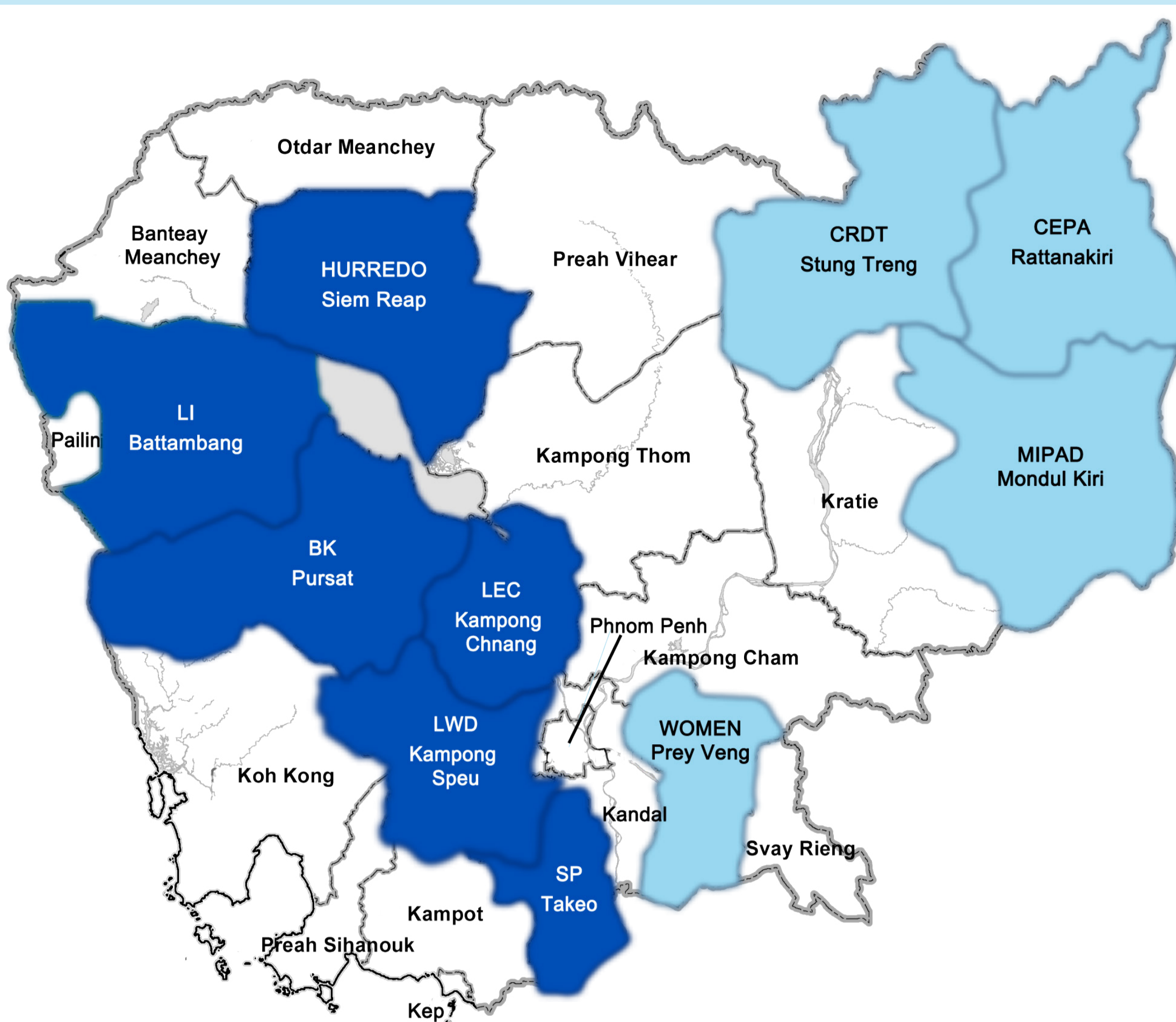




MAINSTREAMING CLIMATE RESILIENCE INTO DEVELOPMENT PLANNING - CIVIL SOCIETY SUPPORT MECHANISM

CLIMATE RESILIENT AGRICULTURE

PLAN INTERNATIONAL THROUGH - HURREDO IN SIEM REAP, SP IN TAKEO, LEC IN KAMPONG CHNANG, LWD IN KAMPONG SPEU, BK IN PURSAT, LI IN BATTAMBANG



