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**Asia Water Forum 2022**

8–11 August 2022 • Online



Focus Area: Productive water in agriculture and the economy

**Session Title: Water-Energy –Food Nexus**

Schedule: [9 August 2022] 3:00 p.m. - 4:30 p.m. (GMT+08)]



International Water  
Management Institute

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# Technology for whom? Solar Irrigation Pumps, women and smallholders in Eastern Tarai.

## AEPC

- 2016/17
- Obj: Raise awareness about solar irrigation and promote SIPs

## ICIMOD

- 2016 -2017
- Test 3 financial models and adoption of SIP by women with additional 10 percent extra subsidy conditional on land ownership

## IWMI-iDE

- 2015-2018
- Improve the livelihood of women, marginal and tenant farmers





# Financial Models

## AEPC

- **60% of total cost - Renewable Energy Subsidy Policy, 2073 BS (2016 AD)**

## ICIMOD

- **Subsidy, loan and rental.**
  - 60% grant
  - 60% grant plus 20% of the total cost as loan at a 5% interest rate
  - Monthly usage rental payment is arranged under the rental model.

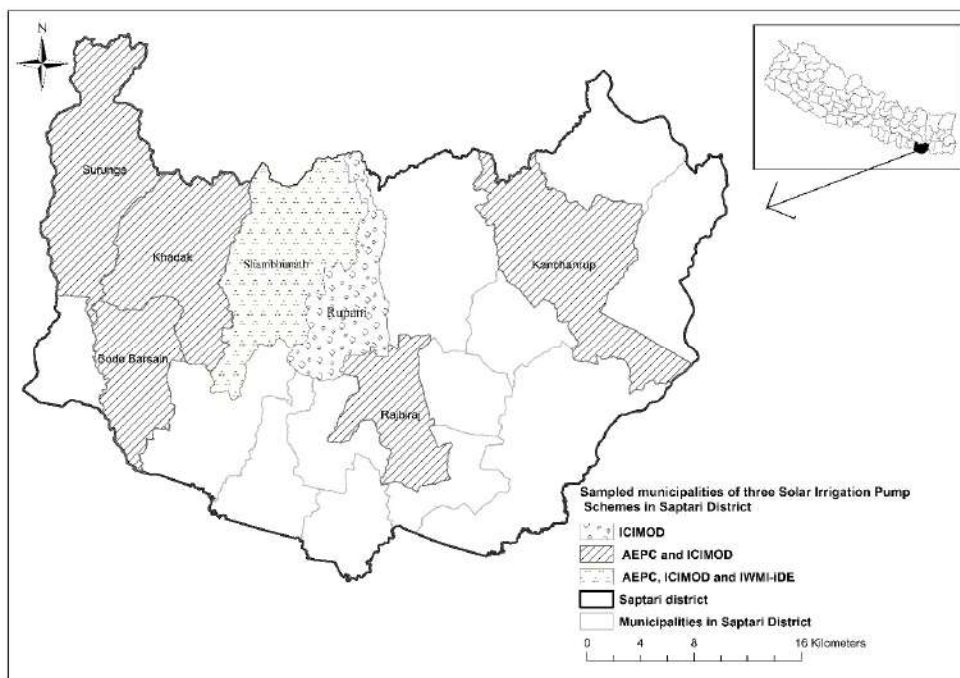
## IWMI-iDE

- **Free distribution**





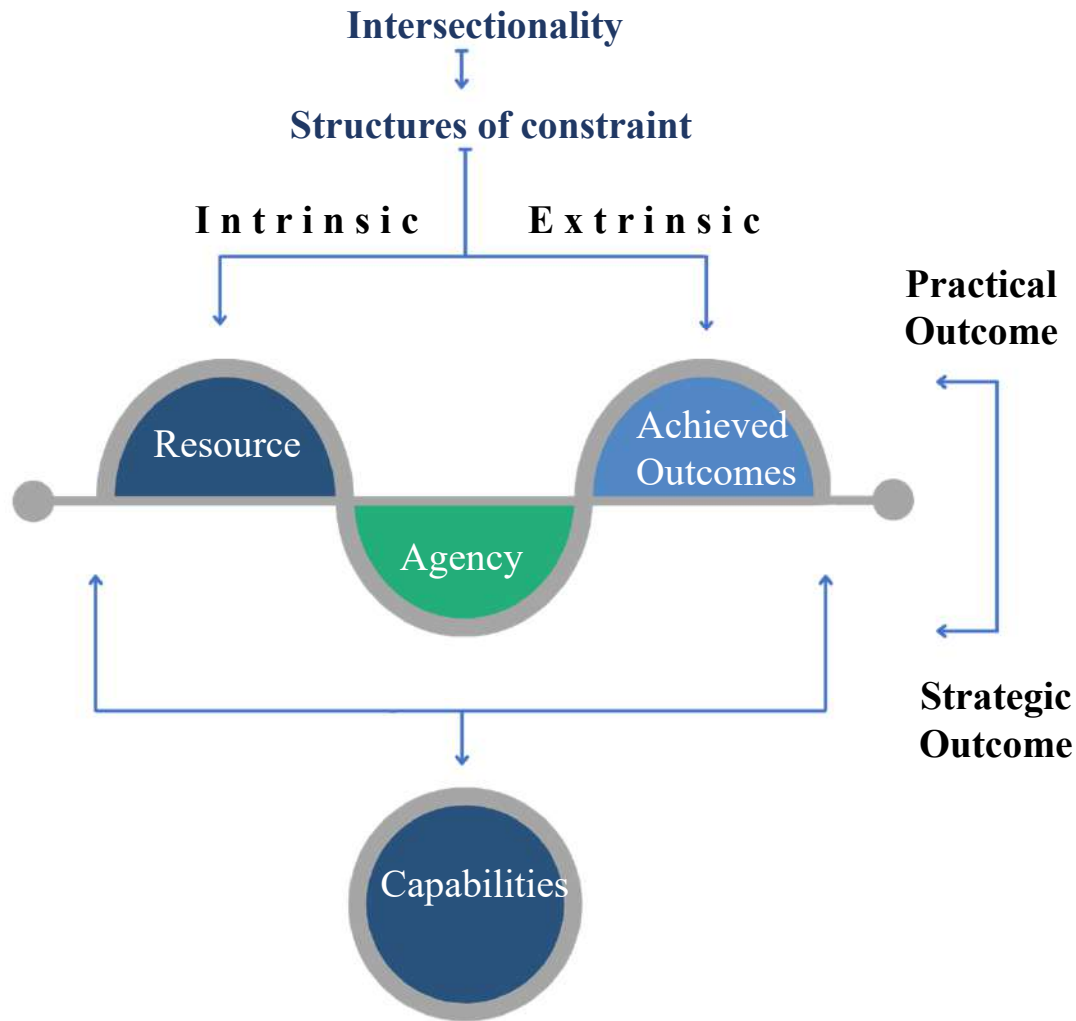
# Method



PHASE I August, 2021	Sample Size		PHASE II November , 2021
SIP Scheme	With SIP	Without SIP	
AEPC	5M, 5F	6M, 6F	10M, 10 F
ICIMOD	5M, 5F		
IWMI-iDE	4M, 4F		
	20 F, 20 M = 40		20
TOTAL	40 SSI, 20 IDI, 4 KII, 4 telephone interviews		
Purposive Sampling	Poor women, Dalit, sharecropping farmers.		



