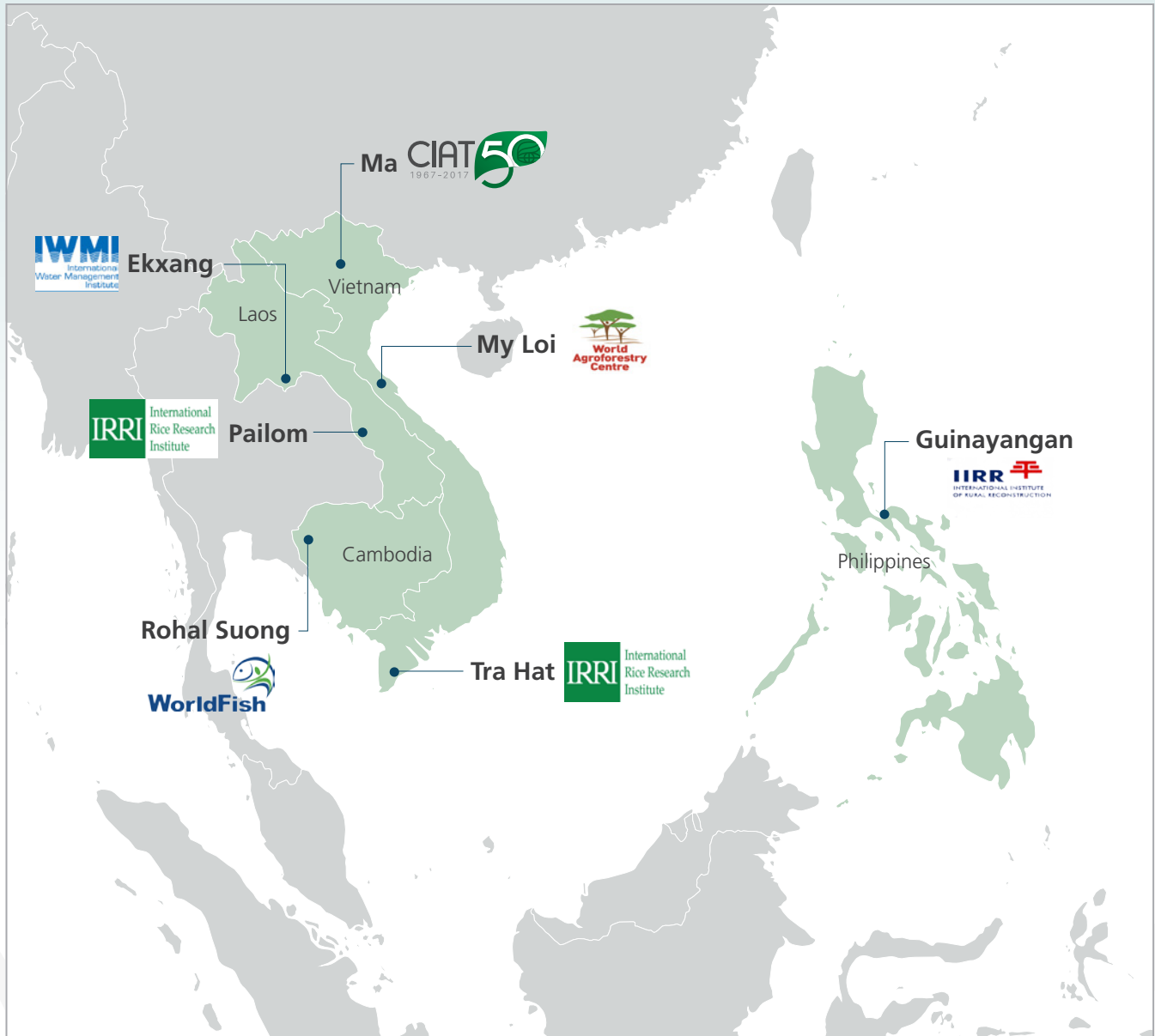


Southeast Asia Climate-Smart Villages AR4D Sites: 2017 Inventory

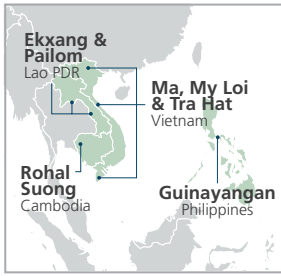


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Citation

Bonilla-Findji O and Bui Tan Y. 2018. Southeast Asia Climate-Smart Villages AR4D sites: 2017 Inventory. Wageningen, The Netherlands: CGIAR Research Program on Climate Change, Agriculture and Food Security (CAAFS).



Inventory of CSA practices in Southeast Asia's Climate-Smart Villages



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Total practices: **47**

♀ Gender impact assessed for: **35**

Practices with mitigation potential: **13**

♀ Potential gender impact known for: **35**

CSA sub-practice	Mitigation potential	Country	CSV sites	Crop	Tested	Evaluated	# HH ¹	Gender assessed	Potential gender impacts
Alleycropping (N-fixing trees)	X	Vietnam	Ma	Acacia	X	-	20	-	-
		Philippines	Guinayangan	Fruit (Others), Pepper, Coffee, Cacao	X	-	112	-	-
Alleycropping (non N-fixing trees)	-	Vietnam	My Loi	Fruit trees, annual crops/ legumious crops, vegetables, mulching with rice straw, palm leaves	X	X	7	X	X
Bank cultivation	-	Vietnam	Tra Hat	vegetables	X	-	5	-	-
Biochar	X	Vietnam	My Loi	Peanut	X	X	8	X	X
Biogas	X	Vietnam	My Loi	Biogas from pig raising	X	X	3	X	X
Boundary planting (living fences or hedgerows)	X	Cambodia	Rohal Suong	Fibre and Wood	X	X	10	X	X
		Philippines	Guinayangan	Root Crops, Fruit trees	X	-	112	-	-
Boundary planting (windbreaks and shelterbelts)	-	Philippines	Guinayangan	Fruit trees, coffee, cacao	X	-	112	-	-
Community-based seed production	-	Vietnam	Tra Hat	Rice	X	-	5	-	-
		Laos	Pailom	Rice	X	-	10	-	-
Compost	-		My Loi	Tomato, egg plants, brassica, pepper, etc	-	X	2	X	X
		Vietnam	Tra Hat	Use rice straw/ stubble	X	-	3	-	-
		Vietnam	Tra Hat	Re-use home organic waste	X	-	30	-	-
Crop residue (fodder)	-	Philippines	Guinayangan		X	X	273	X	X
Crop residue incorporation	-	Cambodia	Rohal Suong	Cereals (rice)	X	-	15	X	X
Crop rotation (mixed legume/ non-legume)	-	Vietnam	My Loi	Peanut + cassava	-	X	2	X	X
Crop type change - Tree to more resistant crop	-	Vietnam	My Loi	Tea	X	X	2	X	X