Vulnerability Profile

- **Main hazard:** intense and/or prolonged drought and floods
- **Impacts:** low rice and crop yield; decrease in soil fertility; food insecurity; water shortage for irrigation and household consumption; food shortage; increased pest and insect outbreak leading to serious damage on crops and higher mortality among animals
- **Key issues:** limited irrigation infrastructure and smart agriculture technologies; limited capacity of communities to effectively integrate CCA into irrigation development, agriculture, and natural resource management
- **Traditional coping strategies:** shift to short-cycle rice or to non-rice crops to make up for rice losses; use of water pumps to irrigate rice paddies and fields; dig ponds and wells; build elevated enclosures for livestock for flood protection
- **Targeted priority stakeholders:** children, women, disabled, elderly



Responses

- Developing and disseminating CCA and DRR knowledge products, creating awareness in communities and local officials
- Enhancing management of irrigation (FWUC), agriculture activities (cooperatives; self-help groups) and natural resources
- Rehabilitating irrigation systems (dam, water gates and canals) to reduce sensitivity to drought
- Providing training to farmers on CSA techniques (adaptive rice cultivation, home gardening, adaptive chicken and fish raising, demonstration plots) to increase livelihood options
- Introducing climate resilient rice seeds, drought tolerant crops and vegetable varieties to farming communities
- Promoting chicken raising practices and establishing model community chick producing centers
- Piloting biochar systems to retain soil moisture and improve soil quality for rice farming, vegetable cropping and planting trees, resulting in increased food security
- Assisting self-help groups that aim do help communities diversify to climate adaptive income methods
- Strengthening rice seed producer groups through seed selection, seed storage and networking support
- Showcasing the agricultural crop insurance scheme
- Promoting Vulnerability Reduction Analysis (VRA) tool as part of the local government planning processes



Key Successes

- Commune councils have been very satisfied with water gate and dam construction in Siem Reap. The construction brings irrigation water to farms and increases ecotourism potential
- Over 150 community farmers have highly appreciated the rehabilitation of their irrigation system in Kampong Chhnang. Some contributed farm-land towards the project
- Increased awareness and training on climate change has helped communities understand climate change impacts and is now improving their livelihood in times of drought
- Support to climate / drought resilient rice/vegetable seed, chicken raising, fingerlings and fish farming, was timely and effective in Siem Reap
- Promoting chicken raising practices and establishing model community chick producing centers in Takeo with incubators
- Bio-char has helped project farmers improve their livelihoods with healthier vegetables

Challenges & Lessons

- Project duration is too short for project impact to be fully apparent. A three year project life would be preferable
- Participation of self-help group members has been a challenge, despite efforts of leaders to encourage members
- Families in the target areas demonstrate some resistance to adopting new techniques such as rice growing, they prefer to continue traditional farming practices. The project is working with PDA to continuously extend coaching and demonstration activities
- Plan and donor controls over project expenditures and procurement processes reduce sub-grant project's autonomy



Dam renovation, at Chorm village, Chansor commune, Soth Nikom district in Siem Reap



Irrigation canal renovation at Phteah Koh, Sre Sdok commune, Kandeng district in Pursat



Watergate renovation, at Chorm village, Chansor commune, Soth Nikom in Siem Reap



Chicken raising demo farm in Siem Reap



Chick Hatchery Centre in Toul Khlong village, O'Saray Commune, Tramkok district in Takeo



Irrigation system rehabilitation in Trapeang Chan commune, Kampong Chhnang



Home garden using CSA techniques in Kampong Chhnang Province



Focal farmers practiced bio-char production in Trapeang Chan commune, Kampong Chhnang

Sample CSA Project at a Glance (HURREDO)

- **Sub-project title:** Mainstreaming Climate Change Adaptation into the Community and Livelihood Improvement (MCCACLI)
- **Budget:** USD99,884.95
- **Implementation period:** June 2016-December 2017
- **Project area:** Siem Reap Province, Khnar Po & Chansar communes in Sotr Nikum district, Peak Sneng commune in Angkor Thom district
- **Theme:** Climate smart agriculture
- **Beneficiaries:** 5,134 (women 2,651)
- **Population:** 20,075 (2010)
- **Key livelihood activities:** farming, fishing, livestock raising; vegetable gardening; tourism



[Siem Reap province]