# Three dimensional theory of change



**Water access, Crop Productivity , Income**

**Women friendly technology**

**Access to land - livelihood opportunities**

**Gender stereotypes and roles.**

**Gender relations**





## AEPC/ ICIMOD

- Men, mostly from
  - Privileged caste/locations
  - Economic status
  - Educated
  - Formal and informal networks
  - Politically Connected
  - Above 2 Bigha landholding (1 Bigha = **72900 Square Feet**)

## IWMI-iDE

- Landless, near landless, women, Dalit

## Who has adopted SIP?

22%

Do not farm

Elderly

Information/documentation through men

24.4%

Absentee landlords

Practice sharecropping

Migrants to developed nations





## Practical Outcome



Water Access

Women Friendly

Access to land, livelihood and knowledge





## Strategic Outcome

Gender Roles

Gender stereotypes

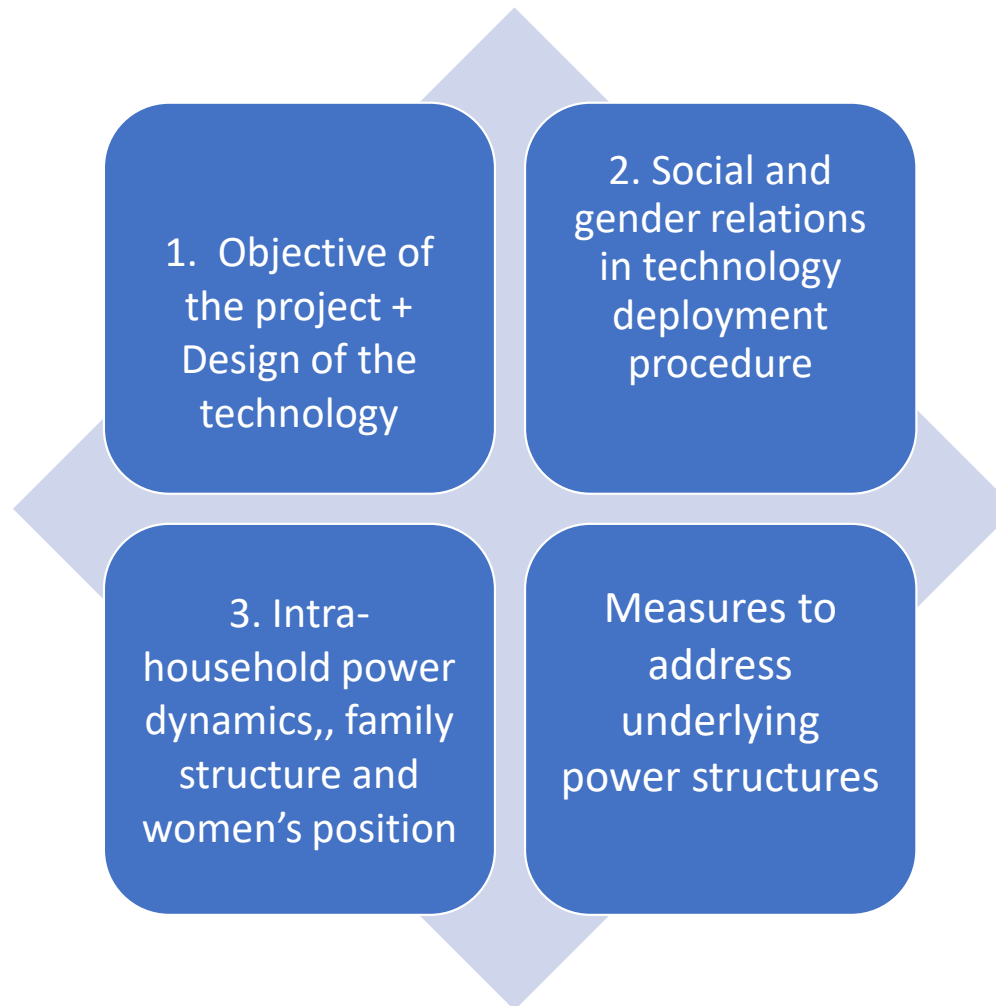
Gender Relations







# CONCLUSION





# Recommendations

- Tailor technology to socio-economic context and needs of marginalised farmers.
- Avoid shallow targeting of farmers.
- Local monitoring mechanisms to monitor elite capture and ease documentation process.
- Include measure of transformative gender and social relations.





*thank  
you*

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