¹ HH: households



Inventory of CSA practices in Southeast Asia's Climate-Smart Villages



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CSA sub-practice	Mitigation potential	Country	CSV sites	Crop	Tested	Evaluated	# HH ¹	Gender assessed	Potential gender impacts
Diet management	-	Vietnam	My Loi	Fermented feed based on available agricultural residue	-	X	1	X	X
		Philippines	Guinayangan	Goats, pigs, fodder grass, fodder legumes, napier grass, other fodders, fodder trees	X	X	273	X	X
Diet management (mechanically processed food)	-	Philippines	Guinayangan	Pigs, cassava	X	X	273	X	X
Energy switching	X	Vietnam	Ma	Rice straw and saw dust from processed forest trees	X	X	4	X	X
Farmer Managed Natural Regeneration	X	Cambodia	Rohal Suong	Fodders	X	X	70	-	-
Green manure	X	Philippines	Guinayangan	Upland and Lowland Rice	X	-	8	X	X
		Vietnam	Ma	Cassava/cattle	X	X	80	X	X
Improved cook stove	X	Vietnam	My Loi	Crop residues	-	X	16	X	X
Improved sty/cage	-	Vietnam	My Loi	Goat	-	X	1	X	X
Improved varieties	-	Cambodia	Rohal Suong	Drought tolerant rice	X	X	25	X	X
		Philippines	Guinayangan	Drought tolerant lowland rice	X	X	64	X	X
				Improved Seeds (Peanut, Lowland Rice and Upland Rice)	X		173	X	X
				Salinity tolerant rice	X	X	56	X	X
Intercropping (Legume/Legume)	-	Philippines	Guinayangan	Madre Kakaw	X	-	3	X	X
				Peanut and mungbean	X	X	13	-	-
Intercropping (mixed legume/ non-legume)	-	Vietnam	Tra Hat	vegetables + ginger + beans	X	-	5	-	-
Irrigation (drip)	-	Vietnam	My Loi	Fruit trees and pepper	-	X	1	X	X



Inventory of CSA practices in Southeast Asia's Climate-Smart Villages



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CSA sub-practice	Mitigation potential	Country	CSV sites	Crop	Tested	Evaluated	# HH ¹	Gender assessed	Potential gender impacts
Manure	-	Philippines	Guinayangan	Fruit Trees, Lowland Rice	X	-	1	X	X
				Manure collection and storage (Pigs, Goat)	X	X	273	X	X
		Vietnam	My Loi	Composting animal manure and crop residues	X	X	42	X	X
				EM bed for pig and chicken Vermiculture	X	X	3 3	X X	X X
More complex rotations	-	Vietnam	My Loi	Peanut/ beans/ sweet potato+maize or peanut/sugarcane	-	X	25	X	X
Mulching	X	Philippines	Guinayangan	Pineapple, cacao, coffee, Fruit(Others) Guyabano, Mango, Citrus	X	-	112	-	-
		Vietnam	My Loi	(Leguminous plants) Fruit trees, Arachis pinto, mulching with rice straw, plam leaves	-	X	1	X	X
		(Plastics) Water melon (heat-tolerant) roate with legumious crops, tea (storm resistant)	-	X	1	X	X		
Multistrata agroforestry	X	Vietnam	My Loi	Black pepper with storm-resistant and shade trees (local Mac tree), mulching with rice straw, plam leaves	-	X	2	X	X
		Philippines	Guinayangan	Coconut, Fruit Trees, Coffee, Cacao	X	-	112	-	-
No or zero tillage	X	Philippines	Guinayangan	Upland Rice	X	-	16	-	-
Non-legume/ non-legume crop intercrop	-	Vietnam	My Loi	Maize + sweet potato, maize + sweet potato+ sugarcane	-	X	26	X	X
Non-legume/ non-legume crop rotation	-	Cambodia	Rohal Suong	Vegetable	X	X	10	X	X
Pasture management	-	Philippines	Guinayangan	Pigs, fodder grass, fodder legumes, napier grass, fodder trees	X	X	273	X	X
Plant-clinics	-	Vietnam	Tra Hat	Rice , vegetables	-	X	36	-	-



Inventory of CSA practices in Southeast Asia's Climate-Smart Villages



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CSA sub-practice	Mitigation potential	Country	CSV sites	Crop	Tested	Evaluated	# HH ¹	Gender assessed	Potential gender impacts
Parkland (scattered trees)	-	Vietnam	My Loi	Orange, local mandarine, jackfruit, pepper, acacia	-	X	2	X	X
Rice Management (Low external input/planting distance)	-	Vietnam	Ma	Paddy rice	X	X	10	X	X
Rice management (mid seasonal drainage)	-	Vietnam	Tra Hat	Rice	X	-	10	-	-
Rice management (SRI)	X	Vietnam Phillippines	Tra Hat Guinayangan	Rice Lowland rice	X X	- X	10 64	- X	- X
Silvopasture	-	Vietnam	My Loi	Fruit trees, Guinea grass, mulching with rice straw, plam leaves	-	X	1	X	X
		Phillippines	Guinayangan	Coconut, Fruit tress	X	-	112	-	-
Smart-pest management (reduced pesticides and herbicides)	X	Lao PDR	Ekxang	Rice, vegetables	X	-	71	-	-
		Cambodia	Rohal Suong	Rice	X	X	23	X	X
				Vegetables	X	X	274	X	X
Tree management (Cropping/tree pruning)	-	Phillippines	Guinayangan	Fruit trees, Coffee Cacao, Coffee, Cacao	X	X	112	X	X
Tree management (tree pruning applied as much N-fixing)	-	Phillippines	Guinayangan	Fruitrees	X	-	112	-	-
Urea application	-	Phillippines	Guinayangan	Upland rice and corn	X	-	24	-	-
Water harvesting (cisterns and tanks)	-	Lao PDR	Pailom	Plant products	X	-	-	-	-
Water harvesting (community ponds)		Lao PDR	Pailom	Plant products	X	-	10	X	X
		Cambodia	Rohal Suong	Vegetable	X	X	50	X	X
Water harvesting (microcatchment)	-	Phillippines	Guinayangan	Fruit trees, coffee, cacao	X	X	112	X	X
Water harvesting (roof top)	-	Lao PDR	Ekxang	Vegetables	-	X	-	-	-
			Pailom	Plant products	X	-	-	-	-
Zero grazing or Cut and carry	-	Vietnam	Ma	Goats	X	X	80	X	X
		Phillippines	Guinayangan		X	X	273	X	X



