Gender Perspective of Existing Good Practices of Water Management for Livelihood Improvement in Koshi Basin

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Outline

Introduction

Best practices in Koshi basin

Gender perspective of good practices

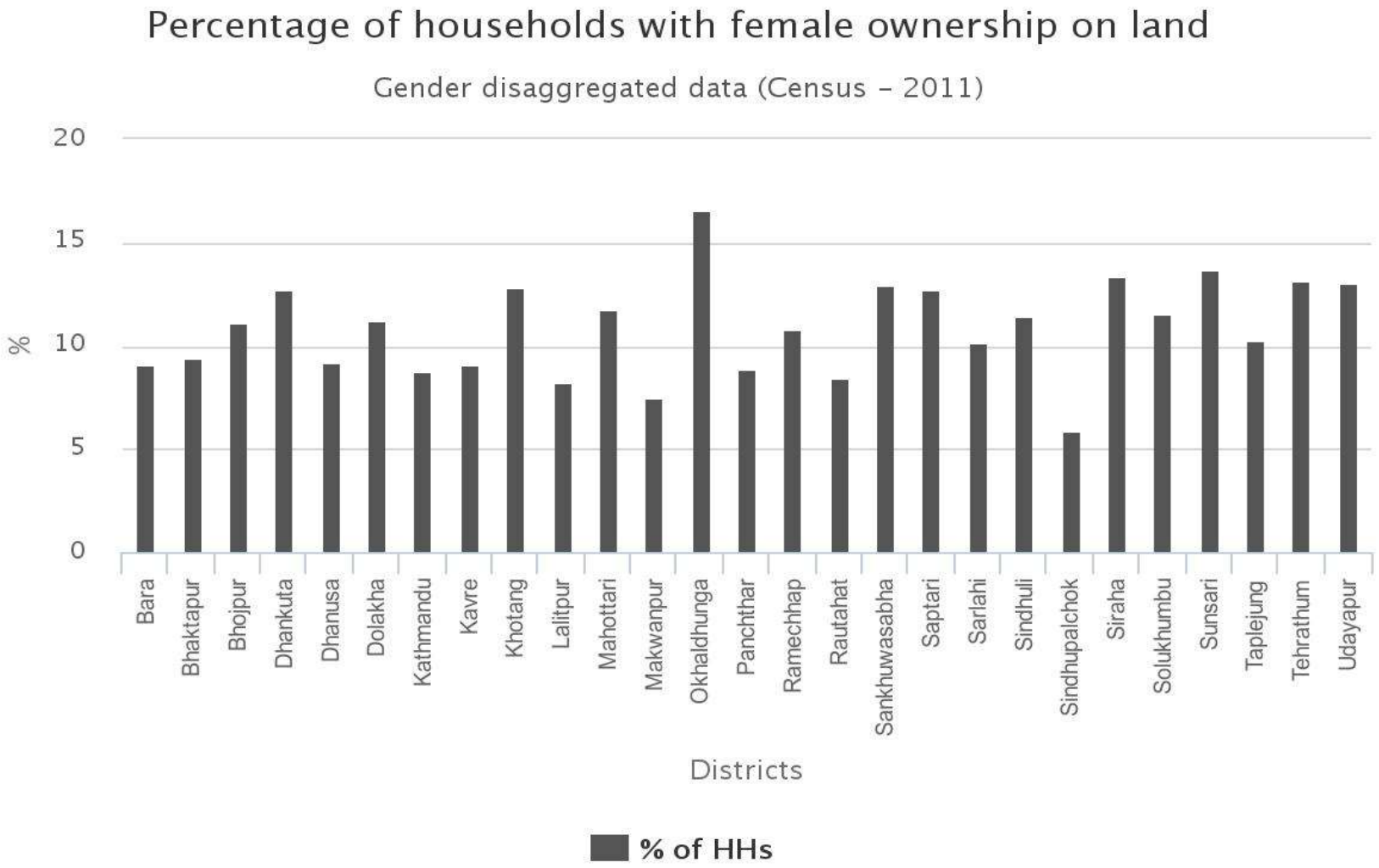
Upscaling/policy uptake

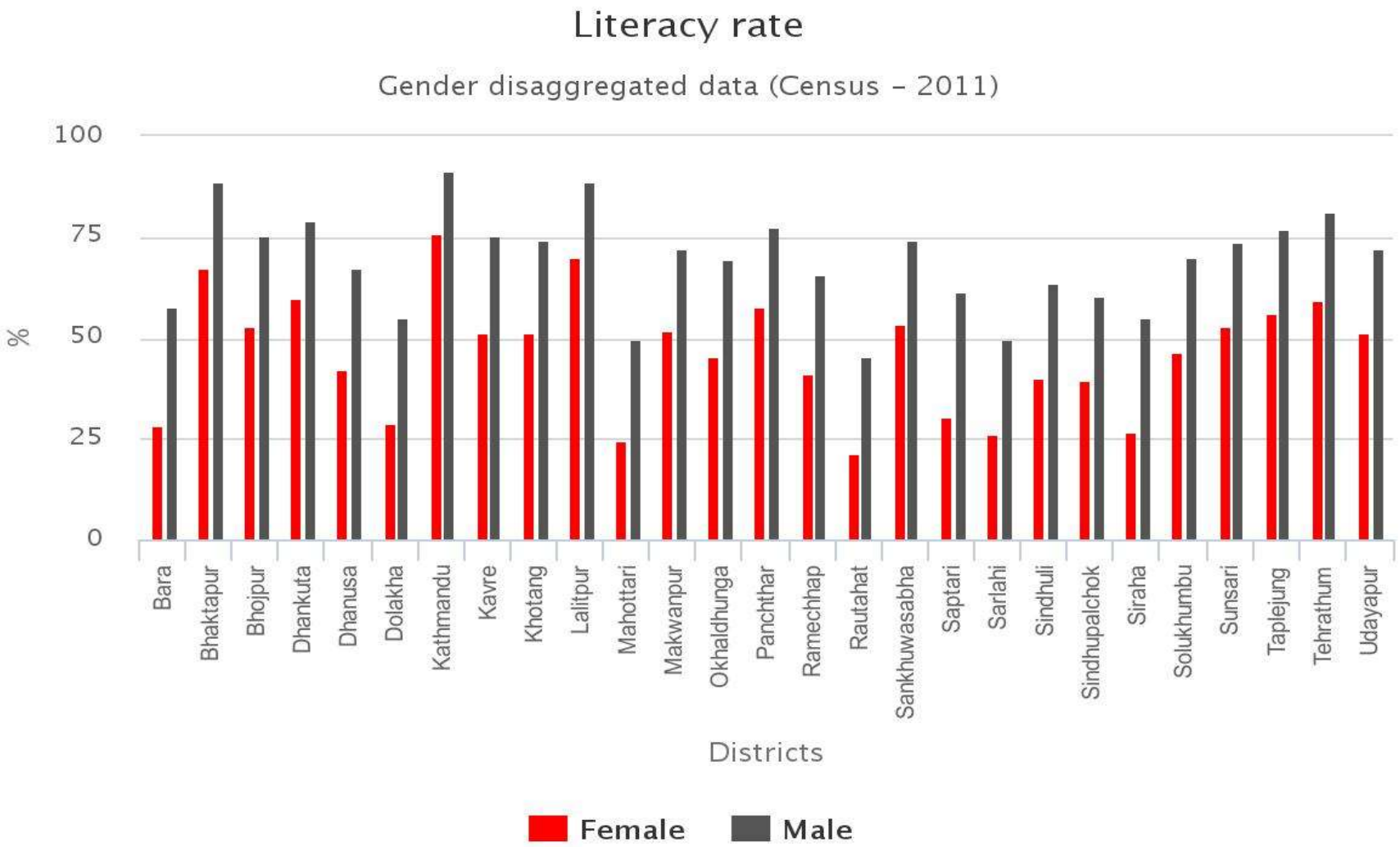
Conclusion

Introduction

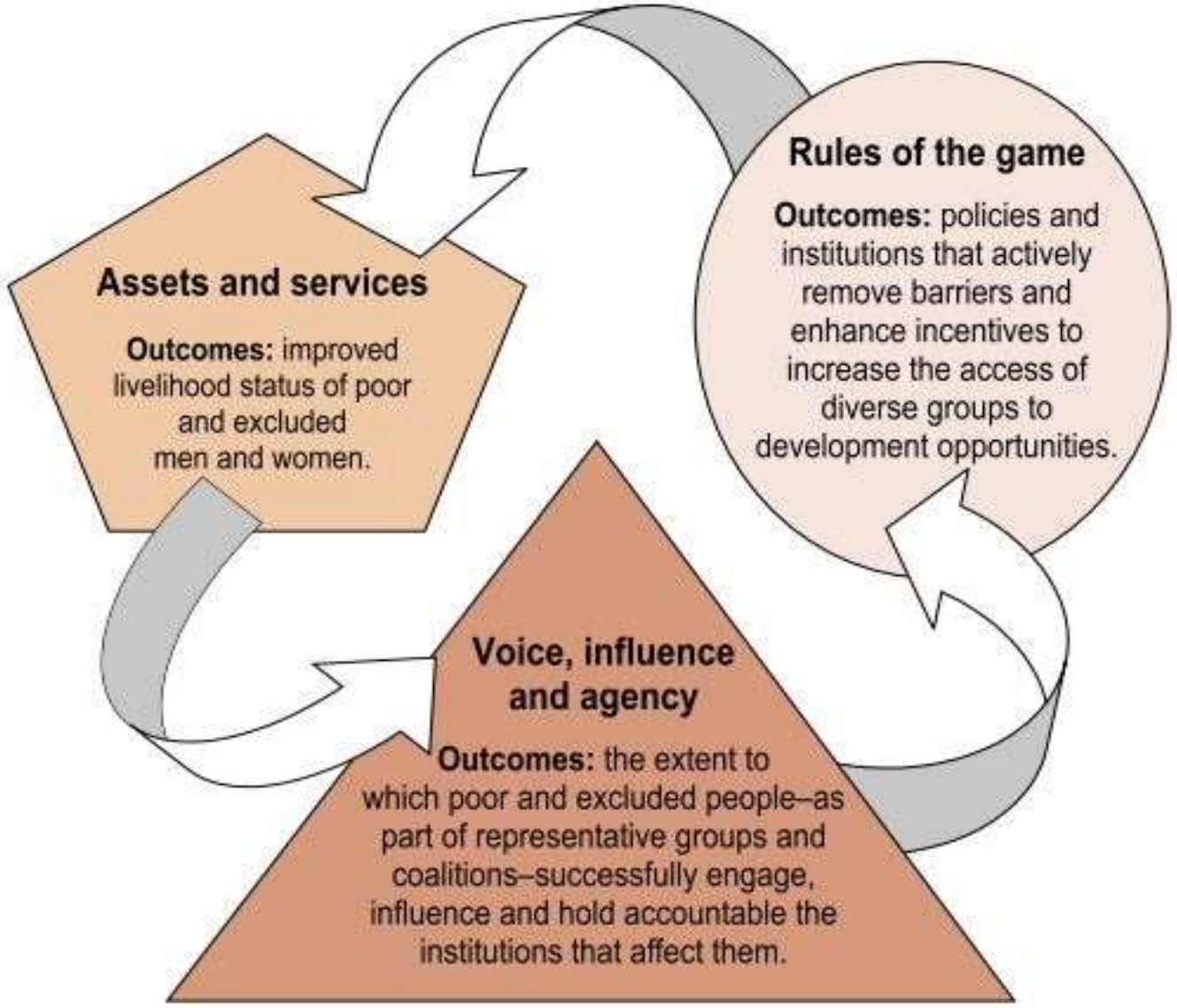
- Mapping out cases of good practices on water related climate change adaptation and livelihood improvements in different parts of Koshi Basin
- Summary of good practices
- Gender perspective of good practices and policy recommendation

27 districts of Nepal




Literacy rate
Gender disaggregated data (Census – 2011)
100
75
50
25
0
%
Bara
Bhaktapur
Bhojpur
Dhankuta
Dhanusa
Dolakha
Kathmandu
Kavre
Khotang
Lalitpur
Mahottari
Makwanpur
Okhaldhunga
Panchthar
Ramechhap
Rautahat
Sankhuwasabha
Saptari
Sarlahi
Sindhuli
Sindhupalchok
Siraha
Solukhumbu
Sunsari
Taplejung
Tehrathum
Udayapur
