

## GENDER VULNERABILITY CLIMATE CHANGE A CASE STUDY OF THE LABDU DHIKURE SHERA IRRIGATION SYSTEM, NEPAL

#### **Command Area**

366.39 ha

Khaigau + Ganesthan VDC Nuwakot, Nepal

Constructed

1983

**Before construction of channels** Z crops

After construction of channels crops

Methodology

Anthropological Participatory Research Methods



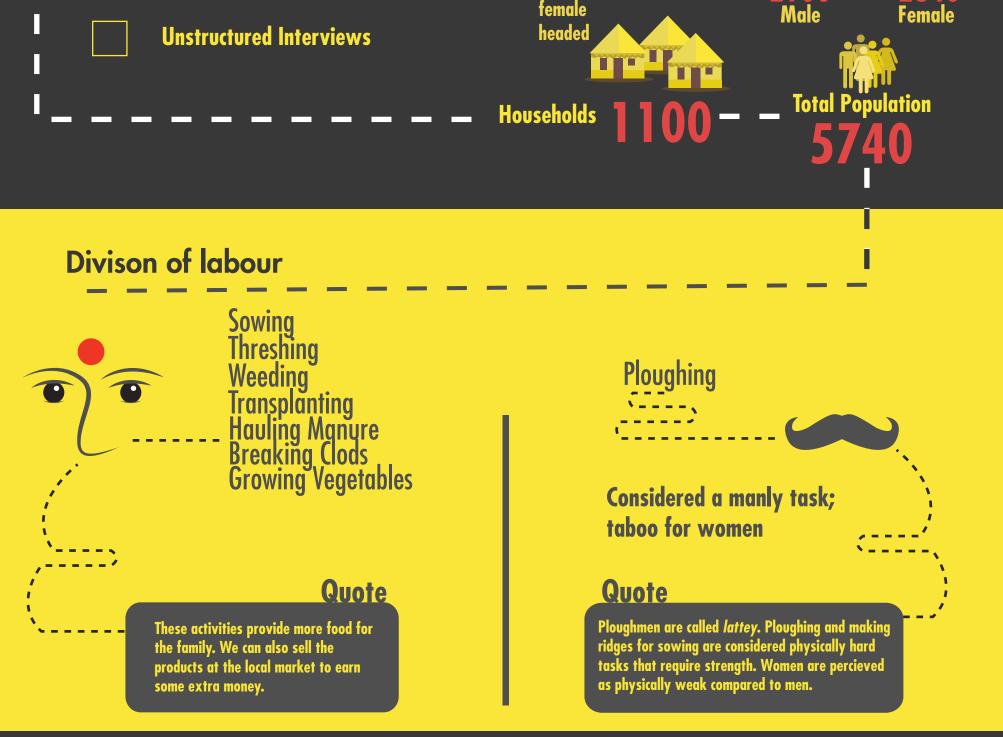
**Participant observation** 



**Case Study** 



2900 2840



### **Background of Labdu Dikure Shera Irrigation System**

The Water Users' Assocation (WUA) registered has ĨĨŢŦŦŢŢŢŢŢŢŢŢŢŢŢŢŢ 11 members -

Till date all presidents of the WUA have been men

Layout of the Labdu Dikure System

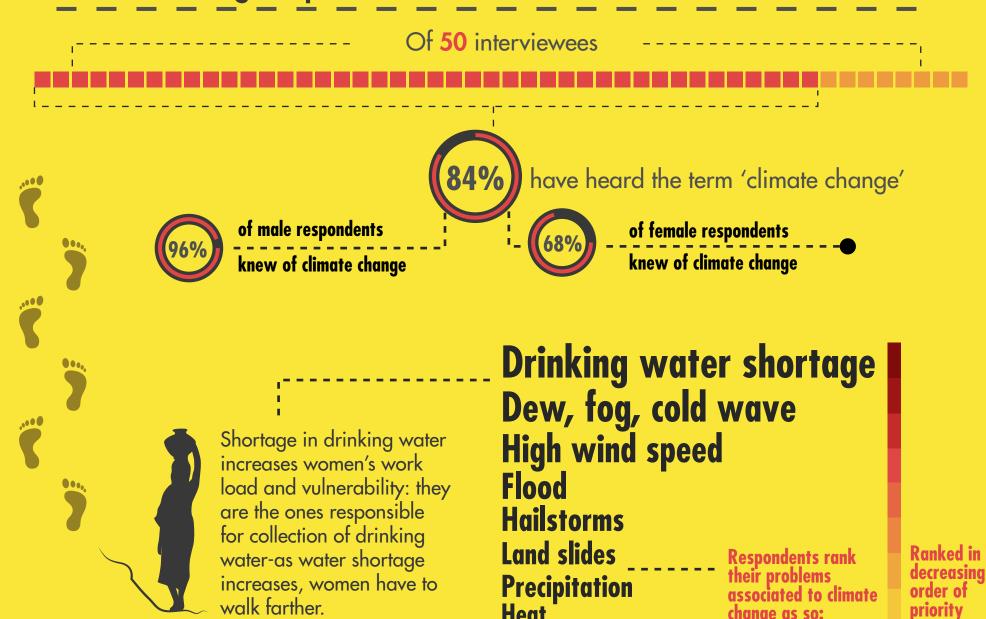
Branch of the irrigation system

Thadi Khola (source)

Water availability decreases for branches that are further away from the source

The Thadi Khola is the source of the Labdu Dikure system. There are a total of 10 branches that irrigate ~ 366 hectares of land. Based on the season, there is variability in water supply. The entire canal length is of 14 km. The tail end of this canal has started eroding, ranging from decreased water supply to almost no supply at the end.

#### **Climate change impact and Gender**







Climate change is not gender and or socially neutral. The impact of climate change is distributed and felt differently among women and men, and also among different social groups based on caste, class, etc.

Heat



A brahmin family used to live on the earnings of the male member who acted as the village priest. After the irrigation system began, he found that his earnings from agricultural activities would be more than from religious functions. Hence, the family purchased farm land and intensified commercial farming with water available from the system.

However, irrigated farmland in the command area next to the river is under threat of flood every year. Recent flooding in the area also affected his own land. To cope with the loss, the man has started to pay attention to his earlier role of offering ritual services. At the same time with an increase in climate uncertainties, there has been a growing demand for religious counseling.

The occurrence of diseases and pests has increased in the area. Newer pest trends such as aphids are being reported in millet crops. Potato growers have also complained about the increasing occurrence of blight, linking the incidence to increase in the number of foggy days, and variability in temperature and precipitation.

change as so:

To cope, chemical pesticides have been intensively applied to the crops. Along with this, the frequency of the spraying of pesticides has increased. Men being involved in off-farm activities, has led to an increased involvement of women in farmwork. Due to a lack of awareness, chemicals are handled improperly, making the community more vulnerable to climatic stressors.



# Looking Ahead

Though, irrigated scenarios are considered as more resilient systems to climatic stressors, the systems do suffer from differential impacts on women and men; these gendered differential impacts are compounded by other social stratifiers based on class, caste, ethnicity, and age among others. Policies and program to address climate adaptation need to address gender based vulnerabilities in irrigated scenarios.

This infograph is based on a thesis by Prajjwal Bhandari. The study for this was carried out under the HI-AWARE component on Gender vulnerability in the Gandaki basin.

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