Kampong Thom:
Rehabilitated Canals Doubles Crop Yield and Increases Household Income.

Water plays a critical role in the agricultural sector, particularly rice cultivation, making reliable water a necessity for Cambodian farmers. The need for water is very much obvious for those whose rice paddy fields are too remote to access water from its source, especially during the dry spell. While most of Cambodian rural farmers rely heavily on rain-fed rice cultivation, climate change has influenced considerable changes in rain distribution. Building and rehabilitating resilient irrigation schemes to adapt to the changing climate is of critical importance, as it will revitalize agricultural productivity, thereby improving livelihoods.

"Water is absolutely essential to our village in many respects, I must keep saying it. Most of the people in my village, if not all, are farmers, and they rely on water to do agricultural activities and earn their incomes," commune chief, Mr. Hem Hai, reiterated the importance of the reliable water irrigation in his commune livelihood improvement.

Photo: UNDP Cambodia.

Water pumping through tube into rice paddies from rehabilitated canal in Pong-ro commune.

Photo: UNDP Cambodia.

Mr. Hem Hai, chief of Pongro commune, on the rehabilitated canal during his regular monitoring.

The SRL project, coined Strengthening Resilient Livelihoods, was designed to reduce vulnerability and improve livelihoods, specifically as it pertains to the changing climate. The project was implemented in two target provinces, Siem Reap and Kampong Thom, covering 10 districts and its 90 constituent communes. One of the project priority interventions is to provide co-financing grants to build and rehabilitate resilient small-scale water infrastructures such as canals, water gates, spillways, and community ponds. Such projects will provide the community with access to reliable water sources, thus improving agricultural production and overall livelihoods.

"It's really a good year for us to double our rice crop. We will do it because we have enough water to do so," said elderly woman, Khiev Sakhorn, as she stood next to her running pump machine. Rehabilitated under PBCR[1] grant, the 1100-meter-long canal is now fully operational in the middle of the approximately 300 hectares of green rice paddies in Pongro commune, Kampong Thom.

Photo: UNDP Cambodia.

Farmer Sakhorn in Pongro commune is pumping water from the rehabilitated canal into her rice paddies.

In a colourful long-sleeve shirt with a yellow hat covering a red krama on her head, 64-year-old widow farmer from O'rang village in Pongror commune, Khiev Sakhorn, stands beside her rice fields. She has been a member of the community water user group formed by the project in 2018.

With water irrigating through the canal, she can now cultivate her rice crop twice per year, in both dry and wet seasons.

[1] *The Performance-Based Climate Resilience grant, coined PBCR, provides a financial top-up to the sub-national administrations (SNAs) to co-finance the most prioritized climate change adaptation interventions, particularly building and rehabilitating resilient infrastructure schemes such as canals, dams, water gates, spillways, ponds, and the like.*

In addition, she has learned new ways of cultivating rice that are more profitable and better for the environment. In so doing, she can save more time, money, and energy. Ms. Sakhorn is a widow farmer who supports a widow younger sister and a son studying at a university. She makes a living by growing rice and some vegetables. She grows vegetables for domestic conusmption and sells the remaing yield for extra income.

> *"Getting water into our rice paddies, particularly during the dry spell, used to be pretty pricey because we had to pump water from a remote water source. Now the water is flowing next to our farm. Last year, i.e., before this canal was repaired, I could only grow rice once a year, and a large pile of our rice yield was used up for daily comsumption and little for sale," she further stressed. She said she is preparing to double rice crop this year because there is enough water to so do.*
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> *"I see that people in my commune are very perky with their agricultural activities this year. Not only will they gain enough yields for their domestic use, but they will also have more to sell for better income," commune chief Hem Hai confidently implied.*

Pumping machine irrigating water from the rehabilitated canal into the rice paddies in Pongro commune, Kampong Thom.

Lush rice paddies along the rehabilitated canal in Ponro commune, Kampong Thom.

RESILIENT WATER SMALL-SCALE INFRASTRUCTURE SCHEMES IN KAMPONG THOM

SUPPORTED THROUGH PBCR GRANT IN 2017-2018

Canal.

1,186-meter-long.
Pongro commune, Baray.
381-meter-long.
Meanchey commune, Sandan.
1,452-meter-long.
Jreab commune, Santouk.
1,706-meter-long.
Kampong Thmo commune, Santouk.
730-meter-long.
Tbong Krapeu commune, Santouk.
1,433-meter-long.
Kokoh commune, Santouk.
2,032-meter-long.
Baray commune, Baray.
300-meter-long.
Chhouk khsach commune, Baray.
2,750-meter-long.
Sralao commune, Baray.
3,295 -meter-long.
Domrei slab commune, Kampong Svay.
3,283-meter-long.
Kreydong commune, Kampong Svay.
2,202-meter-long.

Community Lake/Pond.

80x38mx3m pond.
Koki Thom commune, Baray.
60x50x3.5m lake.
Damrei slab commune, Kampong Svay.
60mx39mx2m &
56.8mx37mx2m ponds.
Salavisay commune, Prasast Balang.
90mx102mx4m lake.
Samaki commune, Santouk.
100mx100mx2m lake.
Tang Krasang commune, Santouk.

Dam/Water gate.

135mx5mx1m dam.
Samaki commune, Prasast Balang.
255mx4mx1m dam.
Cheuteal commune, Sandan.
456mx5mx1.2m dam.
Ngon commune, Sandan.
214mx11mx2.8m dam.
Sandan commune, Sandan.
6mx2mx1.8m water gate.
Meanrith commune, Sandan.

Note: Some schemes are fully operational, and some are in process of completion.

Empowered lives.
Resilient nations.