Inventory of CSA practices in Southeast Asia's Climate-Smart Villages



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Agro-Met service	Country	CSV sites	Tested	Evaluated	# HH	Potential gender impacts
Seasonal forecast	Vietnam	My Loi	X	-	213	-
	Cambodia	Rohal Suong	X	-	10	-
Agroadvisories on fertilizer and pesticide application	Vietnam	My Loi	X	-	213	-
Agroadvisories on varieties applied under the forecasted information	Vietnam	My Loi	X	-	213	-
Daily forecast	Vietnam	My Loi	X	-	213	-
		Tra Hat	X	-	182	-
	Lao PDR	Ekxang	X	-	216	-
		Pailom	X	-	100	-
	Cambodia	Rohal Suong	X	-	200	-

Market services	Country	CSV sites	Available	Tested	Evaluated	# HH	Gender assessed	Potential gender impacts
Payment for Ecosystem Services: Forest	Phillipines	Guinayangan	X	-	-	3,000	-	-
Price support	Vietnam	Ma	X	-	-	200	-	-
Product Certification	Vietnam	Ma	X	-	-	12	-	-



Inventory of CSA practices in Southeast Asia's Climate-Smart Villages



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Financial services	Country	CSV sites	Available	Tested	Evaluated	# HH	Gender assessed	Potential gender impacts
Capacity building/Technical assistance (by dev agencies/ programs)	Vietnam	My Loi	X	-	-	-	-	-
		Tra Hat	X	-	-	-	-	-
	Lao PDR	Rohal Suong	X	-	-	30	-	-
Individual Bank savings	Vietnam	Ma	X	-	-	-	-	-
		My Loi	X	-	-	-	-	-
		Tra Hat	X	-	-	-	-	-
	Lao PDR	Ekxang	X	-	-	-	-	-
		Pailom	X	-	-	-	-	-
Individual (short term) Bank loans	Vietnam	Ma	X	-	-	20	-	-
		My Loi	X	-	-	-	-	-
		Tra Hat	X	-	-	-	-	-
	Lao PDR	Ekxang	X	-	-	-	-	-
		Pailom	X	-	-	-	-	-
Cambodia	Rohal Suong	X	-	-	90	-	-	
Individual (long term) Bank loans	Vietnam	Ma	X	-	-	-	-	-
		My Loi	X	-	-	-	-	-
		Tra Hat	X	-	-	-	-	-
	Lao PDR	Pailom	X	-	-	-	-	-
	Cambodia	Rohal Suong	X	-	-	70	-	-
Informal individual credits/loans	Vietnam	Ma	X	-	-	-	-	-
		My Loi	X	-	-	-	-	-
		Tra Hat	X	-	-	-	-	-
	Lao PDR	Ekxang	X	-	-	-	-	-
		Pailom	X	-	-	-	-	-
Cambodia	Rohal Suong	X	-	-	80	-	-	



Inventory of CSA practices in Southeast Asia's Climate-Smart Villages



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Financial services	Country	CSV sites	Available	Tested	Evaluated	# HH	Gender assessed	Potential gender impacts
Informal saving groups	Vietnam	Ma	X	-	-	100	-	-
		My Loi	X	-	-	-	-	-
		Tra Hat	X	-	-	-	-	-
	Lao PDR	Ekxang	X	-	-	-	-	-
		Pailom	X	-	-	-	-	-
	Cambodia	Rohal Suong	X	-	-	20	-	-
	Phillipines	Guinayangan	X	-	-	35	-	-
Group (short term) Bank loans	Vietnam	Ma	X	-	-	100	-	-
	Cambodia	Rohal Suong	X	-	-	70	-	-
Group (long term) Bank loans	Lao PDR	Ekxang	X	-	-	-	-	-
Informal group loans	Vietnam	My Loi	X	-	-	23	-	-
	Phillipines	Guinayangan	X	-	-	133	-	-

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Acknowledgments

This CSV inventory was implemented as part of CCAFS Flagship 2 activities under the global and regional coordination of Osana Bonilla-Findji and Yen Bui Tan, respectively. We would like to acknowledge the valuable support of our local and national governmental/non-governmental partners including private sector participants, CGIAR Centers and focal points from each site namely: Bui Le Vinh (CIAT/Ma), Duong Minh Tuan (ICRAF/My Loi), Le Minh Duong (DARD Bac Lieu/Tra Hat CSV), Sripone Chanthala (IRRI), Architesh Panda (IRRI/Pailom) and Guillaume Lacombe (IWMI/Ekxang), Rene Vidallo (IIRR/Guinayangan) and Dyna Eam (World Fish/ Rohal Suong)

Climate-Smart Village Ma (Vietnam)



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Photo: B. Tan Yen

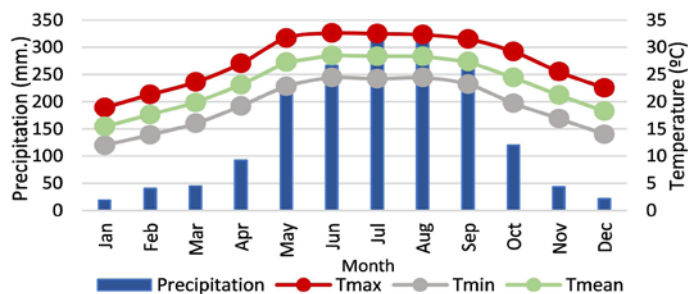
Main crops and livestock ↔ Specific

Food: rice

Food/cash: maize, vegetables, pomelo, chicken, pig

Cash: cassava, fruit trees, forest trees, goat, cow

Climatic conditions



Source: www.worldclim.org

Parameter	Amount	Narrative
Total annual P	1.776 mm	In a single rainy season of 1.395 mm (May – Sep) and a dry season of 381 mm (Oct-Apr)
Max # of consecutive dry months	6 months (< 100 mm)	
Max T rainy season	32.6°C	
Max T dry season	29.2°C	
Highest Tmin	24.4°C	June, August

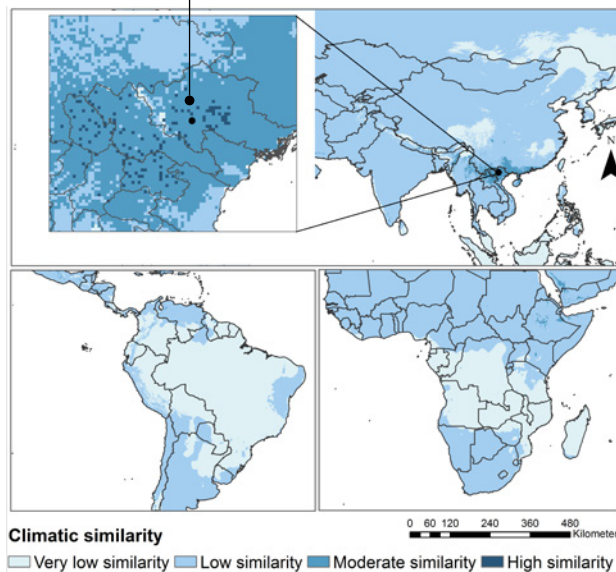
*CCAFS Community level baseline (2014), Situation Analysis (2015)

Climate-related risks

Prolong droughts, heavy rains, unusual floods, decline of natural flows, landslides, severe and long cold and hot spells, typhoon, soil erosion, land degradation, water pollution and GHG emission from current productions systems at high level.

