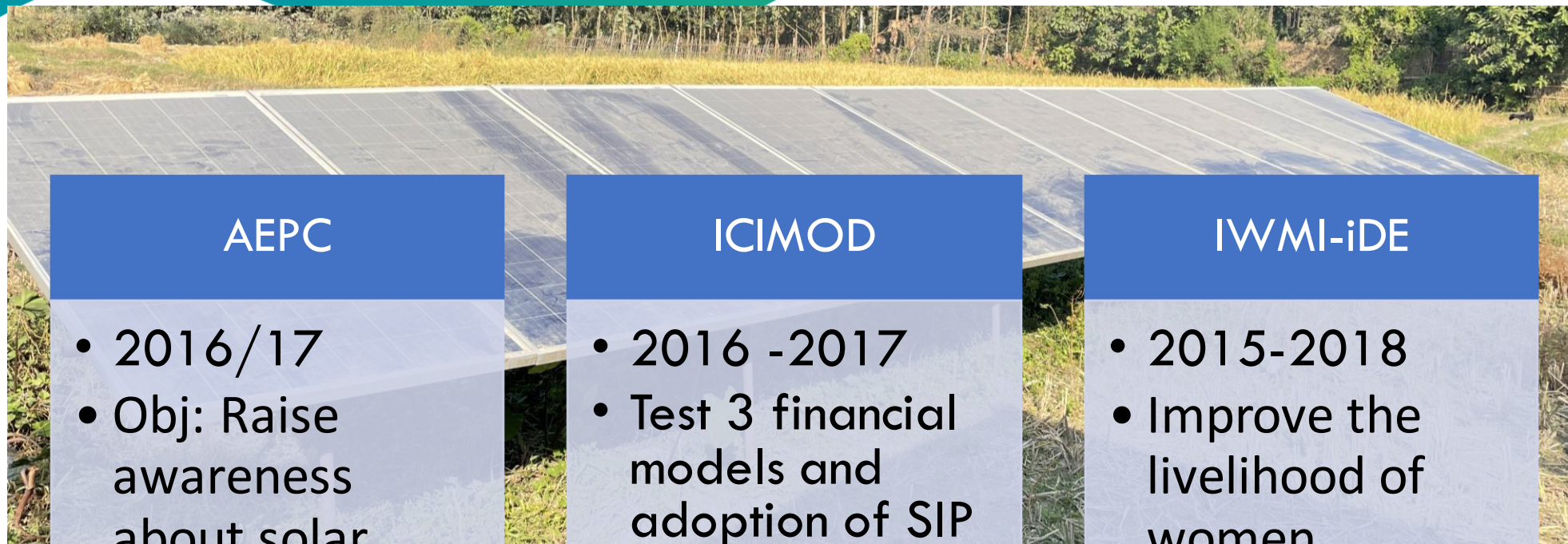


Technology for whom? Solar Irrigation Pumps, women and smallholders in Eastern Tarai.

Gitta Shrestha.

IWMI



AEPC

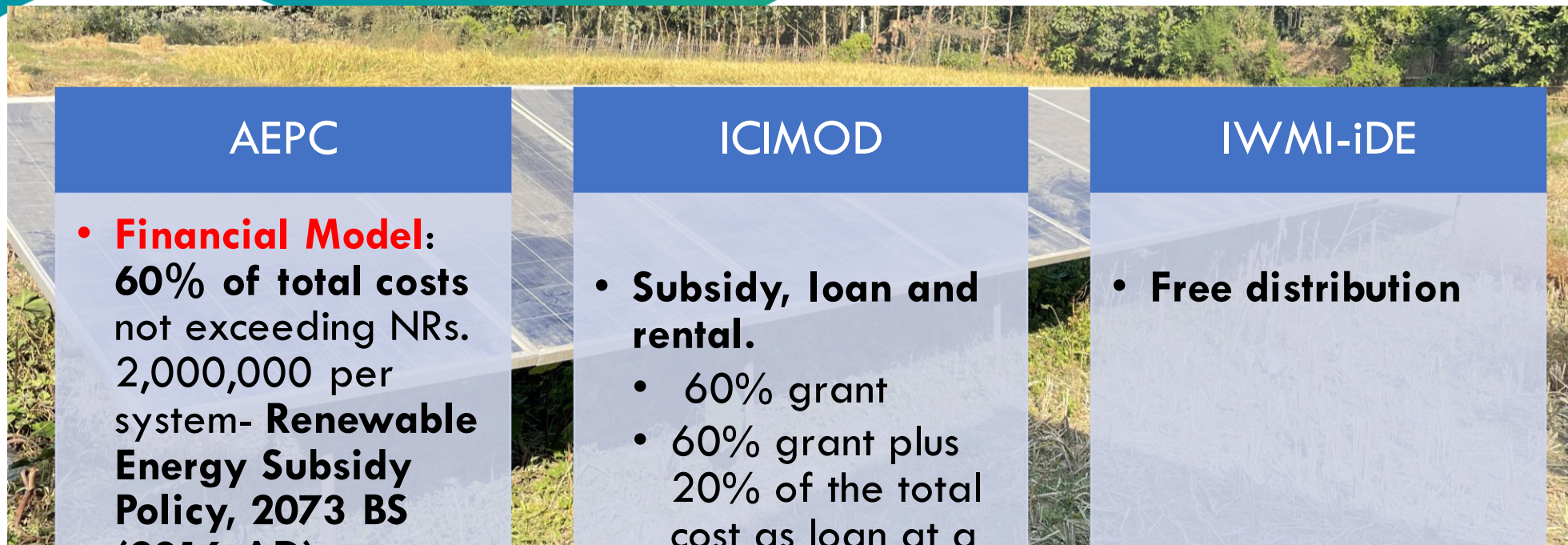
- 2016/17
- Obj: Raise awareness about solar irrigation and promote SIPs

