

Irrigation and Drainage Sector Reforms and the Agrarian Elite in Sindh Province of Pakistan

Principal Investigator: Junaid Alam Memon (PhD)

Co- Principal Investigator: Usman Mustafa (PhD)

Pakistan Institute of Development Economics

Background

- Evolution of Indus Irrigation System
- Political economy of Irrigation Management
 - Vested interests of agrarian elite
 - Corruption hydraulic bureaucracy
- Poor O&M of irrigation facility
 - Unjustified Subsidies, low crop assessment and poor cost recovery, inequitable water distribution and widespread corruption
- Institutional Reforms in Irrigation Management

Research Problem

- Oversimplified assumptions about the reforms
 - Improved water delivery,
 - Better O&M of irrigation structures
 - Diminished burden of water subsidies &
 - *Communal mode of power to ensure compliance with water distribution rules*
- If true, reforms could challenge the interests of those gaining from the previous systems
- Then, how those who had been gaining from the previous system have adjusted themselves with reforms.

Objectives

- To evaluate the progress of Institutional Reforms in terms of FO Formation, Irrigation and Drainage Management Transfer Agreement, *Abiana* assessment and collection.
- To analyze the association between land ownership and composition of the management committees of FOs, WUAs and DBGs under Sindh Irrigation and Drainage Sector Reforms.

Objectives

- To evaluate the mechanism that facilitates the reform managers to negotiate the reform package with large landholders who had significant influence over irrigation affairs in the state managed irrigation system.
- To gather the perception of the local irrigation officials, former and present office bearer farmers of the FO/WUAs/DBGs management committees and ordinary farmers about success of institutional reforms in terms of water delivery, farmer participation and O&M of the I&D infrastructure.

Assumptions and Hypothesis

The social inquiry is based on the assumption that in order to continue their vested interests, the large landholders and politically influential elites have captured the institutional reforms by plugging themselves into the management committees of FOs.

Therefore the testable hypothesis of the study will be:

Average landholding of FO management committee members are greater than the average land holdings of its ordinary farmer members

Scope & Limitations

- Scope:
 - Entire Sindh Province comprising 13 AWB and 1,400 FOs
- Limitation
 - Ideally FGDs should have been conducted at each sample FO, Nevertheless, due to time and finance constrains only 9 FGDs will be conducted

Methodology

- Farmer Organization as a Unit of analysis
- Based on Primary information
- Qualitative and Quantitative Methods
 - Office records
 - Focus Group Discussions
 - Key Informants and In-depth Interview

Methodology

Data Sources

Objective	Sources of Information
Objective 1	<ul style="list-style-type: none">– Questionnaire survey and official records of the selected FOs in all three AWBs– Official records of AWBs and SIDA
Objective 2	<ul style="list-style-type: none">– Official records of 71 randomly selected sample FOs (Appendix 1)– 09 Focus Group Discussions (FGDs) at the head, middle and tail reaches of the selected FOs
Objective 3	<ul style="list-style-type: none">– In-depth Interviews with the officials of SIDA and Nara Canal AWB
Objective 4	<ul style="list-style-type: none">– In-depth Interviews with the officials of SIDA and AWBs & FO management committees

Methodology

Study Area

- 3 AWBs in Sindh province ([Map](#))
 - Nara Canal AWB
 - Ghotki Canal Feeder AWB
 - Left Bank Canal AWB

Methodology

Sampling framework

Name of AWB	FOs registered with SIDA f' (%)	Sample Size Determination f' (%)	
		FOs signed IDMT	Sample ¹
NC AWB	162 (45.76)	160 (62.01)	44 (62.01)
GFC AWB	84 (27.72)	38 (14.72)	10 (14.72)
LBC AWB	92 (25.98)	60 (23.25)	17 (23.25)
Other AWBs ²	16 (4.51)	- -	- -
Total	354 (100)	258 (100)	71^c (100)

Source: SIDA, 2012 (<http://www.sida.org.pk>)

Statistical Details:

- a. Margin of error: ± 10
- b. Confidence level: 95%
- c. 27.5% of all FOS signed IDMT

Notes:

- 1. Proportionate to No. of FOs signed IDMT in each AWB. See Appendix 1 for the AWB wise list of sample FOs
- 2. Excluded from the study

Methodology

Analytical Techniques

- Descriptive Statistics
- T Test for hypothesis testing
- Bivariate Correlation

Budget

Budget Head	Amount in PKR
Sub Totals	130,000
1. Salaries/Honorarium	
2. Permanent Equipment	60,000
3. Expendable Supplies	42,000
4. Literature, documentation, information, online literature search, contingencies, postage, etc.	40,000
5. Local Travel within Country if any	180,000
6. Miscellaneous	38,000
7. Indirect cost (University overheads 02 % of Total direct cost to meet office support, utilities, etc)	10,000
Grand Total	500,000

Thanks

Questions and Comments

memon@pide.org.pk