Areas of climatic similarity

Ma-CSV
21.77°N 105.05°E



Areas whose future projected climate (by 2030) is similar to the current climate in this CSV

Source: www.ccafs-analogues.org

Climate-Smart Village Ma (Vietnam)



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Food Security**



40
m.a.s.l



1-5 Ha
Farm size



192
HH



26.5%
Headed HH



2017: Field testing of CSA portfolio and # of households involved

i Tested
 ▬ Evaluated
 ▬ Tested & Evaluated
 U Mitigation potential
 👤 Households
▲ Available in Site, not by CCAFS
 ♀ Gender aspect assessed
 ♀ Potential gender impact

CSA Practices	Agro-climatic services	Financial services	Market incentives
♀ i Alleycropping (N-fixing trees) 20 👤 ♀ ▬ Energy switching 4 👤 ♀ ▬ Green Manure (leguminous) 80 👤 ♀ ▬ Rice Management (Low external input/ planting distance) 10 👤 ♀ ▬ Zero grazing or Cut and carry 80 👤	N.A.	▲ Informal saving groups 100 👤 ▲ Individual Bank Savings ▲ Informal individual credits loans ▲ Individual - long term Bank loans ▲ Individual - short term Bank loans 20 👤 ▲ Informal saving groups 20 👤 ▲ Group - short term Bank loans 100 👤	▲ Price support 200 👤 ▲ Product Certification 12 👤

Flagship projects

- [Innovative approaches and Upscaling CSA in SEA](#)
- [Integrated agricultural technologies for enhanced adaptive capacity and resilient livelihoods in CSVs \(CIAT\)](#)

Partners



CIAT, NOMAFSI, IAE, DARD Yen Bai

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CSV profile developed by Osana Bonilla-Findji, Patricia Alvarez and Julian Ramirez-Villegas

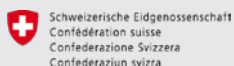
The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) is a strategic partnership of CGIAR and Future Earth, led by the International Center for Tropical Agriculture (CIAT). CCAFS brings to scale climate smart agricultural practices, technologies and institutions which contribute to increased food and nutritional security, low emissions development, sustainable landscapes, and increased gender equity.

This work was implemented as part of CCAFS Flagship 2, which is carried out with support from CGIAR Fund Donors and through bilateral funding agreements. For details please visit <https://ccafs.cgiar.org/donors>.

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Ministry of Foreign Affairs of the Netherlands



Investing in rural people

Climate-Smart Village My Loi (Vietnam)



RESEARCH PROGRAM ON
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Food Security**



60
m.a.s.l



1-2 Ha
Farm size



213
HH



17%
Headed HH



Photo: L. Sebastian

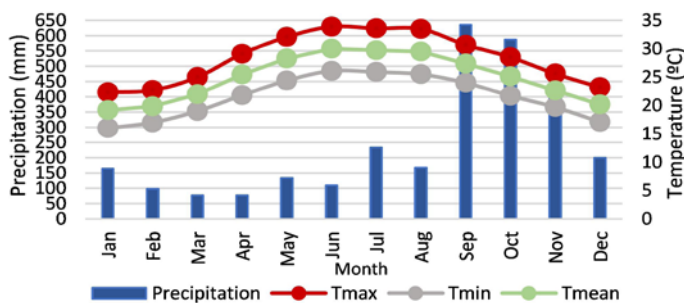
Main crops and livestock ⊕⊖ Specific

Food: rice

Food/cash: peanut, orange, citrus, sweet potato, cassava, green bean, maize, vegetables, chicken, pig, cow, goat

Cash: Acacia, Eucalyptus, tea, pepper

Climatic conditions



Source: www.worldclim.org

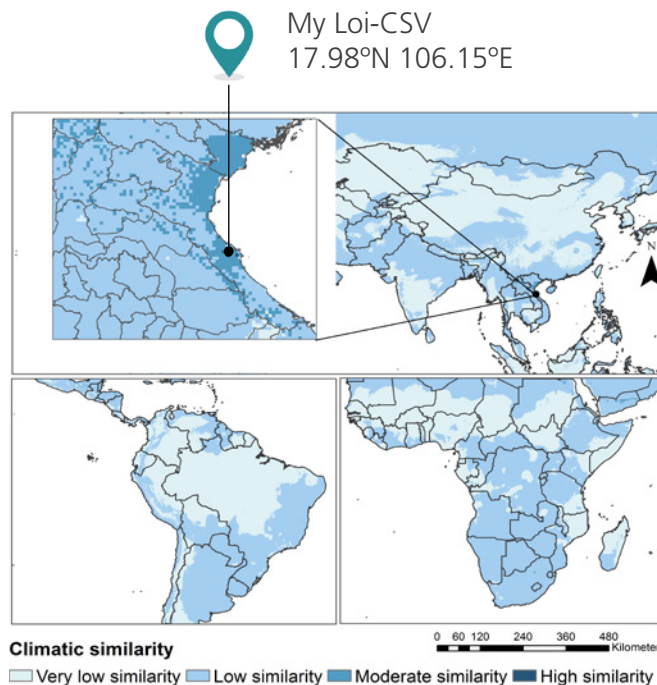
Parameter	Amount	Narrative
Total annual P	2.884 mm	In a single rainy season of 1.621 mm (Sep – Nov) and a dry season of 1263 mm (Dec-Aug)
Max # of consecutive dry months	3 months (< 100 mm)	
Max T rainy season	30.7°C	
Max T dry season	33.9°C	
Highest Tmin	26.1°C	June

*CCAFS Community level baseline (2014), Situation Analysis (2015)

Climate-related risks

Unusual extreme weather events: droughts, flashfloods, cold spells, hot spells and storm/typhoons. Also water scarcity and poor soil quality.

