistan approx. 350 km south of the Aral Sea, is very inefficient
- Water-saving practices have been developed, but are not adopted by farmers → WHY NOT?

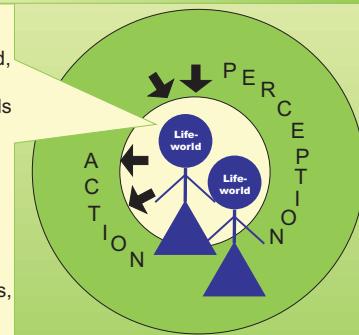
According to Schütz, a lifeworld analysis offers "the only really sufficient guarantee that social reality is not replaced by a fictitious, non-existent world constructed by some scientific observer" (Flick et al. 2004: 69)

How do socio-cultural and landscape ecological rationales of farmers function as incentives or disincentives for the adoption of water-saving practices in Khorezm?

Conceptual Framework: LIFEWORLD (Schütz 1932)

Lifeworld

- = the "intersubjectively shared world, a stock of knowledge, consisting of typifications, abilities, important skills and recipes for observing, interpreting the world and acting in this world" (Münch, 2003: 201).
- = what we regard as 'reality', i.e. a personal encyclopaedia of meaning and action.
- Contains time and space references, typification and institutions.

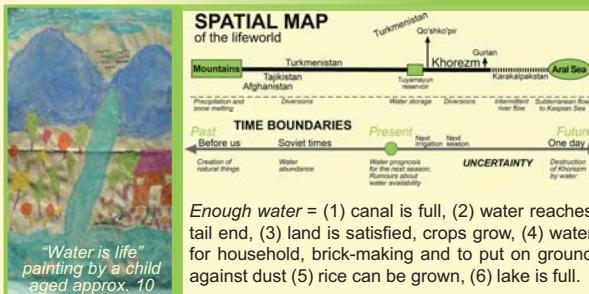


Methods

- Approach: Farmer perspective
- 2 Case study water user associations (head and tail of irrigation system)
- Field research in 2008 and 2009
- Data collection: Participant observation, unstructured interviews, paintings and essays of children
- Challenges: how to see the world through other people's eyes and how to draw conclusions on common patterns from individual lifeworlds



Results I – Content of the water lifeworld: time, space, typifications, institutions



Types of water	Canal water, drainage water, groundwater, and lakes
Types of people	'Upper people' (authorities), mirabs (water professionals), large scale farmers (state owned land), peasants
Types of land	Differences based on location along the canal, elevation and soil salinity, distance from the canal, soil texture
Institutions	Water rotations (asvak), heterogeneity principle based on different types of land and people, water wasting fines

Results II – Water-saving and the lifeworld: incentives and disincentives



The study's main findings: Farmers do not save water because (1) storage of saved water is not possible, (2) using much water is a symbol for power, (3) perceived water needs exceed the geographical realities, (4) the term water-saving is not in use, (5) farmers believe that water management is the state's responsibility.

Conclusions – Strategies to incentivise water-saving within the lifeworld of Khorezmian farmers

- Develop environmental education programmes with schools, water user associations and the water inspection department to create environmental awareness and values. Farmers were found to be interested to learn, and religious values in favour of protecting the environment will facilitate teaching.
- Strengthen the water inspection department (*Uzsvunazorat*) that sanctions water wasting. More control by additional inspectors or water managers will increase the impact of fines as financial incentives not to waste water. Controls need to take place also during times of water abundance.
- Create decentralised water storage facilities that make farmers more independent from the centralised network. 'Leftover water' can then be used at other times. Local level planning will be facilitated. Ideally, integrate water storage with sustainable management concepts for lakes at the tail end of the irrigation system.
- Do not limit strategies to economic incentives. Volumetric water pricing is difficult since measurement devices are not installed. Installation would be expensive and water pricing will meet resistance due to religious reservations. In any case, socio-cultural disincentives are not abolished by water pricing.



"This water-saving, this is nonsense anyway. How can you save water if there is none in the river? To save water there should be a lot of water" (farmer, 2.4.2009)

"It is written in old books that Khorezm will perish because of water. Either because of flooding or because of water scarcity. But because of water." (peasant, 6.4.2009)



"In the last years we have learned that we should save water. Things have changed in people's minds. As last year water was very scarce, people learned the value of water. Before, it was always abundant. People have to learn step by step." (farmer, 20.5.2009)

Literature:

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