

Technical Assistance :  
Mainstreaming gender into Development Planning

# Case Study

STRATEGIC PROGRAM FOR CLIMATE RESILIENCE (SPCR), CAMBODIA

## Gender Water Gate for Agriculture Diversification



### Introduction

**C**limate change is greatly affecting weather patterns and the world's ecosystem and posing significant challenges to water supply. Water sources are affected by climate change which has drastic effects on Cambodia's population and pose a serious challenge for water resources management particularly for agriculture farming and poverty alleviation. Flood and drought vulnerability is one of the most significant factors that must be considered when addressing poverty reduction and economic development in Cambodia.

## Challenges

The lack of appropriate infrastructure for agricultural water management seriously affects almost 3,201 households [14,511 persons (7,501 women)] in Phnov I and Prek Changkran communes of Sithorkandal district in Prey Veng province includes disability who depend on the canal for daily livelihood (Commune Development Plan and Commune Investment Plan, 2016). The existing canal structure is shallow but having an environmental friendly.

In an event of climate change such as drought in these communities, both women and men are seeking water supply for their crop plantation, rice cultivation and home gardening of which they always face various constraints as the current access to water supply from existing water infrastructure requires more costs and economic time.

Also, the villagers live at the upper stream of the canal cannot cultivate rice during dry season as there is less water and it flows to the lower stream.

## Adaptation Measures/Results

As part of the required urgent attention to respond to the impacts of climate change regarding water resources management, adaptation investment on water source infrastructure through gender responsive water gate in vulnerable community is highly value added to the existing canal to be accessed by upper and lower stream although it requires additional cost for construction but it results in less economic time allocation.

Gender responsive water gate with the size of 23-meter width and 3-meter height was rehabilitated for the above two communes with community participatory in the process of design and construction in order to serve the agriculture farming which cover hundred hectares and other livelihood activities especially women as direct beneficiaries [278 households or 815 individuals (575 women)] and indirect beneficiaries [2,923 households or 13,696 individual (6,926 women)].

This gender responsive water gate can store water to flow along the canal at the up-stream which allows most farmers to pump water into their rice field as it is close, farmers can save pipe length and gasoline as well as time consuming.

One of villager complained, “My household income totally depends on rice field but it is very difficult to pump water from far distance (more than 400 meters)”; she added “I always go to pump water alone as my husband cannot go anywhere. He is disabled”.




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**“Less Water,  
Less Yield”**

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Another farmer, Heng Pros said he dug the water well inside the drought lake for his rice field but water from the well cannot provide good quality of paddy rice and high yield and sometime there is no water from the well too.

Yiet Noy, a villager lives at upper stream said “I am a widow with one daughter. To pump water, it consumes a lot of gasoline and takes long time consuming to fill in the rice field and I need help from my 10-year old daughter to pull the long pipe otherwise it is disconnected”. She added that after having this gender water gate, there is water available now in the canal which is close to my rice field so she can pump water by herself and the daughter can go to school regularly and on time. As there is available water, she also plans to grow some vegetable around her rice field to generate more incomes for sending her daughter to higher education.

“Previously it consume gasoline for 4 liters to pump water into my rice field but now I used only two liters, I can save this money and time to do other activities”, said Pin Sri, a farmer live at lower stream.

Director of Provincial Department of Women’s Affair, Ngin Pov said “we need to cooperate with the Provincial Department of Water Resources and Meteorology, local authorities and communities in order to build this gender water gate that women can open and close easily”.

“Women need to use more water than men, not only personal use but also agriculture purpose! If there is enough available water for them, they will not migrate to other places as they can stay in the community to grow vegetable and diversify their crops to generate more income besides doing rice field”, she added.

The gender water gate contributes to help women, men, children, elders and disabled people for better climate adaptation and resilience for daily livelihoods.

## **Sustainability of the Adaptation Measures**

After the rehabilitation of the gender responsive water gate, the water user committee was established within these two communes in order to guide the operation and implementation of the gender responsive water gate, water user’s fee perspective, maintenance and improvement and conflict solution for water to be accessed by both communes at the upper and lower streams.

Long Naysim, one of committee at the upper stream said this gender responsive water gate can be opened easily by two or three women as a group. “I go with other members of the committee to check the water gate once a week if there is any broken or need to open for villagers live at the lower stream for their rice fields”, she said.

A village chief and also deputy chair of the water user committee at lower stream, Meas La said “I checked if it is broken or locked the gate. Previously by this time (December), there is no more water available along the canal. Dol Sinat, a chair of water user committee at upper stream said, “I also call for contribution from farmers who access water to contribute 5,000 Riel per hectare to keep for maintenance”.