Rehabilitated Water Irrigation System Helps Farmers Double crop to Increase Income.

Photo: UNDP Cambodia.

Water pumping through tube into rice paddies from rehabilitated canal in Pongro commune.

Water plays a critical role in agricultural sector, particularly rice cultivation, and reliable water is decidedly demanded by Cambodian farmers. The need for water is even doubled 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, considerable changes in rain distribution have occurred due to the influence of climate change. Building and rehabilitating resilient irrigation schemes to adapt to the changing climate is of critical importance to revitalizing their agricultural productivity, thereby improving their resilient 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.

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

> The SRL project, coined Strengthening Resilient Livelihoods, has been designed to reduce the vulnerability of the people and improve their resilient livelihoods to overcome difficulties induced by the changing climate. The project is 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 provides co-financing grant to build and rehabilitate resilient small-scale water infrastructures such as canals, water gates, spillways, and community ponds so that the people can access reliable water to implement their resilient agricultural livelihood activities in their communities.

Photo: UNDP Cambodia.

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

"It's really a good year for us to double our rice crop. We can't just wait because we have enough water to do so," pleasantly said an elder woman farmer Khiev Sakhorn standing next to her running pumping machine irrigating the water from the rehabilitated canal into her rice paddies. 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.

In a colourful long-sleeve shirt with a tad old yellow hat covering a red krama on the head, a 64-year-old widow farmer from O'rang village in Pongror commune has been a contented member of water user groups formed by the project in 2018. With water irrigating through the canal, she looks very happy because she can't wait to 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.*

Also, she has even changed to practise better ways of rice cultivation and better rice varieties to grow. 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 crop and some vegetables for her domestic use and sale 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 remote water source. Now the water is flowing next to our farms. Last year, i.e., before this canal was repaired, I could only grow rice crop once 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.

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.