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



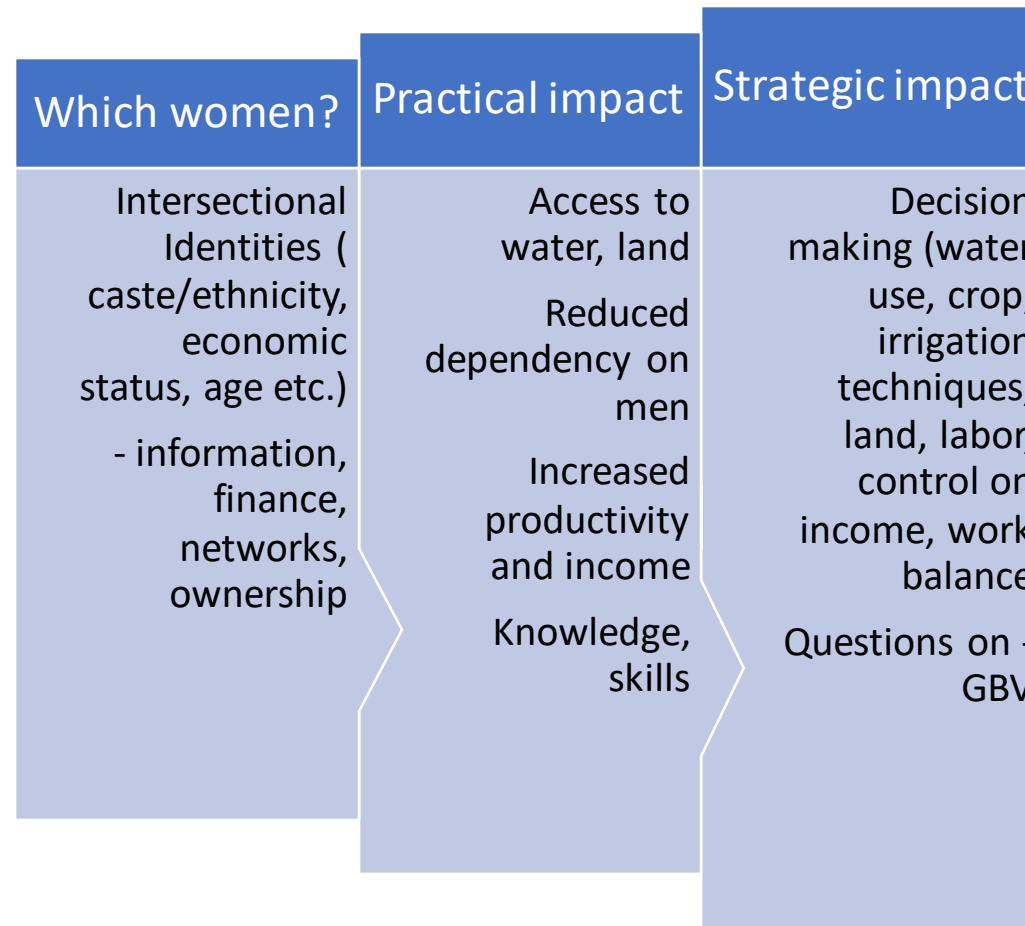
AEPC	ICIMOD	IWMI-iDE
<ul style="list-style-type: none">• Financial Model: 60% of total costs not exceeding NRs. 2,000,000 per system- Renewable Energy Subsidy Policy, 2073 BS (2016 AD)	<ul style="list-style-type: none">• Subsidy, loan and rental.<ul style="list-style-type: none">• 60% grant• 60% grant plus 20% of the total cost as loan at a 5% interest rate• Monthly usage rental payment is arranged under the rental model.	<ul style="list-style-type: none">• Free distribution

Pump Size and Cost, Information dissemination and technology deployment procedure, Eligibility criteria

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 Semi-structured interviews, 20 IDI, 4 KII, 4 telephone interviews with social mobilisers		
Purposive Sampling	Single women-headed households, single women with migrant men, Dalit women, women from poor households, sharecropping farmers		

KABEER 2018: Theory of Change, Women's Economic Empowerment

Empowerment theory [Kabeer, 1999]: "expansion in people's ability to make strategic life choices in a context where this ability was previously denied to them" (p. 437).