Districts
Female
Male

Gender analysis



Good practices

Improvement on irrigation

- pond irrigation system and non-conventional irrigation technology project

Integrated water use

- Multiple water use services

Livelihood improvement and diversification

- livelihood improvement through water harvesting and diversification of livelihood through alternative water use

Disaster risk reduction

- early warning system and reducing climate risk vulnerability through the capacity strengthening of women and vulnerable communities

Water conservation

- Water recharging ponds and integrated water resource management

Good governance

- Water User Associations' leadership in irrigation management, water use master plan for effective governance, drinking water supply management by women

Gender perspective of best practices

- **Conservation pond @ Sipapokhare**
- Pond irrigation @ Timilsingaun
- **Rain water harvesting for livelihood improvement @ Mithinkot**
- Reducing climate risk through capacity strengthening of women and vulnerable communities @ Haibung
- Water recharge pond @ Timilsinagaun
- Water use master plan @ Mahankal

Conservation pond @ Sipapokhare

- ward no 5 and 8 of Sipapokhare VDC in Sindhupalchok district
- water from downstream for drinking and feeding livestock- growing vegetables only up to November
- 19 households in the community.
- The District Soil Conservation office provided a support to dig 12 conservation ponds in the village- Sillpouline plastic ponds were constructed
- The DSCO - about NPR 129 thousand and community - NPR 183 thousand.
- A user committee was formed and was responsible for the overall management in the construction of the ponds and their operation.
- Implementation of the project - coordinated with Sarbangini Cooperative.
- The ponds also ensure the irrigation for paddy in critical periods albeit in smaller scale.
- Production of forage and fodder terrace bonds has also increased with the increased availability of water reducing pressure on the nearby forest.