Areas of climatic similarity



Areas whose future projected climate (by 2030) is similar to the current climate in this CSV

Source: www.ccafs-analogues.org

Climate-Smart Village My Loi (Vietnam)



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60
m.a.s.l



1-2 Ha
Farm size



213
HH

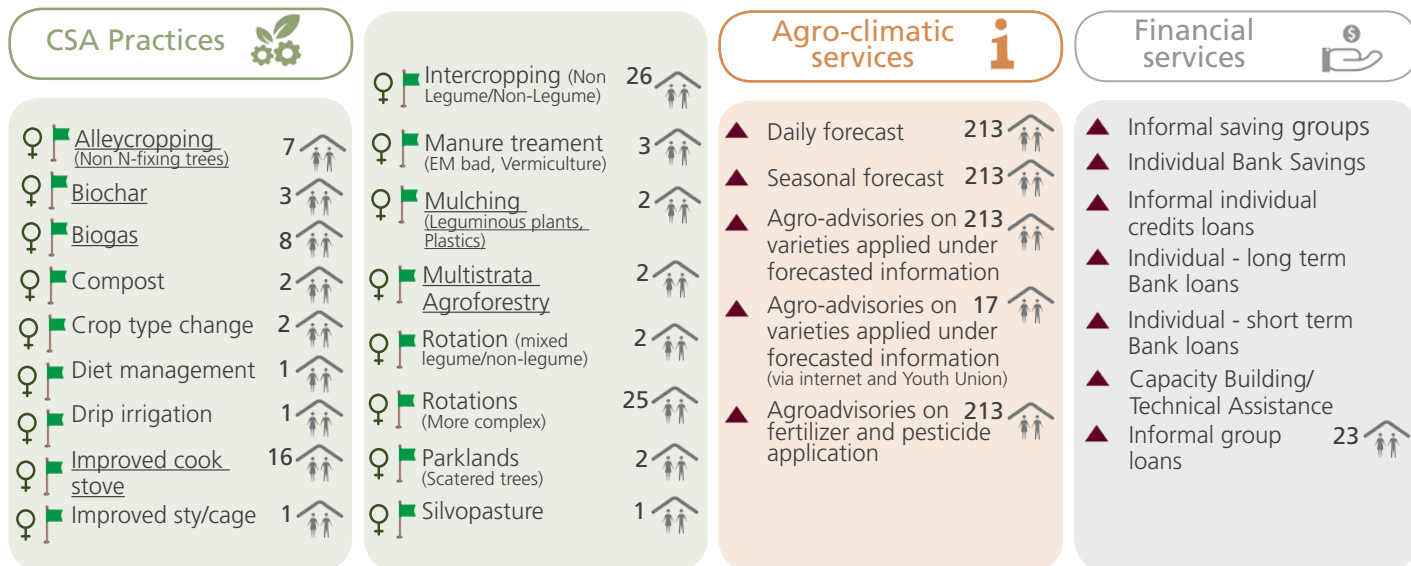


17%
Headed HH



2017: Field testing of CSA portfolio and # of households involved

i Tested
 🔄 Evaluated
 🚩 Tested & Evaluated
 U Mitigation potential
 🏠 Households
▲ Available in Site, not by CCAFS
 ♀ Gender aspect assessed
 ♀ Potential gender impact



Flagship projects

- [Innovative approaches and Upscaling CSA in SEA](#)
- [Generating evidence base for upscaling local adaptation through Climate-Smart Agriculture](#)

Partners



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ICRAF, CARE, IIRR, MONRE-Ministry of Natural Resources and Environment, Farmers' Union of Ha Tinh province
Institute of Agricultural Environment

CSV profile developed by Osana Bonilla-Findji, Patricia Alvarez and Julian Ramirez-Villegas

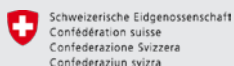
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Investing in rural people

Climate-Smart Village Tra Hat (Vietnam)



RESEARCH PROGRAM ON
**Climate Change,
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Food Security**



1
m.a.s.l



1-5 Ha
Farm size



264
HH



22%
Headed HH



Photo: B. Tan Yen

Main crops and livestock ⊕⊖ Specific

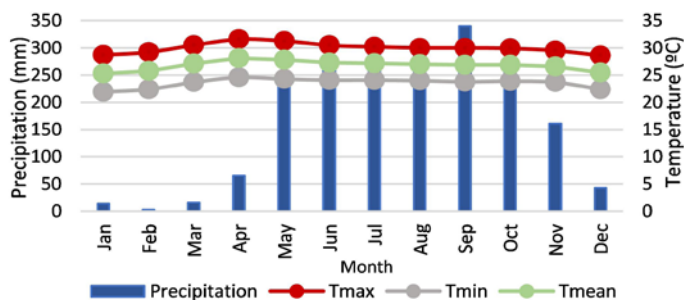
Food/cash: rice, vegetables, chicken, duck

Cash: pig, python, frog

Climate-related risks

Unusual extreme weather events: floods, delays of rainy season, salinity intrusion.

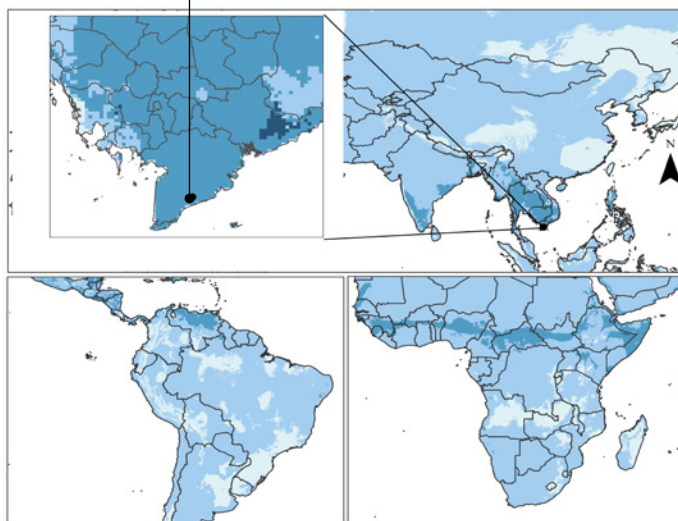
Climatic conditions



Source: www.worldclim.org

Areas of climatic similarity

Tra Hat-CSV
9.37°N 105.67°E



Climatic similarity

Very low similarity Low similarity Moderate similarity High similarity

Areas whose future projected climate (by 2030) is similar to the current climate in this CSV

Source: www.ccafs-analogues.org

Parameter	Amount	Narrative
Total annual P	2.023 mm	In a single rainy season of 1.208 mm (Jul – Oct) and a dry season of 815 mm (Nov-Jun)
Max # of consecutive dry months	5 months (< 100 mm)	
Max T rainy season	30.2°C	
Max T dry season	31.6°C	
Highest Tmin	24.6°C	April