Who has adopted SIP?



AEPC

- Men, mostly from
- Privileged caste
- Economic status
- Educated
- Formal and informal networks
- Politically Connected
- Above 2 Bigha landholding
- Half of the female from the SIP recipient HH do not farm themselves
- Information through men to female

Which Women?



ICIMOD

- Men, mostly from
- Privileged caste
- Economic status
- Educated
- Formal and informal networks
- Politically Connected
- 2 – 30 Bigha landholding
- Absentee landlords
- Practice sharecropping

22%

24.4%



IWMI-iDE

- landless, near landless, women, Dalit

Do not farm
Elderly
Migrants to developed nations.
Information, documentation,
access through men

Practical Outcome

Easy, cheaper and reliable **water access**, increase in crop productivity and income of the households.



SIP technology as women friendly.

Physically not demanding

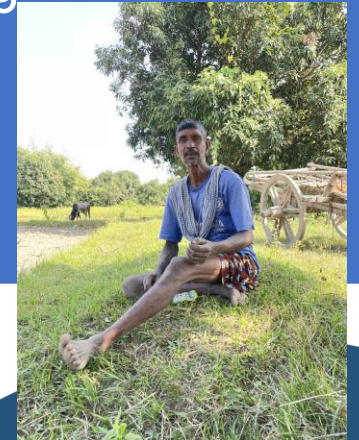
Eliminates the burden of carrying the pumps back and forth from the fields

Reduced dependency of women on men for irrigation

Save time and labor

Access to land and livelihood opportunities for the landless, near landless and poor Dalit.

Skills and knowledge on vegetable farming



Strategic Outcome



Change in Gender Roles

- Not in gender relations
- No ownership in technology, income and other benefits
- Young daughter-in-law with migrant husband dependent on in-laws
- Women's mobility accepted within acceptable social norms

Impact on gender stereotypes

- NO
- No physical risk, therefore women friendly.
- Women irrigate fields in the absence of husbands or men
- Irrigation is men's job – intact.

Capabilities / agency

- Women – household activities – disempowerment [WEAI]
- Men – access to powerful public spaces
- Daughters enrolment in public schools intact.
- Sharecroppers dependent on SIP owners for irrigation water
- Land access - a constraint for poor Dalit farmers

Conclusion

1. GESI impact – Objective of the project + Design of the technology	2. Ignoring unequal social and gender relations in technology deployment procedure could skew the adoption and benefit from the technology	3. Intra-household power dynamics,, family structure and women's position in the household – influence women's strategic agencies to benefit from the technology	Address structural constraints and explicitly address needs, responsibilities and constraints of women and marginalized farmers.
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Recommendations

SIP schemes/projects

- **Theory of Change** – Gender Sensitive, Gender Responsive, Gender Transformative – Develop indicators

Technology deployment

- Target **private spaces & local areas**
- Mobilize female **social mobilisers, women's groups** (e.g. Cooperatives, saving groups)
- Establish **local monitoring mechanism** to address elite capture of government subsidies
- Devise simplified strategies to **remove bureaucratic hurdles** and easy documentation procedure

Access to resources

- Facilitate easy and secure access and **land tenure**
- **Identify women**, landless and marginalized farmers and prioritize them for government/ project trainings, subsidies and services
- Devise a workable model/technology design to make **farming profitable for sharecroppers** by reducing their dependency on elite farmers
- Organize adult, financial and business **literacy courses** for elders, women and youths.
- Foster **Social capital of women** farmers by networking them with female technicians, entrepreneurs, mobilisers, leaders
- Ensure compulsory representation of **sharecroppers in IUAs**

Gender transformative relations

- Indicators to measure **change in interpersonal relationships**
- Empower and promote young female farmers (widows, single women, women headed households) for **leadership positions and entrepreneurs.**
- **Create safe spaces** and promote dialogues on local gender and social norms, gender assumptions, gendered attitudes and behaviours through participatory approaches. Encourage participation of mother-in-law, daughter-in-law, husband-wife, parents and adolescent (boys and girls) in such spaces.

Thank you

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Food • Climate • Growth