Before and after scenario of cropping pattern

Crops	Before	After	
	2070BS	2071BS	2072BS
Millet	No change in cropping area before and after the conservation pond		
Maize	No change in cropping area before and after the conservation pond		
Mustard	Not planted	Planted	Not planted
Garlic	Planted for consumption at home	Cropping area increased	Same as 2071
Onion	Planted for consumption at home	**Sold around 20 kg**	**Sold around 20 kg**
Chili	Not planted	**Sold 5 sacks (30 kg per sacks)**	**Same as 2071**
Leafy vegetable	Planted for consumption at home	Cropping area increased	Same as 2071
Cauliflower	Not planted	**Planted in 1 Ropani**	Same as 2071
Cabbage	not planted	**Planted but no change in cropping area**	
Peas	Not planted	Not planted	Planted in this year
Carrot	Not planted	Planted but no change in cropping area	
Cucumber	Not planted	50 plants planted	70 plants planted
Bitter guard	Not planted	Planted (16 plants)	
Pumpkin	Not planted	**Sold leafs from 22 plants**	**Same as 2071**

Women farmer

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“Mustard was planted last year. We could irrigate from the pond as my husband requested pipes to bring water from the pond to the farm.

This year, we were reluctant to request neighbour; thus mustard is not planted.

Chili, cauliflower, cabbage, were the crops that were sold in large quantity. It has become my responsibility to look after the off-seasonal vegetable. I donot know about vitamin and chemicals usage. I need a training. My husband know how much to apply vitamins and chemicals, and I follow him. When he is not around I need to wait for him.

- From the month June/July to February, water in the pond is more than half, but since then, water level quickly goes down because of low discharge in the pipe. From February to June, when water level in the pond goes down to the dregs, they have planned to fill the pond from the spring source located downstream. They have estimated that 90 m of pipe requires to pump water to their conservation pond. They have also visited mechanical shops for the discussion on price and horsepower required for electric motor. In addition, they have also decided to build concrete collection tank in between down spring source to conservation pond.

- I thought pond can also be used for fish farming. I convinced my husband to keep fish in the conservation pond. We tried fish farming paying Rs 3 per fingerling, however we bear the loss.
- I watch TV programs on off-seasonal vegetable farming
- Now I want to try off-seasonal tomato farming, I want to convince my husband on this.
- I bought sprinkles to irrigated vegetables. I was inspired by TV shows. But only later I come to know that springs require high water pressure for its rotation and it did not work for our pond irrigation.
- Similarly, Rudrakshya plantation is another interest. Rudrakshya fruit can be sold within 3 to 4 years of plantation and it can be sold in higher price.
- A couple of years ago my son used to wait for his father to get pocket money; now I can meet his need from the income from vegetable farming.

Enhancement in AGENCY, SKILLS & ASSETS

Livelihood improvement through water harvesting, Mithinkot VDC, Kabhrepalanchok

No irrigation in the village

2064BS- rainwater harvesting pond constructed in support from CEAPRED and DADO 2064

2065 BS- Jor Salla Vegetable Seed Production cooperative established to promote seed production- seeds of hybrid tomato.

Each household has constructed plastic pond and collect rain water. They irrigate the crop in tunnel by both drip and pipe irrigation.

Interview with women farmer

- Prior to 2064BS, family depend on selling of buffalo milk, rice from 1.5 Ropani of Khet, goat farming and maize, wheat and mustard planted in 5 Ropani Bari.
- The rice was enough for hh consumption for 2 months. Maize and wheat were sufficient for a year. For 6 months family had to purchase mustard oil. Vegetable crops were farmed in small area for hh consumption.
- After 2064: Tomato planted in 1.5 Ropani, Brinjal in 1.5 Ropani, chili and cucumber for trial in smaller area.
- Selling of seed - Vegetable contractor started visiting farm, they started began growing tomato, Brinjal, chilli, cucumber, etc in larger scale.
- 2068- Tomato worth NRS 20000, brinjal worth NRS 15000, and 20 kg of chili.

Bargaining power

In ward 1 of Mithinkot, there is lack of drinking water, and therefore husband go far for the collection of water

Often he goes at night to fill in his buckets.

She explained however, he manage water for irrigation inside tunnel, otherwise she could not be able to irrigate tunnel full of growing tomato plants inside tunnel.

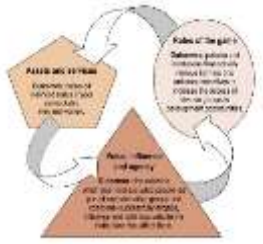
I make sure he helps me in bringing in water for tomato.

Upscaling/policy uptake

- Improving livelihood assets and services for women and marginalized communities

- Facilitating possibilities to voice, influence and agency

- Empowering women and marginalized to frame the rules to meet their need



Thank you

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