*CCAFS Community level baseline (2014), Situation Analysis (2015)

Climate-Smart Village Tra Hat (Vietnam)



RESEARCH PROGRAM ON
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Agriculture and
Food Security**



1
m.a.s.l



1-5 Ha
Farm size



264
HH



22%
Headed HH



2017: Field testing of CSA portfolio and # of households involved

i Tested
 🌱 Evaluated
 🏠 Tested & Evaluated
 U Mitigation potential
 👤 Households
▲ Available in Site, not by CCAFS
 ♀ Gender aspect assessed
 ♀ Potential gender impact

CSA Practices	Agro-climatic services	Financial services	Market incentives
<ul style="list-style-type: none"> i Bank cultivation 5 👤 i Community-based Seed Production (rice) 5 👤 i ♀ Compost (home organic waste) 30 👤 i Compost (rice straw) 3 👤 i Intercropping (Mixed legume/non-legume) 5 👤 🌱 Plant-clinics 36 👤 i Rice Management (Mid-season drainage) 10 👤 i Rice Management (SRI) 10 👤 	<ul style="list-style-type: none"> ▲ Daily forecast 182 👤 	<ul style="list-style-type: none"> ▲ Informal saving groups ▲ Individual Bank Savings ▲ Informal individual credits loans ▲ Individual - long term Bank loans ▲ Individual - short term Bank loans ▲ Capacity Building/ Technical Assistance 	N.A.

Flagship projects

- [Innovative approaches and Upscaling CSA in SEA](#)
- [CSVs in the Mekong Basin: Catalyzing Roll-out of Adoption](#)

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Partners



IRRI, CABI, Institute of Agricultural Environment, Cuu Long Rice Research Institute, Can Tho University, Nong Lam University

CSV profile developed by Osana Bonilla-Findji, Patricia Alvarez and Julian Ramirez-Villegas

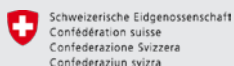
The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) is a strategic partnership of CGIAR and Future Earth, led by the International Center for Tropical Agriculture (CIAT). CCAFS brings to scale climate smart agricultural practices, technologies and institutions which contribute to increased food and nutritional security, low emissions development, sustainable landscapes, and increased gender equity.

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Investing in rural people

Climate-Smart Village Pailom (Lao PDR)



RESEARCH PROGRAM ON
**Climate Change,
Agriculture and
Food Security**



150
m.a.s.l



1-5 Ha
Farm size



102
HH



8.8%
Headed HH



Photo: B. Tan Yen

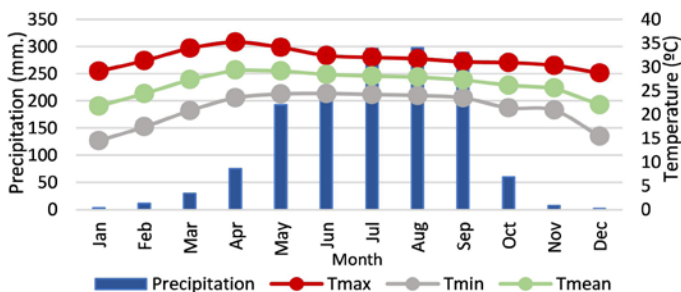
Main crops and livestock ⊕⊗ Specific

Food/cash: rice, maize, vegetables, pig, chicken, ducks
Cash: cow, forest trees

Climate-related risks

Droughts, long dry season and delay of rainy season, also low soil fertility

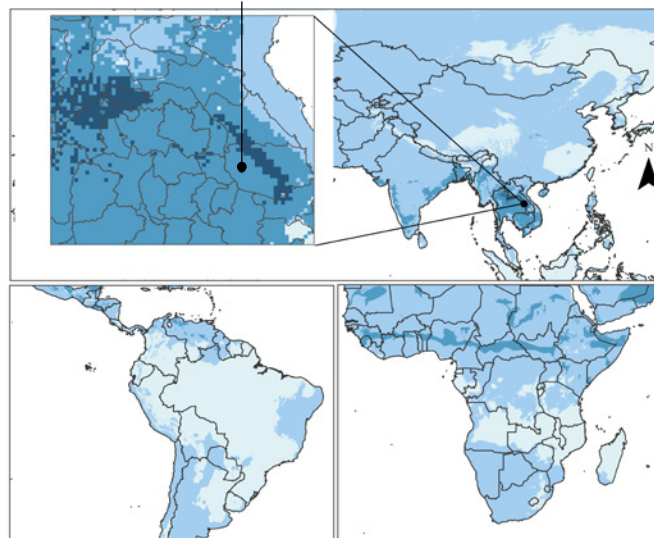
Climatic conditions



Source: www.worldclim.org

Areas of climatic similarity

Pailom-CSV
16.53°N 105.12°E



Climatic similarity

Very low similarity Low similarity Moderate similarity High similarity

Areas whose future projected climate (by 2030) is similar to the current climate in this CSV

Source: www.ccafs-analogues.org

Parameter	Amount	Narrative
Total annual P	1.478 mm	In a single rainy season of 883 mm (Jul – Sep) and a dry season of 595 mm (Oct-Jun).
Max # of consecutive dry months	7 months (< 100 mm)	
Max T rainy season	32.2°C	
Max T dry season	35.2°C	
Highest Tmin	24.4°C	June

*CCAFS Community level baseline (2014), Situation Analysis (2015)

Climate-Smart Village Pailom (Lao PDR)



RESEARCH PROGRAM ON
**Climate Change,
Agriculture and
Food Security**



150
m.a.s.l



1-5 Ha
Farm size



102
HH



8.8%
Headed HH



2017: Field testing of CSA portfolio and # of households involved

i Tested
 🌿 Evaluated
 🚩 Tested & Evaluated
 U Mitigation potential
 👤 Households
▲ Available in Site, not by CCAFS
 ♀ Gender aspect assessed
 ♀ Potential gender impact

CSA Practices	Agro-climatic services	Financial services	Market incentives
<ul style="list-style-type: none"> i Community-based Seed Production (Rice) 10 i Water Harvesting (Cisterns and tanks) 40 i Water Harvesting (Community Pond) 10 	<ul style="list-style-type: none"> ▲ Daily forecast 100 	<ul style="list-style-type: none"> ▲ Informal saving groups ▲ Individual Bank Savings ▲ Informal individual credits/loans ▲ Individual - long term Bank loans ▲ Individual - short term Bank loans 	N.A.

