# Scaling up lessons: promoting sustainable agriculture in Cambodia

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# Geographic and demographic information



Country	Cambodia
Province	Kampong Cham
District	All 10 districts in the province
Size of geographical area	4,549 km <sup>2</sup>
Number of indirect beneficiaries	1,679,992 persons (Men: 818,662 persons) (Women: 861,330 persons)
Dominant ethnicity	Khmer



Size of project area	4,549 km <sup>2</sup>
Number of direct beneficiaries	1,000 persons (Men: 818,662 persons) (Women: 861,330 persons)
Geographic coordinates (longitude and latitude)	11° 59′ 0″ N, 105° 27′ 0″ E
Dominant ethnicity	Khmer

# **Ecosystem Types**

Forest	Grassland	X Agricultural	Χ	In-land water
Coastal	Dryland	Mountain		Urban/peri-urban

# Important species in the site

English common name (Local name)	Scientific name	Description
Rice (ដំណាំស្រូវ: Srov)	Oriza sativa	Paddy rice is the staple food of Cambodian which is cultivated as a main product in Kampong Cham. Rice ecosystem provides additional protein such as fish, shrimp, snail and etc. to human and animals.



Rice (ដំណាំស្រូវ: Srov)

# **General introduction**

Kampong Cham province located on the central lowland of the Mekong River. Main products of the province include rice and vegetables as shown in Figures 1 and 2. The usage of chemical fertilizers and pesticides has significantly increased to promote agricultural productivity. However, due to the inappropriate use of agricultural chemicals such as overuse and application without sufficient knowledge, it has caused various problems to human and environmental health.

In 2011-2016, ERECON implemented the program on Promoting Sustainable Agriculture in Samroung Commune of Kampong Cham. The program created positive impacts in term of changing farming practices in the commune from the prevalent applications of agro-chemicals to those of organic fertilizers which improve soil fertility and conserve biodiversity. Drawing on the lessons of positive impacts of the previous project, on September 2017, ERECON has launched the program on Promoting Sustainable Agricultural Conditions for Poverty Reduction, which covers the whole province and the target participants of the project include farmers and agricultural extension officers.

The project aims to 1) building capacity on sustainable agriculture based on cyclic use of natural resources for agricultural extension officers in provincial and district levels, 2) promoting sustainable farming practices based on cyclic use of natural resources for local farmers and 3) promoting conditions for sales of agricultural products with low chemical inputs.

Trainings and workshops related to sustainable agricultural practices are provided to officers and farmers. Farmers who attended the training and workshop share their knowledge to their neighbors. Agricultural materials such as compost boxes and tanks for making liquid fertilizer are provided to famers. Networks of safety agricultural products will be formed and marketing channel for the products will be introduced to farmers in the final year of the project.





# Contribution to Aichi Biodiversity Targets' Strategic Goal **B**

		Breakdown Target	How did you measure the outcome?	Result		
	TARGET 5	The rate of loss of forests is at least halved and where feasible brought close to zero The loss of all habitats is at least halved and where feasible brought close to zero Degradation and fragmentation are significantly reduced				
		All fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches				
	ET 6	Recovery plans and measures are in place for all depleted species				
itegic Goal B	TARG	Fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems				
		The impacts of fisheries on stocks, species and ecosystems are within safe ecological limits, i.e. overfishing avoided				
	۲7	Areas under agriculture are managed sustainably, ensuring conservation of biodiversity	Data of farmland under sustainable agricultural practices, amount of compost, liquid fertilizer and bio-pesticide applied in farmland and percentage of agro- chemical reduced after participated in the project.	100 percent of farmers who received agricultural equipment from the project produce and apply organic fertilizer in their farmland.		
	TARGE	Areas under aquaculture are managed sustainably, ensuring conservation of biodiversity				
		Areas under forestry are managed sustainably, ensuring conservation of biodiversity				
Str	ET 8	Pollutants (of all types) have been brought to levels that are not detrimental to ecosystem function and biodiversity				
	TARGE	Pollution from excess nutrients has been brought to levels that are not detrimental to ecosystem function and biodiversity	Amount of cow manure applied directly in paddy field and amount of agro- chemical applied in farmland.	Farmers apply cow manure and compost in a proper way to prevent eutrophication. Agrochemicals application is minimized.		
	•	Invasive alien species identified and prioritized				
	3ET 9	Pathways identified and prioritized				
	TARC	Priority species controlled or eradicated				
		Introduction and establishment of IAS prevented				
	10	Multiple anthropogenic pressures on coral reefs are minimized, so as to maintain their integrity and functioning				
TADGET	TARGET	Multiple anthropogenic pressures on other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning				

### **Relations to other Aichi Biodiversity Target & SDGs**

Please indicate the Aichi Biodiversity Targets other than the targets your working group focuses and SDGs that your activities contribute to if any. Use "●" and" ■" to indicate the "direct" or "indirect" contributions to the targets.





UN Sustainable Development Goals (SDGs) (https://sustainabledevelopment.un.org/sdgs)

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	2 ZERO HUNGER	3 GOOD HEALTH	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 GLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
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		•						
10 REDUCED INEQUALITIES		12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE	14 LIFE Beldwwater	15 LIFE ON LAND	16 PEACE JUSTICE AND STREAM INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS	

#### Any difficulties you found during your assessment

So far we assess project activities by using questionnaire and check sheet for sustainable agricultural practices such as amount of compost that made and applied in farmland, percentage of agro-chemical reduced after farmers convert to organic fertilizers, size of area under sustainable agricultural practices and etc. However, it is difficult to measure the changes in soil biodiversity or physical/chemical properties before and after farmers applied organic fertilizers. Baseline survey of the project mainly provides general information, socio-economic information and level of understanding/knowledge of sustainable agriculture of participants before the project.

#### Key messages for the CBD in planning for the post-2020 Targets

IPSI members should continue their contribution for post-2020 target and IPSI should consolidate the potential capacity of existing members to scale up the work to conserve and revitalize SEPLS around the world.