Flagship projects

- [Innovative approaches and Upscaling CSA in SEA](#)
- [CSVs in the Mekong Basin: Catalyzing Roll-out of Adoption](#)

Partners



Contacts

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IRRI, CABI, Institute of Agricultural Environment, Cuu Long Rice Research Institute, Can Tho University, Nong Lam University

CSV profile developed by Osana Bonilla-Findji, Patricia Alvarez and Julian Ramirez-Villegas

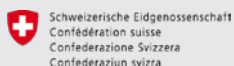
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Investing in rural people

Climate-Smart Village Ekxang (Lao PDR)



RESEARCH PROGRAM ON
**Climate Change,
Agriculture and
Food Security**



175
m.a.s.l



1-5 Ha
Farm size



216
HH



9%
Headed HH



Photo: CCAFS-SE

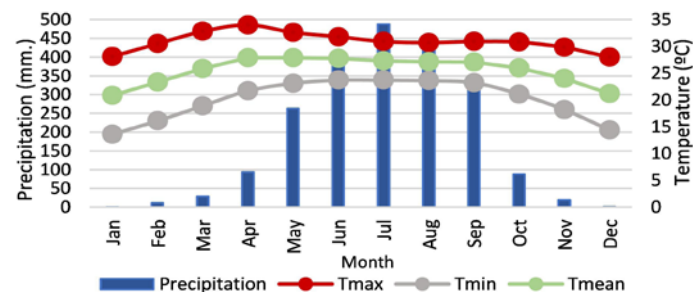
Main crops and livestock ↔ Specific

Food: rice

Food/cash: maize, vegetables, beans, fruits, pig, chicken, ducks, fish

Cash: cassava, cow, forest trees

Climatic conditions



Source: www.worldclim.org

Parameter	Amount	Narrative
Total annual P	2.136 mm	In a single rainy season of 1.294 mm (Jun – Aug) and a dry season of 842 mm (Sep-May).
Max # of consecutive dry months	7 months (< 100 mm)	
Max T rainy season	31.8°C	
Max T dry season	35.2°C	
Highest Tmin	24.4°C	June

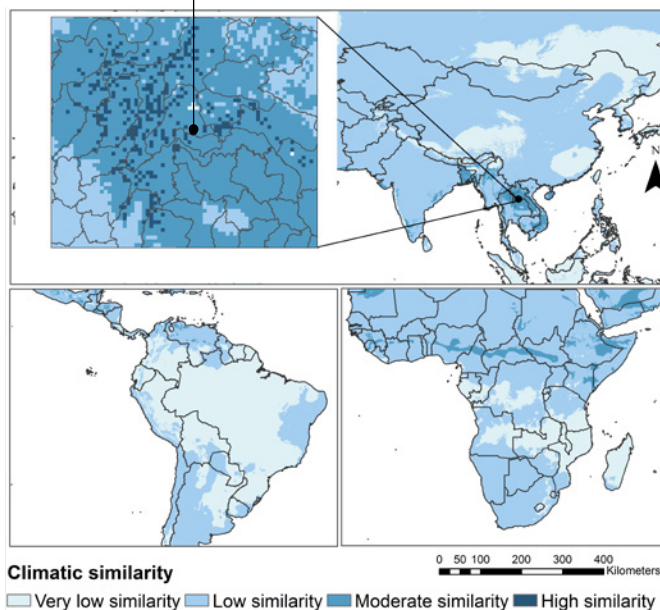
*CCAFS Community level baseline (2014), Situation Analysis (2015)

Climate-related risks

Unusual extreme weather events: floods, delay of rainy season.

Areas of climatic similarity

Ekxang-CSV
18.35°N 102.46°E



Areas whose future projected climate (by 2030) is similar to the current climate in this CSV

Source: www.ccafs-analogues.org

Climate-Smart Village Ekxang (Lao PDR)



RESEARCH PROGRAM ON
**Climate Change,
Agriculture and
Food Security**



175
m.a.s.l



1-5 Ha
Farm size



216
HH



9%
Headed HH



2017: Field testing of CSA portfolio and # of households involved

i Tested
 🌿 Evaluated
 🚩 Tested & Evaluated
 U Mitigation potential
 👤 Households
▲ Available in Site, not by CCAFS
 ♀ Gender aspect assessed
 ♀ Potential gender impact

CSA Practices	Agro-climatic services	Financial services	Market incentives
<p>i Smart pest management (reduced pesticides and herbicides) 71 </p> <p>🌿 Water Harvesting (Roof top)</p>	<p>▲ Daily forecast 216 </p>	<p>▲ Informal saving groups</p> <p>▲ Individual Bank Savings</p> <p>▲ Informal individual credits/loans</p> <p>▲ Group - long term Bank loans</p> <p>▲ Individual - short term Bank loans</p>	<p>N.A.</p>

Flagship projects

- [Innovative approaches and Upscaling CSA in SEA](#)
- [CSVs in the Mekong Basin: Catalyzing Roll-out of Adoption](#)

Partners



IRRI, IWMI, CABI, National University of Laos, DAFO-Phonhong District, PAFO- Vientiane Province, CUSO International, NAFRI

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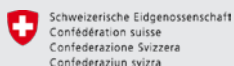
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Investing in rural people

Climate-Smart Village Rohal Suong (Cambodia)



RESEARCH PROGRAM ON
**Climate Change,
Agriculture and
Food Security**

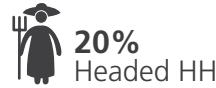


Photo: B. Tian Yen

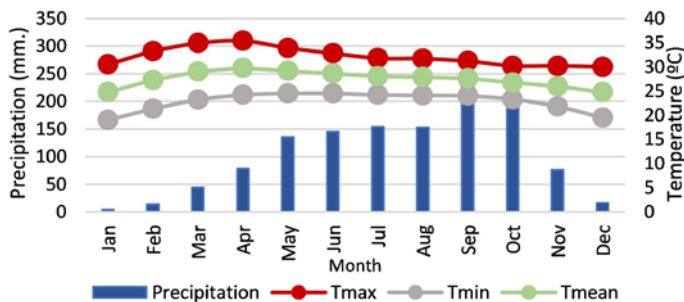
Main crops and livestock ⊕⊖ Specific

Food: rice, maize, soybean, sweet potato, vegetables
Food/cash: rice, fruit trees, natural fish, pig, chicken
Cash: corchorus

Climate-related risks

Unusual extreme weather events: floods, delays of rainy season.

Climatic conditions



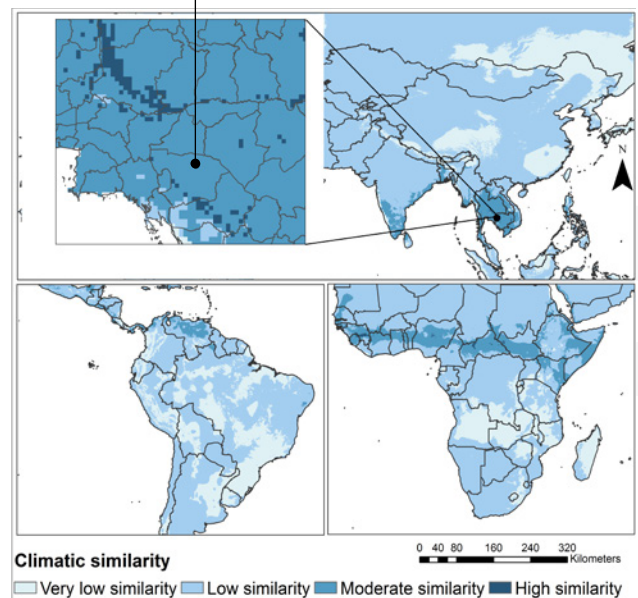
Source: www.worldclim.org

Parameter	Amount	Narrative
Total annual P	1.252 mm	In a single rainy season of 433 mm (Sep-Oct) and a dry season of 819 mm (Nov-Aug)
Max # of consecutive dry months	6 months (< 100 mm)	
Max T rainy season	31.2°C	
Max T dry season	35.4°C	
Highest Tmin	24.5°C	May, June

*CCAFS Community level baseline (2014), Situation Analysis (2015)

Areas of climatic similarity

Rohal Suong-CSV
13.18°N 103.24°E



Areas whose future projected climate (by 2030) is similar to the current climate in this CSV

Source: www.ccafs-analogues.org

Climate-Smart Village Rohal Suong (Cambodia)



RESEARCH PROGRAM ON
**Climate Change,
Agriculture and
Food Security**



15
m.a.s.l



1 < Ha
Farm size



300
HH



20%
Headed HH



2017: Field testing of CSA portfolio and # of households involved

i Tested
 🌱 Evaluated
 🚩 Tested & Evaluated
 U Mitigation potential
 👤 Households
▲ Available in Site, not by CCAFS
 ♀ Gender aspect assessed
 ♀ Potential gender impact

CSA Practices	Agro-climatic services	Financial services	Market incentives
<ul style="list-style-type: none"> ♀ 🚩 Boudary Planting (living fences or hedgerows) 10 👤 ♀ i Crop residue incorporation 15 👤 ♀ 🌱 Crop rotation mixed non legume/ non-legume (vegetables) 10 👤 🌱 Farmer Managed Natural Regeneration 70 👤 ♀ 🚩 Improved varieties (Drought tolerant rice) 25 👤 ♀ i Smart pest management 23 👤 ♀ 🚩 Water harvesting (Community ponds) 50 👤 	<ul style="list-style-type: none"> ▲ Daily forecast 200 👤 ▲ Seasonal forecast 10 👤 	<ul style="list-style-type: none"> ▲ Informal saving groups 20 👤 ▲ Informal individual credits loans 80 👤 ▲ Individual - long term Bank loans 70 👤 ▲ Individual - short term Bank loans 90 👤 ▲ Capacity Building/ Technical Assistance (by Dev agencies/programs) 30 👤 ▲ Group - short term Bank loans 70 👤 	

Flagship projects

- [Innovative approaches and Upscaling CSA in SEA](#)
- [CSVs in the Mekong Basin: Catalyzing Roll-out of Adoption](#)

Partners



WorldFish, IRRI, Aphivat Strey, Dept. of Agricultural Extension, Dept. of Agriculture, Fishery and Forestry of Battambang province, CABI

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CSV profile developed by Osana Bonilla-Findji, Patricia Alvarez and Julian Ramirez-Villegas

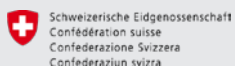
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Investing in rural people

Climate-Smart Village Guinayangan (Philippines)



RESEARCH PROGRAM ON
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Food Security**



Photo: IIRR

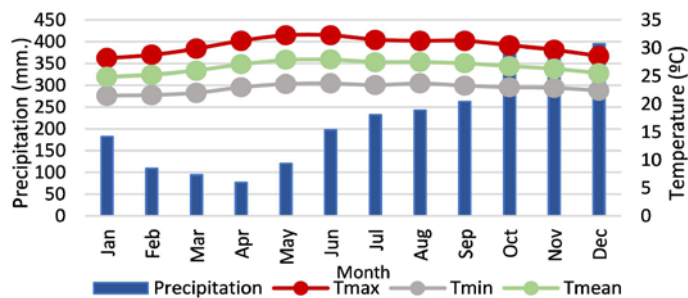
Main crops and livestock ↔ Specific

Food: Rice

Food/cash: Maize, Banana, Peanut, Vegetables, Chicken, Pig, Cattle

Cash: Coconut

Climatic conditions



Source: www.worldclim.org

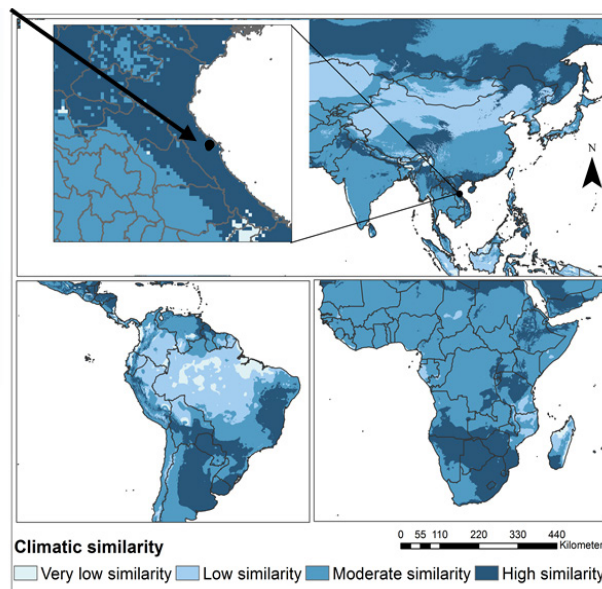
Parameter	Amount	Narrative
Total annual P	2,710	In a single rainy season of 1,192 mm (Oct – Dec) and a dry season of 1518 mm (Jan-Sep).
Max # of consecutive dry months	2 months	
Max T rainy season	30.5 °C	
Max T dry season	32.3 °C	
Highest Tmin	23.7	Jun, Aug months

Climate-related risks

Unusual extreme weather events: storm/typhoons

Areas of climatic similarity

Guinayangan CSV
18.00°N 106.15°E



Areas whose future projected climate (by 2030) is similar to the current climate in this CSV

Source: www.ccafs-analogues.org

*CCAFS Community level baseline (2014), Situation Analysis (2015)

